

Universitas Indonesia Thesis (**uithesis**) Document Class
User and Maintainer Documentation / Dokumentasi Pengguna dan
Maintainer

Ichlasul Affan contributors

Version 3.0.0, 2026/08/20

Contents

1	How to Read This Documentation / Cara Membaca Dokumentasi Ini	4
I	User Guide / Panduan Pengguna	5
1	Abstract / Abstrak	6
2	Installation / Instalasi	7
2.1	From TeX Live / CTAN (Dari TeX Live / CTAN)	7
2.2	Manual Installation from Source / Instalasi Manual dari Sumber	7
3	Required Packages / Paket yang Dibutuhkan	8
4	Class Options / Opsi Kelas	11
5	Metadata Commands / Perintah Metadata	14
6	Front Matter / Halaman Awal	17
7	Content Layout / Tata Letak Isi	19
7.1	Document Spacing Behavior / Perilaku Spasi Dokumen	19
8	Content Commands / Perintah Konten	20
9	Appendices / Lampiran	27
10	Table Column Types / Jenis Kolom Tabel	28
11	Journal Format / Format Jurnal	29
12	Glossary Integration / Integrasi Glosarium	31
13	Code Listings / Tampilan Kode Program	32
14	Known Limitations / Keterbatasan	33

II	Maintainer Guide / Panduan Maintainer	34
1	Maintainer Source of Truth / Sumber Kebenaran untuk Maintainer	34
2	Private API Boundary / Batas API Privat	35
3	Code Map of uithesis.dtx / Peta Kode uithesis.dtx	35
4	Internal Behaviors and Caveats / Perilaku Internal dan Catatan Penting	36
5	Policy Toggles and Style Knobs / Tombol Kebijakan dan Kenop Gaya	38
6	Option Parsing Internals / Internal Pemrosesan Opsi	40
7	Citation Preset System / Sistem Preset Sitasi	41
8	Package Dependency Structure / Struktur Dependensi Paket	42
9	Package Configuration / Konfigurasi Paket	43
10	Chapter Heading System (ConnyRevised) / Sistem Judul Bab (ConnyRevised)	45
11	Page Geometry and Typography Policies / Kebijakan Geometri Halaman dan Tipografi	46
12	Journal Two-Column Helpers / Pembantu Jurnal Dua Kolom	47
13	Page Style System / Sistem Gaya Halaman	49
14	Chapter and Page Management / Pengelolaan Bab dan Halaman	50
15	Vertical Spacing System / Sistem Spasi Vertikal	51
16	Internationalization Layer / Lapisan Internasionalisasi	53
17	Custom Table Column Types / Jenis Kolom Tabel Kustom	55
18	User Content Commands / Perintah Konten Pengguna	55
19	Front-Matter List System / Sistem Daftar Front Matter	57
20	Content Collector Environments / Environment Pengumpul Konten	59
21	Front Matter Page Typesetting / Penyusunan Halaman Front Matter	60
22	<code>\makefrontmatter</code> Assembly Logic / Logika Perakitan <code>\makefrontmatter</code>	61
23	Metadata Accumulator API / API Akumulator Metadata	63
24	Appendix and Back Matter / Lampiran dan Materi Belakang	64

25	Code Listing Style and Language Definitions / Gaya Kode Program dan Definisi Bahasa Pemrograman	66
26	Document Lifecycle Hooks / Hook Siklus Hidup Dokumen	67
27	Maintainer Workflow / Alur Kerja Maintainer	68
28	Maintaining Public APIs / Pemeliharaan API Publik	69
29	Contribution Flow / Alur Kontribusi	70
30	Testing Infrastructure / Infrastruktur Pengujian	71
31	Changelog	75
	Change History	75
	Index	76

1 How to Read This Documentation / Cara Membaca Dokumentasi Ini

English

This document has two explicit parts with different audiences:

- **Part I - User Guide:** for students, lecturers, and professors who need to write or supervise a thesis using `uithesis`.
- **Part II - Maintainer Guide:** for contributors who need to modify class code, update internals, improve tests, and submit merge requests.

The user part follows the thesis PDF lifecycle from installation, metadata setup, front matter generation, content formatting, appendices, glossary, and code listings.

Bahasa Indonesia

Dokumen ini dibagi menjadi dua bagian utama dengan sasaran yang berbeda:

- **Bagian I - Panduan Pengguna:** untuk mahasiswa, dosen, dan pembimbing yang perlu menulis atau membimbing tugas akhir dengan `uithesis`.
- **Bagian II - Panduan Maintainer:** untuk kontributor yang perlu mengubah kode kelas, memperbarui komponen internal, meningkatkan pengujian, dan mengirim merge request.

Bagian pengguna mengikuti alur siklus PDF tugas akhir, dimulai dari instalasi, pengisian metadata, penyusunan halaman awal, pemformatan isi, lampiran, glosarium, hingga daftar kode program.

Part I

User Guide / Panduan Pengguna

English

Recommended reading path for first-time users:

1. Installation
2. Required packages
3. Class options
4. Metadata commands
5. Front matter
6. Content layout and content commands
7. Appendices, glossary, and code listings

Bahasa Indonesia

Alur baca yang direkomendasikan untuk pengguna baru:

1. Instalasi
2. Paket yang dibutuhkan
3. Opsi kelas
4. Perintah metadata
5. Halaman awal
6. Tata letak isi dan perintah konten
7. Lampiran, glosarium, dan daftar kode program

1 Abstract / Abstrak

English

The `uithesis` document class provides a configurable L^AT_EX template for writing undergraduate theses (*Skripsi*), master's theses (*Tesis*), doctoral dissertations (*Disertasi*), internship reports (*Laporan Kerja Praktik*), and independent-study reports (*Kampus Merdeka*) at Universitas Indonesia (UI). Front matter, body layout, bilingual typesetting (Indonesian and English), citation styles, glossary integration, and code-listing support are all handled by the class.

Bahasa Indonesia

Kelas dokumen `uithesis` menyediakan templat L^AT_EX yang dapat dikonfigurasi untuk penulisan skripsi, tesis, disertasi, laporan kerja praktik, dan laporan Kampus Merdeka di Universitas Indonesia (UI). Halaman awal, tata letak isi, pengetikan dwibahasa (Indonesia dan Inggris), gaya sitasi, integrasi glosarium, dan tampilan kode program ditangani oleh kelas.

2 Installation / Instalasi

2.1 From TeX Live / CTAN (Dari TeX Live / CTAN)

English

Once the package is available on CTAN, install via TeX Live:

```
tlmgr install uithesis
```

This places `uithesis.cls` and the companion Makara logo images on the TeX search path automatically.

Bahasa Indonesia

Setelah paket tersedia di CTAN, instal melalui TeX Live:

```
tlmgr install uithesis
```

Perintah ini menempatkan `uithesis.cls` dan gambar logo Makara ke dalam *search path* TeX secara otomatis.

2.2 Manual Installation from Source / Instalasi Manual dari Sumber

English

1. Clone the repository or download the source archive.
2. Run `tex uithesis.ins` in the repository root. This extracts `uithesis.cls` from `uithesis.dtx`.
3. Copy `uithesis.cls` and companion Makara image files to the same directory as your thesis `.tex` file, or install them to your local `TEXMFHOME` tree.

Bahasa Indonesia

1. Clone repositori atau unduh arsip sumber.
2. Jalankan `tex uithesis.ins` di direktori root repositori. Perintah ini mengekstrak `uithesis.cls` dari `uithesis.dtx`.
3. Salin `uithesis.cls` dan berkas gambar Makara pendamping ke direktori yang sama dengan berkas `.tex` tesis, atau instal ke pohon `TEXMFHOME` lokal.

3 Required Packages / Paket yang Dibutuhkan

`uithesis` loads the packages in the table below. The third column is bilingual so English and Indonesian descriptions stay aligned.

Jika diinstal melalui `tlmgr install uithesis`, TeX Live akan menyelesaikan dependensi secara otomatis. Pada MiKTeX, paket yang belum tersedia biasanya ditawarkan saat kompilasi.

Package (.sty)	TeX Live package	Role (EN) / Keterangan (ID)
<code>xkeyval</code>	<code>xkeyval</code>	Class option parsing / parsing opsi kelas
<code>pslatex</code>	<code>psnfss</code>	Times New Roman font / font Times New Roman
<code>setspace</code>	<code>setspace</code>	Line spacing control / pengaturan spasi baris
<code>geometry</code>	<code>geometry</code>	Page margins and paper size / margin halaman dan ukuran kertas
<code>babel</code>	<code>babel</code>	Multilingual support (Indonesian + English) / dukungan multibahasa (Indonesia + Inggris)
<code>afterpage</code>	<code>afterpage</code>	Deferred commands after page break / penjadwalan perintah setelah pindah halaman
<code>changepage</code>	<code>changepage</code>	Per-page margin adjustment / penyesuaian margin per halaman
<code>tocbibind</code>	<code>tocbibind</code>	Adds bibliography to table of contents / menambahkan daftar pustaka ke daftar isi
<code>tocloft</code>	<code>tocloft</code>	Custom table of contents formatting / kustomisasi format daftar isi
<code>fancyhdr</code>	<code>fancyhdr</code>	Header and footer customisation / kustomisasi header dan footer
<code>pdfpages</code>	<code>pdfpages</code>	Inserting external PDF pages / menyisipkan halaman PDF eksternal
<code>hyperref</code>	<code>hyperref</code>	PDF hyperlinks and metadata / hyperlink dan metadata PDF
<code>url</code>	<code>url</code>	URL typesetting / penulisan URL
<code>booktabs</code>	<code>booktabs</code>	Publication-quality table rules / garis tabel kualitas publikasi
<code>multirow</code>	<code>multirow</code>	Multi-row table cells / sel tabel multi-baris
<code>longtable</code>	<code>tools</code>	Multi-page tables (monograph) / tabel multi-halaman (monograf)
<code>supertabular</code>	<code>supertabular</code>	Multi-column long tables (2-column journal) / tabel panjang lintas kolom (jurnal dua kolom)
<code>array</code>	<code>tools</code>	Extended column specifiers / spesifikasi kolom lanjutan
<code>tabularx</code>	<code>tools</code>	Auto-width table columns / kolom tabel dengan lebar otomatis
<code>multicol</code>	<code>tools</code>	Multi-column layout / tata letak multi-kolom
<code>colortbl</code>	<code>colortbl</code>	Coloured table cells / pewarnaan sel tabel
<code>tcolorbox</code>	<code>tcolorbox</code>	Coloured and framed boxes / kotak berwarna dan berbingkai
<code>graphicx</code>	<code>graphics</code>	Image inclusion / penyisipan gambar

Package (.sty)	TeX Live package	Role (EN) / Keterangan (ID)
wrapfig	wrapfig	Text-wrapped figures / gambar dengan teks mengalir
float	float	Float placement control / pengaturan peletakan float
tikz	pgf	Vector graphics (cover page layout) / grafik vektor (tata letak sampul)
tikzpagenodes	pgf	TikZ page node anchors / anchor node halaman TikZ
amsmath	amsmath	Mathematical environments / lingkungan matematika
amsfonts	amsfonts	AMS mathematical fonts / font matematika AMS
amssymb	amssymb	AMS mathematical symbols / simbol matematika AMS
bm	tools	Bold mathematical symbols / simbol matematika tebal
listings	listings	Source code typesetting / penataan kode sumber
xcolor	xcolor	Colour support / dukungan warna
xparse	xparse	Advanced command definitions / definisi perintah lanjutan
inputenc	(base)	UTF-8 input encoding / encoding masukan UTF-8
csquotes	csquotes	Context-sensitive quotation marks (biblatex) / tanda kutip kontekstual (biblatex)
biblatex	biblatex	Bibliography management; requires biber / manajemen bibliografi; memerlukan biber
enumitem	enumitem	List customisation / kustomisasi daftar
everyshi	everyshi	Page-level processing on each shipout / pemrosesan tingkat halaman pada setiap shipout
environ	environ	Content-collecting environments / lingkungan pengumpul konten
etoolbox	etoolbox	LaTeX programming utilities / utilitas pemrograman LaTeX
subcaption	caption	Sub-figure and sub-table captions / caption sub-gambar dan sub-tabel
glossaries-extra	glossaries-extra	Glossary and acronym management / manajemen glosarium dan akronim
pdflscape	pdflscape	Landscape pages in PDF output / halaman lanskap pada keluaran PDF
CJKutf8	CJK	CJK character support / dukungan karakter CJK
indentfirst	tools	Indents the first paragraph after headings / membuat paragraf pertama setelah judul masuk
dblfloatfix	dblfloatfix	Improves placement of figure*/table* / memperbaiki peletakan figure*/table*
cuted	sttools	Provides strip for full-width blocks / menyediakan strip untuk blok penuh-lebar
flushend	flushend	Balances the last-page columns / menyeimbangkan kolom pada halaman terakhir

Two-column journal-only packages. In `format=journal`, `columns=2`, the following packages are used for layout behavior:

- `dblfloatfix`: improves placement rules for **figure*/table***.

- `cuted`: provides `strip`, used by `UIwideblock` for full-width non-float blocks.
- `flushend`: balances the last-page column heights in two-column mode.

Paket khusus jurnal dua kolom. Pada `format=journal`, `columns=2`, paket berikut dipakai untuk perilaku tata letak:

- `dblfloatfix`: memperbaiki peletakan `figure*/table*`.
- `cuted`: menyediakan `strip` untuk blok penuh-lebar non-float.
- `flushend`: menyeimbangkan kolom pada halaman terakhir.

External engine: `biber` must be available on the `PATH` for bibliography processing. It is shipped with TeX Live (`tlmgr install biber`) and MiKTeX.

Engine eksternal: *biber harus tersedia di PATH untuk pemrosesan daftar pustaka. Sudah disertakan dalam instalasi TeX Live dan MiKTeX.*

4 Class Options / Opsi Kelas

Load the class with the following pattern. Muat kelas dengan pola berikut.

```
\documentclass[<options>]{uithesis}
```

Option	Values	Default	Description / Keterangan
format	monograph, journal	monograph	EN: Document layout format. <i>monograph</i> : standard thesis layout. <i>journal</i> : two-column journal-like layout. ID: Format tata letak dokumen. <i>monograph</i> : tata letak tugas akhir standar. <i>journal</i> : tata letak mirip jurnal dua kolom.
type	Skripsi, Tesis, Disertasi, Laporan Kerja Praktik, Kampus Merdeka	Skripsi	EN: Degree type shown on the cover and approval pages. ID: Jenis karya yang ditampilkan pada sampul dan halaman pengesahan.
jenjang	Sarjana, Magister, Doktor	Sarjana	EN: Degree level. Must be consistent with type . ID: Jenjang pendidikan. Harus konsisten dengan type .
lang	indonesian, english	indonesian	EN: Primary document language. Affects front-matter labels and hyphenation patterns. ID: Bahasa utama dokumen. Mempengaruhi label halaman awal dan pola pemenggalan kata.
citation	apa, ieee, acm, vancouver, mla, harvard, chicago, turabian, acs, nature, science, aip, oscola, custom	apa	EN: Bibliography and citation style preset for document output. ID: Preset gaya sitasi dan daftar pustaka untuk keluaran dokumen.
print	twoside, oneside	twoside	EN: Page binding layout. Only valid with format=monograph . <i>twoside</i> : alternating margins for book binding. <i>oneside</i> : uniform margins, suitable for digital submission. ID: Tata letak penjilidan halaman. Hanya valid dengan format=monograph . <i>twoside</i> : margin bergantian untuk penjilidan buku. <i>oneside</i> : margin seragam, cocok untuk pengumpulan digital.

Option	Values	Default	Description / Keterangan
spacing	calibrated, semantic	calibrated	EN: Line spacing mode. <i>calibrated</i> : 1.4× baseline (matches UI regulation). <i>semantic</i> : 1.5× baseline (more readable on screen). ID: Mode spasi baris. <i>calibrated</i> : baseline 1.4× (sesuai ketentuan UI). <i>semantic</i> : baseline 1.5× (lebih nyaman dibaca di layar).
paragraph	noindent, indent	noindent	EN: Paragraph style. <i>noindent</i> : no first-line indent with vertical paragraph spacing. <i>indent</i> : first-line indent with zero paragraph spacing. ID: Gaya paragraf. <i>noindent</i> : tanpa inden baris pertama dan memakai jarak antarpagraf. <i>indent</i> : dengan inden baris pertama dan tanpa jarak antarpagraf.
columns	1, 2	1	EN: Number of body columns. Only valid with <code>format=journal</code> . ID: Jumlah kolom isi dokumen. Hanya valid dengan <code>format=journal</code> .
plagiarismcheck	false, true	false	EN: If <code>true</code> , all headers and footers are disabled for plagiarism-check submission copies. ID: Jika <code>true</code> , seluruh header dan footer dimatikan untuk salinan pemeriksaan plagiarisme.

+

Advanced citation configuration. When `citation=custom` is set, or when the preset requires fine-tuning, the following commands may be called in the preamble.

Konfigurasi sitasi lanjutan. Saat `citation=custom` dipakai, atau saat preset perlu penyesuaian, perintah berikut dapat dipanggil di preamble.

<code>\setuicitationpreset</code>	<code>\setuicitationpreset{<preset name>}</code>
-----------------------------------	--

Select a named citation preset (same values as the `citation` class option). Call after `\documentclass` to change the preset at runtime without reloading the class. Memilih preset sitasi bernama (nilainya sama dengan opsi kelas `citation`). Panggil setelah `\documentclass` untuk mengubah preset tanpa memuat ulang kelas.

<code>\setuicitestyle</code>	<code>\setuicitestyle{<style>}</code>
<code>\setuibibstyle</code>	<code>\setuibibstyle{<style>}</code>
<code>\setuibiblatexstyle</code>	<code>\setuibiblatexstyle{<style>}</code>

Override just the citation style (`\setuicitestyle`), bibliography style (`\setuibibstyle`), or set both to the same value (`\setuibiblatexstyle`). These are applied on top of any preset. Menimpa gaya sitasi saja (`\setuicitestyle`), gaya daftar pustaka saja (`\setuibibstyle`), atau keduanya sekaligus (`\setuibiblatexstyle`). Semua diterapkan di atas preset aktif.

<code>\setuicitationmapping</code>	<code>\setuicitationmapping{<mapping>}</code>
<code>\setuibiblatexoptions</code>	<code>\setuibiblatexoptions{<key=value list>}</code>

Override the biblatex driver mapping (`\setuicitationmapping`) or pass extra options to the biblatex package load call (`\setuibiblatexoptions`). Menimpa *driver mapping* biblatex (`\setuicitationmapping`) atau menambahkan opsi saat pemanggilan paket biblatex (`\setuibiblatexoptions`).

5 Metadata Commands / Perintah Metadata

English

All metadata commands are declared in the preamble (before `\begin{document}`) and are consumed by `\makefrontmatter`.

<code>\judul</code>	<code>\judul{<Indonesian title>}</code>
	Thesis title in Indonesian.

<code>\judulInggris</code>	<code>\judulInggris{<English title>}</code>
	Thesis title in English.

<code>\penulis</code>	<code>\penulis{<Full name>}</code>
	Author's full name. Repeat for each co-author (group thesis).

<code>\npm</code>	<code>\npm{<Student ID>}</code>
	Student identification number (NPM). Repeat alongside each <code>\penulis</code> .

<code>\programStudi</code>	<code>\programStudi{<Indonesian name>}{<English name>}</code>
	Study programme name in both languages. Repeat alongside each author.

<code>\fakultas</code>	<code>\fakultas{<Indonesian name>}{<English name>}</code>
	Faculty or school name in both languages.

<code>\gelar</code>	<code>\gelar{<degree>}</code>
	Degree title (e.g., <i>Sarjana Komputer (S.Kom.)</i>).

<code>\bulanTahun</code>	<code>\bulanTahun{<Month Year>}</code>
	Publication month and year (e.g., <i>Mei 2026</i>).

<code>\pembimbing</code>	<code>\pembimbing{<Name>}</code>
	Supervisor's full name. Repeat for each co-supervisor.

<code>\penguji</code>	<code>\penguji{<Name>}</code>
	Examiner's full name. Repeat for each examiner.

<code>\tanggalSiapSidang</code>	<code>\tanggalSiapSidang{<Date>}</code>
	Date the document was submitted to examiners.

	<code>\tanggalLulus{<i><Date></i>}</code>
	Graduation date from the defence.
	<code>\kota{<i><kota></i>}</code>
	City where you attended university (e.g., <i>Depok</i>).
	<code>\setmakaraimage{<i><path></i>}</code>
	Override the Makara UI logo path. Useful when the class is installed in a non-standard location.
	<code>\kampusMerdekaType{<i><activity type></i>}</code>
	Name of the Kampus Merdeka activity (e.g., <i>MSIB Batch 7</i>). Used in the approval page when <code>type=Kampus Merdeka</code> .
	<code>\mitra{<i><position></i>}{<i><institution></i>}</code>
	Partner supervisor details for the Kampus Merdeka approval page. <i><position></i> is the supervisor's role (e.g., <i>Cohort Manager</i>) and <i><institution></i> is the partner institution name (e.g., <i>Bangkit Academy 2024</i>).
	<code>\aiplatform{<i><platform name></i>}</code>
	AI platform used during the preparation of this work (e.g., <i>GitHub Copilot</i>). The AI-use declaration page is always included in the front matter. When <i><platform name></i> is empty, the page contains a statement that no Artificial Intelligence technology was used. When non-empty, the page states that AI was used on the named platform for the purpose given by <code>\tujuanai</code> .
	<code>\tujuanai{<i><purpose></i>}</code>
	Purpose for which the AI platform was used (e.g., <i>membantu penulisan kode</i>). Only rendered when <code>\aiplatform</code> is non-empty.
	<code>\tahunAkademik{<i><academic year></i>}</code>
	Academic-year text shown on the declaration letter page (<i>Surat Pernyataan</i>).
	<code>\pengesahanPDF{<i><filename></i>}</code>
	Supply an externally-signed approval page as a PDF file (filename without the <code>.pdf</code> extension). When provided, the class replaces the auto-generated approval page layout with the given PDF. Omit this command to use the generated layout.
	<code>\namaTipeTesis{<i><Indonesian name></i>}{<i><English name></i>}</code>
	Override the display name for the thesis type on cover and front-matter pages. Use when the <code>type</code> option does not match the required title; both language variants must be supplied.

Bahasa Indonesia

Semua perintah metadata dideklarasikan di preamble (sebelum `\begin{document}`) dan diproses oleh `\makefrontmatter`.

- `\judul{<judul ID>}`: judul tesis dalam bahasa Indonesia.
- `\judulInggris{<judul EN>}`: judul dalam bahasa Inggris.
- `\penulis{<nama>}`: nama lengkap penulis; ulangi untuk setiap anggota (tugas akhir kelompok).
- `\npm{<NPM>}`: nomor pokok mahasiswa; ulangi bersama setiap `\penulis`.
- `\programStudi{<ID>}{<EN>}`: nama program studi; ulangi bersama setiap anggota.
- `\fakultas{<ID>}{<EN>}`: nama fakultas/sekolah.
- `\gelar{<gelar>}`: gelar yang diperoleh.
- `\bulanTahun{<Bulan Tahun>}`: bulan dan tahun publikasi.
- `\tahunAkademik{<tahun akademik>}`: teks tahun akademik untuk halaman surat pernyataan.
- `\pembimbing{<nama>}`: nama dosen pembimbing; ulangi untuk ko-pembimbing.
- `\penguji{<nama>}`: nama dosen penguji; ulangi untuk setiap penguji.
- `\tanggalSiapSidang{<tanggal>}`: tanggal penyerahan ke penguji/sekretariat.
- `\tanggalLulus{<tanggal>}`: tanggal kelulusan sidang.
- `\kota{<kota>}`: kota tempat kuliah (contoh: *Depok*). (bawaan: *Depok*).
- `\setmakaraimage{<jalur>}`: mengganti jalur gambar logo Makara UI.
- `\pengesahanPDF{<berkas>}`: lembar pengesahan dari PDF eksternal; menggantikan tata letak bawaan jika diisi.
- `\namaTipeTesis{<ID>}{<EN>}`: mengganti tampilan nama tipe karya pada halaman sampul dan halaman awal.
- `\kampusMerdekaType{<nama kegiatan>}`: nama kegiatan Kampus Merdeka (contoh: *MSIB Batch 7*); dipakai di halaman pengesahan saat `type=Kampus Merdeka`.
- `\mitra{<jabatan>}{<instansi>}`: data penanggung jawab mitra untuk halaman pengesahan Kampus Merdeka. Contoh: `\mitra{Cohort Manager}{Bangkit Academy 2024}`.
- `\aiplatform{<nama platform>}`: nama platform AI yang dipakai (contoh: *GitHub Copilot*). Halaman pernyataan AI selalu dicetak. Jika kosong, halaman menyatakan bahwa tidak ada AI yang digunakan. Jika berisi, halaman menyatakan penggunaan AI pada platform tersebut untuk tujuan yang diberikan oleh `\tujuanai`.
- `\tujuanai{<tujuan>}`: tujuan penggunaan platform AI (contoh: *membantu penulisan kode*). Hanya ditampilkan jika `\aiplatform` tidak kosong.

6 Front Matter / Halaman Awal

English

Content for the front-matter pages is declared before `\begin{<document>}` using the environments below, then rendered all at once by `\makefrontmatter`.

abstrakID	<code>\begin{<abstrakID>} ... \end{<abstrakID>}</code> <code>\katakunci{<keywords>}</code>
------------------	---

Indonesian abstract text. `\katakunci` supplies the comma-separated keywords; it must follow immediately after `\end{<abstrakID>}`.

abstractEN	<code>\begin{<abstractEN>} ... \end{<abstractEN>}</code> <code>\keywords{<keywords>}</code>
-------------------	--

English abstract text, with `\keywords` for the keyword list.

kataPengantar	<code>\begin{<kataPengantar>} ... \end{<kataPengantar>}</code>
----------------------	--

Preface text. Optional; typically omitted for Kampus Merdeka and internship reports.

pernyataanOrisinalitas	<code>\begin{<pernyataanOrisinalitas>} ... \end{<pernyataanOrisinalitas>}</code>
-------------------------------	--

Optional override body for the originality statement page.

persetujuanPublikasi	<code>\begin{<persetujuanPublikasi>} ... \end{<persetujuanPublikasi>}</code>
-----------------------------	--

Optional override body for the publication-consent page.

\makefrontmatter	Typesets all front-matter pages in the required order: cover, inner title page, approval page, originality statement, AI-use declaration, declaration letter, abstract pages, and list pages. Preface and publication-consent pages are included for thesis/dissertation flows (and omitted for internship and Kampus Merdeka flows). The AI-use declaration (states AI use if <code>\aiplatform</code> is set, otherwise states no AI was used), and table/list pages are always handled by this command.
-------------------------	--

pernyataanAI	<code>\begin{<pernyataanAI>} ... \end{<pernyataanAI>}</code>
---------------------	--

Optional override body for the AI-use declaration page. If this environment is omitted, the class generates the statement automatically from `\aiplatform` and `\tujuanai`.

suratPernyataan	<code>\begin{<suratPernyataan>} ... \end{<suratPernyataan>}</code>
------------------------	--

Optional override body for the declaration letter page.

\makebibliography	Prints the bibliography. Call after all body chapters.
--------------------------	--

\makeglossarypage	Prints the glossary (monograph format only). Call after <code>\makebibliography</code> .
--------------------------	--

Bahasa Indonesia

Konten halaman awal dideklarasikan menggunakan lingkungan di bawah sebelum `\begin{document}`}, lalu dicetak sekaligus oleh `\makefrontmatter`.

- Lingkungan `abstrakID`: teks abstrak bahasa Indonesia, diikuti `\katakunci{<kata kunci>}`.
- Lingkungan `abstractEN`: teks abstrak bahasa Inggris, diikuti `\keywords{<keywords>}`.
- Lingkungan `kataPengantar`: kata pengantar (opsional).
- Lingkungan `pernyataanOrisinalitas`: isi kustom untuk halaman pernyataan orisinalitas (opsional).
- Lingkungan `persetujuanPublikasi`: isi kustom untuk halaman persetujuan publikasi (opsional).
- `\makefrontmatter`: mencetak seluruh halaman awal secara berurutan: sampul, judul dalam, pengesahan, orisinalitas, pernyataan AI, surat pernyataan, abstrak, serta halaman daftar. Kata pengantar dan persetujuan publikasi dicetak pada alur Skripsi/Tesis/Disertasi, dan dilewati pada alur KP/MBKM.
- Lingkungan `pernyataanAI`: isi kustom untuk halaman pernyataan penggunaan AI (opsional).
- Lingkungan `suratPernyataan`: isi kustom untuk halaman surat pernyataan (opsional).
- `\makebibliography`: mencetak daftar referensi.
- `\makeglossarypage`: mencetak daftar istilah (hanya monograf).

7 Content Layout / Tata Letak Isi

7.1 Document Spacing Behavior / Perilaku Spasi Dokumen

English

Spacing behavior is controlled by the public class option `spacing=calibrated|semantic`.

- `spacing=calibrated`: uses the spacing profile tuned to match current UI formatting expectations.
- `spacing=semantic`: uses semantic one-and-a-half spacing (more readable for iterative drafting).

In normal usage, no manual spacing constant tuning is required. Advanced spacing customisation is documented in Part II (Maintainer Guide).

Bahasa Indonesia

Perilaku spasi dikendalikan oleh opsi kelas publik `spacing=calibrated|semantic`.

- `spacing=calibrated`: memakai profil spasi yang sudah disetel agar sesuai ketentuan format UI saat ini.
- `spacing=semantic`: memakai spasi satu-setengah untuk kebutuhan penulisan dan telaah draf.

Untuk pemakaian normal, pengguna tidak perlu melakukan penyetelan konstanta spasi secara manual. Kustomisasi spasi lanjutan dijelaskan pada Bagian II (Panduan Maintainer).

8 Content Commands / Perintah Konten

English

Label shorthand aliases.

Expand to the localised label word; combine with `\ref` for cross-references.

<code>\bab</code>	Label words for chapters, sections, figures, tables, equations, code listings, and appen-
<code>\sect</code>	dices, respectively. Example: <code>\pic \ref{fig:example}</code> produces <i>Gambar 1.1</i> .
<code>\pic</code>	
<code>\tab</code>	
<code>\equ</code>	
<code>\lst</code>	
<code>\apdx</code>	

Text formatting.

<code>\f</code>	<code>\f{<term>}</code>	Foreign-language or domain-specific term in italic.
<code>\bo</code>	<code>\bo{<text>}</code>	Bold text.
<code>\bi</code>	<code>\bi{<text>}</code>	Bold italic text.
<code>\code</code>	<code>\code{<snippet>}</code>	Inline code in typewriter font.
<code>\m</code>	<code>\m{<expr>}</code>	Bold-math inline (<code>\m</code>) and display (<code>\mc</code>).
<code>\mc</code>	<code>\mc{<expr>}</code>	

Utility.

<code>\todo</code>	<code>\todo{<text>}</code>	Highlighted placeholder box. Remove all <code>\todo</code> calls before final submission.
--------------------	----------------------------------	---

<code>\captionsource</code>	<code>\captionsource{<caption>}{<source>}</code>
<code>\captionsourcecont</code>	<code>\captionsourcecont{<caption>}{<source>}</code>
Caption with a source attribution line. Use <code>\captionsourcecont</code> on continuation pages of multi-page tables. Caption text is 12pt; the source line is 10pt.	

<code>\inpdf</code>	<code>\inpdf{<filename>}</code>	<code>\putpdf{<filename>}</code>
<code>\putpdf</code>	Insert an external PDF (filename without the <code>.pdf</code> extension). <code>\inpdf</code> preserves the running header; <code>\putpdf</code> inserts bare pages.	

<code>\blankpage</code>	<code>\blankpage</code>
	Insert a blank page (no header, footer, or page number). In <code>print=oneside</code> mode this is a no-op.

<code>\addeqtotoc</code>	<code>\addeqtotoc{<label>}{<caption text>}</code>
	Manually register a labelled equation in the List of Equations. Call immediately after the equation environment, passing the <code>\label</code> key and the equation description.

<code>\minimumListEntries</code>	<code>\minimumListEntries{<N>}</code>
	Set the minimum number of entries a list must have before its page is included in the front matter. The default is 0 (always include). Call in the preamble.

Page control.

<code>\clearchapter</code>	Flush all floats, issue a page break, and advance to the correct physical side for the next chapter (odd page in two-sided print, accounting for intentionally unnumbered blank pages). In journal format this is a no-op. Called automatically between chapters; expose it explicitly only when the automatic call is insufficient.
----------------------------	--

<code>\forceclearchapter</code>	Like <code>\clearchapter</code> but always inserts a blank verso page in two-sided print regardless of the current page parity. Use this when an unconditional physical blank page is required. In journal format this is a no-op.
---------------------------------	--

Header and footer customization (monograph only).

The following three commands reconfigure the `fancyhdr` running styles for chapter body pages. They are stubs (no-ops) in journal format. Call them in the preamble or at the start of the body.

<code>\setfirstheaderfooter</code>	Configure the header and footer for the first page of each chapter (the page that uses the plain style).
------------------------------------	--

<code>\setoddevenheader</code>	Configure the running header for chapter body pages. In two-sided print, the page number appears on the outer margin of each page.
--------------------------------	--

<code>\setoddevenfooter</code>	Configure the running footer for chapter body pages (institutional text placed on the outer margin in two-sided print).
--------------------------------	---

Table-of-contents customisation.

<code>\enableboldchapterintoc</code>	Toggle bold formatting for chapter entries in the table of contents. The class default is bold; call <code>\disableboldchapterintoc</code> to revert to normal weight.
<code>\disableboldchapterintoc</code>	

<code>\CAPinToC</code>	Toggle all-caps rendering of chapter titles in the table of contents. <code>\CAPinToC</code> is the default for Indonesian-language documents; <code>\noCAPinToC</code> is the default for English-language documents.
<code>\noCAPinToC</code>	

<code>\enablechapterseparatorspaceinlists</code>
<code>\disablechapterseparatorspaceinlists</code>

Toggle chapter-separator vertical spacing in list pages. The default is enabled. It applies to all list pages, including user-defined lists from `\newUllist`, and excludes the appendix list (Daftar Lampiran).

Custom lists.

<code>\newUllist</code>	Declares a new list-of-objects with a custom caption type.
-------------------------	--

- `<ext>`: file-extension stem (e.g., `lotr`).
- `<type>`: `\caption` type name (e.g., `transformationrule`).
- `<label>`: label word used with `\ref` (e.g., `Aturan Transformasi`).
- `<list title>`: list page heading (e.g., `Daftar Aturan Transformasi`).

Declare in the preamble; the list automatically appears in the front matter.

Long tables.

Ulongtable	\Ulongtablecaption{<caption text>}
	\Ulongtablelabel{<label key>}
	\Ulongtablecols{<N>}
	\Ulongtablefirsthead{<header rows>}
	\Ulongtablehead{<continuation header rows>}
	\Ulongtabletail{<footer rows>}
	\Ulongtablelasttail{<last-section footer rows>}
	\begin{Ulongtable}{<column spec>}<rows>\end{Ulongtable}

Long table that can span pages or columns. Call the seven setup commands *before* `\begin{Ulongtable}`. In one-column mode (`format=monograph`), behavior follows standard multi-page table flow. In two-column mode (`format=journal`, `columns=2`), the environment keeps table chunks readable across column/page continuations. `\Ulongtablecols{<N>}` sets the total number of columns. When set, the class prepends “Table N: caption (*sambungan*)” to `\Ulongtablehead` for continuation parts. If the caption is wider than the natural table width, continuation columns can expand. Omit `\Ulongtablecols` and define `\Ulongtablehead` manually to prevent this. The column specification uses the same syntax as `tabular`.

Bahasa Indonesia

Label pintasan.

Mengembang ke kata label yang sesuai bahasa dokumen; gabungkan dengan `\ref` untuk referensi silang.

\bab	Kata label untuk bab, subbab, gambar, tabel, persamaan, kode program, dan lampiran.
\sect	Contoh: <code>\pic \ref{fig:example}</code> menghasilkan <i>Gambar 1.1</i> .
\pic	
\tab	
\equ	
\lst	
\apdx	

Pemformatan teks.

\f	\f{<istilah>}
----	---------------

Istilah asing atau istilah domain dalam cetak miring.

\bo	\bo{<teks>}
-----	-------------

Cetak tebal.

\bi	\bi{<teks>}
-----	-------------

Cetak tebal-miring.

\code	\code{<cuplikan>}
-------	-------------------

Kode sebaris dengan huruf mesin tik.

<code>\m</code>	<code>\m{<ekspresi>}</code>	<code>\mc{<ekspresi>}</code>
-----------------	-----------------------------------	------------------------------------

`\mc` Persamaan matematika tebal untuk mode sebaris (`\m`) dan mode tampilan (`\mc`).

Utilitas.

<code>\todo</code>	<code>\todo{<teks>}</code>
--------------------	----------------------------------

Kotak placeholder berpenyorot. Semua `\todo` harus dihapus sebelum pengumpulan akhir.

<code>\captionsource</code>	<code>\captionsource{<judul>}{<sumber>}</code>
<code>\captionsourcecont</code>	<code>\captionsourcecont{<judul>}{<sumber>}</code>

Caption dengan baris atribusi sumber. Gunakan `\captionsourcecont` pada halaman lanjutan tabel multi-halaman. Teks caption berukuran 12pt, baris sumber berukuran 10pt.

<code>\inpdf</code>	<code>\inpdf{<berkas>}</code>	<code>\putpdf{<berkas>}</code>
---------------------	-------------------------------------	--------------------------------------

`\putpdf` Menyisipkan PDF eksternal (nama berkas tanpa ekstensi `.pdf`). `\inpdf` mempertahankan header berjalan, sedangkan `\putpdf` menyisipkan halaman polos.

<code>\blankpage</code>	<code>\blankpage</code>
-------------------------	-------------------------

Menyisipkan halaman kosong (tanpa header, footer, atau nomor halaman). Pada mode `print=oneside`, perintah ini tidak melakukan apa pun.

<code>\addequtotoc</code>	<code>\addequtotoc{<label>}{<teks caption>}</code>
---------------------------	--

Mendaftarkan persamaan berlabel secara manual ke Daftar Persamaan. Panggil tepat setelah lingkungan persamaan, dengan memberikan kunci `\label` dan deskripsi persamaan.

<code>\minimumListEntries</code>	<code>\minimumListEntries{<N>}</code>
----------------------------------	---

Menetapkan jumlah minimum entri agar halaman daftar dimunculkan pada halaman awal. Nilai bawaan 0 (selalu ditampilkan). Panggil di preamble.

Kontrol halaman.

<code>\clearchapter</code>	Mengosongkan semua float, memutus halaman, lalu berpindah ke sisi fisik yang benar untuk bab berikutnya (halaman ganjil pada cetak dua sisi, dengan memperhitungkan halaman kosong tanpa nomor yang memang disisipkan). Pada format jurnal, perintah ini tidak melakukan apa pun. Dipanggil otomatis antar-bab, paparkan manual hanya jika pemanggilan otomatis belum cukup.
----------------------------	--

<code>\forceclearchapter</code>	Mirip <code>\clearchapter</code> , tetapi selalu menyisipkan halaman verso kosong pada cetak dua sisi tanpa melihat paritas halaman saat ini. Gunakan saat halaman kosong fisik harus selalu ada. Pada format jurnal, perintah ini tidak melakukan apa pun.
---------------------------------	---

Kustomisasi header dan footer (khusus monograf).

Tiga perintah berikut mengatur ulang gaya halaman berjalan `fancyhdr` untuk halaman isi bab. Pada format jurnal, ketiganya adalah *no-op*. Panggil di preamble atau di awal isi dokumen.

<code>\setfirstheaderfooter</code>	Mengatur header dan footer untuk halaman pertama setiap bab (halaman dengan gaya plain).
------------------------------------	--

<code>\setoddevenheader</code>	Mengatur header berjalan untuk halaman isi bab. Pada cetak dua sisi, nomor halaman ditempatkan di margin luar.
--------------------------------	--

<code>\setoddevenfooter</code>	Mengatur footer berjalan untuk halaman isi bab (teks institusi pada margin luar untuk cetak dua sisi).
--------------------------------	--

Kustomisasi daftar isi.

<code>\enableboldchapterintoc</code> <code>\disableboldchapterintoc</code>	Mengaktifkan/menonaktifkan format tebal untuk entri bab pada Daftar Isi. Bawaan kelas adalah tebal; panggil <code>\disableboldchapterintoc</code> untuk kembali ke bobot normal.
---	--

<code>\CAPinToC</code> <code>\noCAPinToC</code>	Mengaktifkan/menonaktifkan kapital semua pada judul bab di Daftar Isi. <code>\CAPinToC</code> menjadi bawaan untuk dokumen berbahasa Indonesia; <code>\noCAPinToC</code> menjadi bawaan untuk dokumen berbahasa Inggris.
--	--

<code>\enablechapterseparatorspaceinlists</code> <code>\disablechapterseparatorspaceinlists</code>	
---	--

Mengaktifkan/menonaktifkan jarak vertikal pemisah antar-bab pada halaman daftar. Bawaan kelas adalah aktif. Berlaku untuk semua halaman daftar, termasuk daftar kustom dari `\newUllist`, dan tetap mengecualikan Daftar Lampiran.

Daftar kustom.

<code>\newUllist</code>	Mendeklarasikan daftar objek baru dengan tipe caption kustom.
-------------------------	---

- `<ext>`: stem ekstensi berkas (mis. `lotr`).
- `<type>`: nama tipe `\caption` (mis. `transformationrule`).
- `<label>`: kata label untuk `\ref` (mis. `Aturan Transformasi`).
- `<list title>`: judul halaman daftar (mis. `Daftar Aturan Transformasi`).

Deklarasikan di preamble; daftar otomatis muncul di halaman awal.

Tabel panjang.

```

\Ulongtable \Ulongtablecaption{<teks judul>}
\Ulongtablelabel{<kunci label>}
\Ulongtablecols{<N>}
\Ulongtablefirsthead{<baris header>}
\Ulongtablehead{<baris header lanjutan>}
\Ulongtabletail{<baris footer>}
\Ulongtablelasttail{<baris footer bagian akhir>}
\begin{Ulongtable}{<spesifikasi kolom>} <baris> \end{Ulongtable}

```

Tabel panjang yang dapat melintasi halaman atau kolom. Jalankan tujuh perintah setup *sebelum* `\begin{Ulongtable}`. Pada mode satu kolom (`format=monograph`), perilaku mengikuti alur tabel multi-halaman standar. Pada mode dua kolom (`format=journal, columns=2`), lingkungan ini menjaga keterbacaan potongan tabel saat tabel berlanjut lintas kolom/halaman. `\Ulongtablecols{<N>}` menetapkan jumlah total kolom. Jika diisi, kelas menambahkan otomatis “Table N: judul (*sambungan*)” pada awal `\Ulongtablehead` untuk bagian lanjutan. Jika judul lebih lebar dari lebar alami tabel, kolom lanjutan bisa melebar. Hilangkan `\Ulongtablecols` dan definisikan `\Ulongtablehead` secara manual untuk mencegah hal ini. Spesifikasi kolom memakai sintaks yang sama dengan `tabular`.

9 Appendices / Lampiran

English

<code>lampiranBab</code>	<code>\begin{<lampiranBab>}{<title>}</code> ... <code>\end{<lampiranBab>}</code>
---------------------------------	--

Numbered appendix environment. Each `lampiranBab` increments the appendix counter (A, B, C, ...), registers an entry in the Appendix List, and (in monograph format) installs a two-line running header showing the appendix number and title. Continuation pages show *(lanjutan)* or *(continued)* after the title.

Bahasa Indonesia

- Lingkungan `lampiranBab{<judul>}`: lampiran bernomor. Setiap `lampiranBab` menambah penghitung lampiran (A, B, C, ...), mendaftarkan entri ke Daftar Lampiran, dan (format monograf) memasang *header* berjalan dua baris berisi nomor dan judul lampiran. Halaman lanjutan menampilkan sufiks *(lanjutan)*.

10 Table Column Types / Jenis Kolom Tabel

English

The class defines nine shorthand column types for common alignments. All accept one argument specifying the column width.

Type	Vertical	Horizontal alignment
P{w}	top	left
L{w}	middle	left
B{w}	bottom	left
U{w}	top	centre
C{w}	middle	centre
O{w}	bottom	centre
E{w}	top	right
R{w}	middle	right
T{w}	bottom	right

Bahasa Indonesia

Kelas mendefinisikan sembilan tipe kolom singkat untuk penyelarasan umum. Semua menerima satu argumen berupa lebar kolom.

Tipe	Vertikal	Horizontal
P{l}	atas	kiri
L{l}	tengah	kiri
B{l}	bawah	kiri
U{l}	atas	tengah
C{l}	tengah	tengah
O{l}	bawah	tengah
E{l}	atas	kanan
R{l}	tengah	kanan
T{l}	bawah	kanan

11 Journal Format / Format Jurnal

English

The following environments and switches are only relevant when `format=journal`. In monograph format they degrade gracefully to standard `figure` and `table` wrappers.

Journal layout rules applied by the class:

- Front matter pages use 3cm margins on all sides.
- Body pages use 3cm top/bottom and 2cm left/right margins.
- Abstrak and Abstract pages use Arabic numbering starting from page 1.
- Paragraphs are fully justified; default paragraph style is `paragraph=noindent`.

<code>UIwidetable</code>	<code>\begin{UIwidetable}[placement] ... \end{UIwidetable}</code>
<code>UIwidefigure</code>	<code>\begin{UIwidefigure}[placement] ... \end{UIwidefigure}</code>

Full-width float (`table*`/`figure*`) in two-column journal mode; falls back to single-column `table/figure` in monograph.

<code>UIwideblock</code>	<code>\begin{UIwideblock}[width] ... \end{UIwideblock}</code>
--------------------------	---

Full-width non-float block spanning both columns in two-column mode, using the `cuted/stip` mechanism. The optional argument overrides the block width (default: `\textwidth`).

<code>UIlandscape</code>	<code>\begin{UIlandscape} ... \end{UIlandscape}</code>
--------------------------	--

Landscape single-column pages in two-column journal mode.

<code>UIfullwidthpages</code>	<code>\begin{UIfullwidthpages} ... \end{UIfullwidthpages}</code>
-------------------------------	--

Temporarily switch to one-column mode so that enclosed content spans the full text width. When the environment ends, two-column mode is restored. `UIlandscape` is implemented on top of this environment. In monograph mode this environment is a no-op.

Bahasa Indonesia

Lingkungan berikut hanya relevan pada `format=journal`. Pada format monograf, semuanya terdegradasi ke `figure/table` biasa.

Aturan tata letak jurnal yang diterapkan kelas:

- Halaman awal memakai margin 3cm pada semua sisi.
- Halaman isi memakai margin atas/bawah 3cm dan kiri/kanan 2cm.

- Halaman Abstrak dan Abstract memakai nomor Arab mulai dari halaman 1.
- Paragraf rata kiri-kanan; default gaya paragraf adalah `paragraph=noindent`.
- Lingkungan `UIwidetable[⟨posisi⟩]` / `UIwidefigure[⟨posisi⟩]` : *float* penuh-lebar (`table*/figure*`) pada mode dua kolom. Pada monograf, kembali menjadi `table/figure` biasa.
- Lingkungan `UIwideblock[⟨lebar⟩]`: blok penuh-lebar non-*float* yang mencakup kedua kolom. Blok ini memakai mekanisme `strip` dari `cuted`.
- Lingkungan `UIlandscape`: halaman landscape satu kolom di mode dua kolom.
- Lingkungan `UIfullwidthpages`: beralih sementara ke mode satu kolom agar konten di dalamnya mencakup penuh lebar teks. Mode dua kolom dipulihkan saat lingkungan ditutup. Pada mode monograf, lingkungan ini tidak melakukan apa-apa.

12 Glossary Integration / Integrasi Glosarium

English

The class pre-configures `glossaries-extra`. Define entries in `config/glossary.tex` and load them in the preamble with:

```
\input{config/glossary}
```

A typical entry looks like:

```
\newglossaryentry{ml}{  
  name={machine learning},  
  description={a field of AI that enables ...}}  
\newacronym{ml}{ML}{machine learning}
```

Use `\gls{<key>}` to reference an entry: the first use expands to the full form with the acronym in parentheses; subsequent uses produce the short form. `\Gls` capitalises the first letter; `\glspl` produces the plural.

Print the glossary with `\makeglossarypage` in the back matter.

Note. Glossary entries are resolved by running `makeglossaries` between two `LATEX` passes. The `latexmkrc` file included in `example/` configures this automatically.

Bahasa Indonesia

Kelas mengonfigurasi `glossaries-extra` secara otomatis. Definisikan entri di `config/glossary.tex` dan muat di preamble dengan `\input{<config/glossary>}`.

Contoh entri:

```
\newglossaryentry{ml}{  
  name={machine learning},  
  description={bidang AI yang memungkinkan ...}}  
\newacronym{ml}{ML}{machine learning}
```

Gunakan `\gls{<kunci>}` untuk merujuk entri; penggunaan pertama mencetak bentuk lengkap dengan singkatan dalam tanda kurung, penggunaan berikutnya hanya singkatan. `\Gls` mengawali huruf kapital; `\glspl` menghasilkan bentuk jamak. Cetak daftar istilah di bagian belakang dengan `\makeglossarypage`.

Catatan. Entri glosarium diselesaikan dengan menjalankan `makeglossaries` di antara dua *pass* `LATEX`. Berkas `latexmkrc` yang disertakan di `example/` mengonfigurasi ini secara otomatis.

13 Code Listings / Tampilan Kode Program

English

The class loads listings and pre-defines language styles for Python, Java, C, C++, JavaScript, SQL, HTML, and Bash. Additional definitions can be placed in `config/proglangdef.sty`.

Listing from a file. Include a source file with:

```
\lstinputlisting[language=Python, numbers=left,
  caption={My snippet}, label=code:snippet]
{assets/codes/my-snippet.py}
```

Inline listing. For a short snippet inside the text, use:

```
\begin{lstlisting}[language=Java, caption={Hello World}]
public class Hello { ... }
\end{lstlisting}
```

Inline code. For a single identifier or keyword in running text, use `\code{<text>}` (defined by the class as `\lstinline...`).

Refer to a listing with `\lstlistingname \ref{code:snippet}` or the shorter alias `\lst \ref{code:snippet}`.

Bahasa Indonesia

Kelas memuat listings dan mendefinisikan gaya untuk Python, Java, C, C++, JavaScript, SQL, HTML, dan Bash. Definisi bahasa tambahan dapat diletakkan di `config/proglangdef.sty`.

Listing dari berkas. Sertakan berkas kode dengan:

```
\lstinputlisting[language=Python, numbers=left,
  caption={Cuplikan saya}, label=code:cuplikan]
{assets/codes/cuplikan.py}
```

Listing langsung. Untuk cuplikan singkat di dalam teks, gunakan lingkungan `lstlisting`.

Kode *inline*. Gunakan `\code{<teks>}` untuk menampilkan kode pendek dalam kalimat.

Rujuk daftar kode dengan `\lst \ref{...}`.

14 Known Limitations / Keterbatasan

English

- `columns=2` is only valid with `format=journal`.
- The Makara logo images (`uithesis-makara.png`, `uithesis-makara-kuning.png`) must be on the $\text{T}_{\text{E}}\text{X}$ search path. When installing from source, place those image files alongside `uithesis.cls`, or set `TEXINPUTS` accordingly.
- The class targets `pdflatex`. $\text{XeL}_{\text{A}}\text{T}_{\text{E}}\text{X}$ and $\text{LuaL}_{\text{A}}\text{T}_{\text{E}}\text{X}$ are untested.

Bahasa Indonesia

- Opsi `columns=2` hanya berlaku untuk `format=journal`.
- Gambar logo Makara (`uithesis-makara.png`, `uithesis-makara-kuning.png`) harus tersedia di *search path* $\text{T}_{\text{E}}\text{X}$. Jika diinstal dari sumber, tempatkan berkas gambar tersebut di lokasi yang sama dengan `uithesis.cls`, atau atur variabel `TEXINPUTS`.
- Kelas ini ditujukan untuk `pdflatex`. $\text{XeL}_{\text{A}}\text{T}_{\text{E}}\text{X}$ dan $\text{LuaL}_{\text{A}}\text{T}_{\text{E}}\text{X}$ belum diuji.

Part II

Maintainer Guide / Panduan Maintainer

English

This part explains how to maintain and extend `uithesis` safely. It focuses on the source of truth files, internal code map, build workflow, testing expectations, and contribution flow.

Bahasa Indonesia

Bagian ini menjelaskan cara memelihara dan mengembangkan `uithesis` secara aman. Fokus utamanya adalah berkas sumber utama, peta kode internal, alur build, ekspektasi pengujian, dan alur kontribusi.

1 Maintainer Source of Truth / Sumber Kebenaran untuk Maintainer

English

The authoritative source for class behavior is `uithesis.dtx` (inside the `%<*class>` and `%</class>` guards).

Do not edit `uithesis.cls` directly. It is generated by `tex uithesis.ins` or `l3build unpack`.

Documentation source is `uithesis-doc.dtx`. Student template files live under `example/`.

Bahasa Indonesia

Sumber utama perilaku kelas adalah `uithesis.dtx` (di dalam guard `%<*class>` dan `%</class>`).

`uithesis.cls` tidak boleh diedit langsung karena merupakan berkas turunan yang dihasilkan oleh `tex uithesis.ins` atau `l3build unpack`.

Sumber dokumentasi adalah `uithesis-doc.dtx`. Berkas templat mahasiswa berada di subtree `example/`.

2 Private API Boundary / Batas API Privat

English

Maintainer-only symbols and topics are documented in this Part II. Scope boundary used in this project:

- **Public API** (Part I): user commands/environments/options intended for thesis authors and supervisors.
- **Private API** (Part II): internal implementation symbols, internal data flow, and maintenance workflow topics.

In `uithesis.dtx`, private implementation symbols follow internal naming conventions such as `\UI@...` and internal builder families (for example, page assembly helpers and collector/storage helpers). These symbols are maintainer-facing only.

Bahasa Indonesia

Simbol dan topik maintainer didokumentasikan di Bagian II ini. Batas ruang lingkup yang dipakai pada proyek ini:

- **API publik** (Bagian I): perintah/lingkungan/opsi untuk penulis tugas akhir dan pembimbing.
- **API privat** (Bagian II): simbol implementasi internal, alur data internal, dan topik alur pemeliharaan.

Di `uithesis.dtx`, simbol implementasi privat mengikuti konvensi penamaan internal seperti `\UI@...` serta keluarga helper internal (misalnya helper perakitan halaman dan helper pengumpul/penyimpan konten). Simbol tersebut khusus untuk maintainer.

3 Code Map of `uithesis.dtx` / Peta Kode `uithesis.dtx`

English

The class source is grouped by named comment headers. Maintainers should navigate by these section names:

Header in <code>uithesis.dtx</code>	Maintainer role
IDENTIFIKASI KELAS	Class identity and version metadata.
KEBIJAKAN KELAS (policy surface)	Global policy switches and style knobs (spacing, print mode, paragraph style).
PEMROSESAN OPSI (<code>xkeyval</code>)	Parsing of class options and default normalization.

Header in <code>uithesis.dtx</code>	Maintainer role
KONFIGURASI BIBLATEX	Citation preset mapping, biblatex options, and language-specific bibliography behavior.
IMPOR PAKET DEPENDENSI / KONFIGURASI PAKET	Runtime dependencies and package-level setup.
TATA LETAK ISI: *	Page geometry, heading styles, journal helpers, page styles, chapter management, i18n labels.
OBJEK ISI: *	User content helpers (table column types, content commands, object handling).
FRONT-MATTER LISTS: * and FRONT MATTER: *	Front-matter data model, list registration, collector environments, and page assembly internals.
METADATA API: *	Public metadata commands consumed by front matter and headers.
MATERI BELAKANG: *	Appendix, bibliography, glossary, and separators for back matter.
STYLING NON-ALUR: *	Built-in code-listing language styles and color conventions.
HOOK <code>\AtBeginDocument</code> / <code>\AtEndDocument</code> HOOK	Lifecycle hooks executed before and after document processing.

Bahasa Indonesia

Sumber kelas dikelompokkan dengan header komentar bernama. Navigasi maintainer sebaiknya mengikuti nama section tersebut, bukan nomor baris.

Ringkasnya, kelompok `TATA LETAK ISI:*` menangani aturan tata letak, kelompok `FRONT MATTER:*` menangani perakitan halaman awal, kelompok `METADATA API:*` menangani perintah publik, dan kelompok `MATERI BELAKANG:*` menangani lampiran, daftar pustaka, serta glosarium.

4 Internal Behaviors and Caveats / Perilaku Internal dan Catatan Penting

English

This section documents private behavior intentionally, for maintainers. Public users should rely on Part I only.

Area	Private behavior and rationale	Caveat
KEBIJAKAN KELAS	Policy toggles (e.g., internal booleans for spacing, print mode, paragraph mode) centralize defaults and reduce duplicated conditional checks.	Keep policy changes centralized; avoid local ad-hoc overrides in page macros.

Area	Private behavior and rationale	Caveat
PEMROSESAN OPSI	Option parsing normalizes values and fallback behavior before layout code runs.	Unknown options warn and fall back; ensure docs and fallback logic stay aligned.
KONFIGURASI BIBLATEX	Citation preset resolution maps high-level option values to biblatex profiles and optional-package fallbacks.	Any new preset must update both parser and fallback map, with bilingual docs.
IMPOR/KONFIGURASI PAKET	Runtime packages are grouped by responsibility (layout, references, tables, graphics, code, glossary).	When adding dependencies, update dependency tables and doc build deps.
TATA LETAK ISI: HALAMAN & TIPOGRAFI	Physical page parity uses shipout-based counters for reliable odd/even decisions.	Shipout counters reflect shipped pages; transition logic can require buffered-page handling.
TATA LETAK ISI: PENAMAAN & I18N	Label naming and language switching are centralized to keep bilingual output consistent.	Changing labels requires cross-checking list titles and refs in both languages.
OBJEK ISI	Content helpers wrap common patterns and keep user syntax stable while internals evolve.	Preserve public command contracts when refactoring helper internals.
FRONT-MATTER LISTS	Custom-list registration is data-driven so user-defined lists can be emitted uniformly.	Registration order affects output order; keep deterministic ordering rules.
FRONT MATTER: ENV PENGUMPUL KONTEN	Collector environments store user blocks before assembly, separating data capture from rendering.	Ensure collector defaults are safe when users omit optional environments.
FRONT MATTER: PENYUSUNAN HALAMAN INTERNAL	Typesetting internals compose mandatory pages with shared spacing and heading conventions.	Keep spacing/profile edits centralized to avoid drift among page builders.
METADATA API	Public metadata commands feed internal accumulators consumed by front matter and headers.	New metadata fields require updates in API, renderers, and docs simultaneously.
MATERI BELAKANG	Appendix/bibliography/glossary helpers enforce consistent separators and pagination behavior.	Verify twoside transitions and list entries after modifying appendix/page-style code.
HOOK <code>\AtBeginDocument</code> / <code>\AtEndDocument</code>	Lifecycle hooks finalize runtime defaults and persist list counters across runs.	Multi-pass behavior means stale auxiliary files can hide or delay regressions.

Internal spacing profile note: low-level spacing lengths are grouped in the macro

shown below. This grouping exists so maintainers can tune typography in one place without editing many page-rendering macros.

`\UI@setDocumentSpacingDefaults`

Internal pagination caveat note: The macro below increments physical-page counters after page shipout. For front-matter transitions where a page may still be buffered, parity checks can require offset logic as implemented in the class transition helpers.

`\EveryShipout`

Bahasa Indonesia

Section ini mendokumentasikan perilaku privat secara sengaja, khusus untuk maintainer. Pengguna umum tetap mengacu ke Bagian I.

Ringkasan area internal dan catatan utama:

- Pemrosesan opsi dan kebijakan kelas harus tetap terpusat, agar fallback dan perilaku default konsisten.
- Resolusi preset sitasi harus dijaga sinkron dengan fallback paket opsional serta dokumentasi dwibahasa.
- Perakitan front matter memakai pemisahan tahap: pengumpulan konten (environment) lalu penyusunan halaman.
- Kontrol spasi internal dipusatkan pada makro berikut untuk mencegah penyetelan tersebar di banyak makro.

`\UI@setDocumentSpacingDefaults`

- Penentuan paritas halaman fisik bergantung pada penghitung berbasis shipout. Pada transisi tertentu, cek paritas dapat memerlukan logika offset karena halaman terakhir bisa masih berada di buffer TeX.
- Hook awal/akhir dokumen memengaruhi perilaku multi-pass, sehingga pembersihan berkas bantu dan validasi log tetap penting.

5 Policy Toggles and Style Knobs / Tombol Kebijakan dan Kenop Gaya

English

The `KEBIJAKAN KELAS` section defines global policy booleans and style hook macros. All booleans default to `false` and are set exclusively by option parsing. Maintainers should not set them directly inside page-rendering macros; all policy-driven branching should test the boolean rather than re-implementing the condition.

Boolean	Default	Effect when true
<code>\ifUI@calibratedspacing</code>	false	1.4× line spacing via <code>\setstretch</code> ; false uses <code>\onehalfspacing</code>
<code>\ifUI@twosideprint</code>	false	Mirrors header/footer positions for twoside printing
<code>\ifUI@paragraphindent</code>	false	1.5em paragraph indent and zero <code>\parskip</code> ; false: zero indent and 12 pt skip
<code>\ifUI@plagiarismcheck</code>	false	Clears all header and footer content from every named page style

Style hook macros expose typographic choices as reassignable macros so maintainers or advanced users can override them without touching rendering code.

Hook macro	Default value and purpose
<code>\UI@chapterHeadingStyle</code>	<code>\singlespacing\centering\rm\bfseries</code> (applies to ConnyRevised chapter heading blocks)
<code>\UI@sectionHeadingStyle</code>	<code>\normalfont\fontsize{12}{15}\bfseries</code> (monograph section headings at all levels)
<code>\UI@journalSectionHeadingStyle</code>	same default as <code>\UI@sectionHeadingStyle</code> (journal section headings)
<code>\UI@applyFooterFont</code>	no-op (override to change footer brand font)
<code>\UI@applyPageNumberFont</code>	12pt Times Roman (override to change page number font)

The composed text macros `\UI@footerText` and `\UI@pageNumberText` call the hooks at expansion time, so assigning `\UI@applyFooterFont` before `\makefrontmatter` is sufficient to affect all pages.

Spacing control macros:

- `\UI@applyMainSpacing`: applies the active spacing mode (calibrated or one-half) as a side effect. Call after any `setspace` environment that overrides spacing.
- `\UI@restoreMainSpacing`: alias for `\UI@applyMainSpacing`. Used throughout page assembly to restore spacing after `singlespace` blocks.
- `\UI@applyParagraphLayout`: sets `\parindent`/`\parskip` according to the active `paragraph` option. Called once at class load; call again if you switch paragraph policy after the class is loaded (unusual).

Bahasa Indonesia

Bagian KEBIJAKAN KELAS mendefinisikan boolean global dan makro kenop gaya. Semua boolean bernilai `false` secara bawaan dan hanya diubah oleh pemrosesan opsi. Maintainer tidak boleh mengatur boolean ini secara langsung di dalam makro penyusunan halaman; semua percabangan berbasis kebijakan cukup dengan menguji kondisional yang sudah ada.

Makro hook gaya mengekspos pilihan tipografi sebagai makro yang dapat ditetapkan ulang, sehingga maintainer atau pengguna lanjutan dapat mengganti gaya tanpa menyentuh kode rendering.

Makro kontrol spasi: `\UI@applyMainSpacing` menerapkan mode spasi aktif; `\UI@restoreMainSpacing` adalah alias-nya dan digunakan di seluruh perakitan halaman untuk memulihkan spasi setelah blok `singlespace`.

6 Option Parsing Internals / Internal Pemrosesan Opsi

English

All keys belong to the `uithesis.cls` keyfamily, processed by `xkeyval`. Every key is declared with `\define@choicekey**`, which restricts values to an explicit list, calls a `ClassWarning` via `\UI@warnUnknownChoice` for unknown values, and falls back to the documented default.

Available keys and their choices:

Key	Accepted values	Default
<code>format</code>	<code>monograph</code> , <code>journal</code>	<code>monograph</code>
<code>type</code>	<code>Skripsi</code> , <code>Tesis</code> , <code>Disertasi</code> , <code>Laporan Kerja Praktik</code> , <code>Kampus Merdeka</code>	<code>Skripsi</code>
<code>jenjang</code>	<code>Sarjana</code> , <code>Magister</code> , <code>Doktor</code>	<code>Sarjana</code>
<code>lang</code>	<code>indonesian</code> , <code>english</code>	<code>indonesian</code>
<code>columns</code>	<code>1</code> , <code>2</code>	<code>1</code>
<code>spacing</code>	<code>calibrated</code> , <code>standard</code>	<code>calibrated</code>
<code>paragraph</code>	<code>indent</code> , <code>noindent</code>	<code>noindent</code>
<code>plagiarismcheck</code>	<code>false</code> , <code>true</code>	<code>false</code>
<code>print</code>	<code>oneside</code> , <code>twoside</code>	<code>twoside</code>
<code>citation</code>	14 preset names (see citation preset section)	<code>apa</code>

Keyless shortcut options (`\DeclareOptionX`) forward directly to `\setkeys{uithesis.cls}{...}` so that, for example, `[Skripsi,english]` works equivalently to `[type=Skripsi,lang=english]`.

`\DeclareOptionX*` passes any unrecognized option to the `report` base class. This enables passing standard `report` options such as `draft` without explicit forwarding.

The base class is always loaded with fixed arguments: `12pt,a4paper,onecolumn,twoside,final`. Values for `columns` and `print` do not affect these arguments; they control internal class behavior instead.

Adding a new class option:

1. Add a `\define@choicekey**` block with a `\UI@warnUnknownChoice` fallback. For boolean flags, also add a corresponding `\newif`.
2. Optionally add a `\DeclareOptionX` keyless shortcut.

3. Add the option to the Class Options table in Part I.
4. Add a `\changes` entry in the Changelog.

Bahasa Indonesia

Semua kunci termasuk keyfamily `uithesis.cls` yang diproses oleh `xkeyval`. Setiap kunci dideklarasikan dengan `\define@choicekey**`, membatasi nilai ke daftar pilihan eksplisit, dan memanggil `ClassWarning` via `\UI@warnUnknownChoice` untuk nilai yang tidak dikenal.

Pintasan tanpa nilai (`\DeclareOptionX`) meneruskan langsung ke `\setkeys`, sehingga `[Skripsi,english]` setara dengan `[type=Skripsi,lang=english]`.

Kelas dasar selalu dimuat dengan argumen tetap: `12pt,a4paper,onecolumn,twoside,final`. Nilai opsi `columns` dan `print` tidak memengaruhi argumen ini; keduanya mengontrol perilaku internal kelas.

7 Citation Preset System / Sistem Preset Sitasi

English

Citation configuration is resolved through a preset system before `biblatex` is loaded. Three factory macros construct the preset commands:

- `\UI@bibDefinePreset{<name>}{<citestyle>}{<bibstyle>}{<mapping>}`: registers a simple preset that maps directly to a fixed `biblatex` profile.
- `\UI@bibDefinePresetWithFallback{<name>}{<.bbx-file>}{<cs>}{<bs>}{<cs-fallback>}{<bs-fallback>}{<lang>}{<pkg>}{<fb-desc>}`: tries to locate the `.bbx` file; if absent, attempts to install the optional package via `\RequirePackage`, then either uses the full profile or falls back to the provided `cs-fallback` and `bs-fallback` values.
- `\UI@bibDefineNumericFallbackPreset{<name>}{<.bbx>}{<bsstyle>}{<pkg>}`: shorthand for presets whose fallback is always `numeric-comp/numeric`.

Resolution: `\UI@bibResolveConfiguration` dispatches to the preset handler generated by the factory macro for the active `\UI@citationpreset`. Override fields (`\UI@citationstyleoverride`, `\UI@bibstyleoverride`, `\UI@citationmappingoverride`) are applied after preset resolution if non-empty, allowing fine-grained overrides without replacing the entire preset.

Public override API (called in document preamble, after `\documentclass`):

Command	Effect
<code>\setuicitationpreset{name}</code>	Select a named preset
<code>\setuicitestyle{style}</code>	Override <code>citestyle</code> only
<code>\setuibibstyle{style}</code>	Override <code>bibstyle</code> only
<code>\setuicitationmapping{map}</code>	Override language mapping

Command	Effect
<code>\setuibliatexoptions{opts}</code>	Append extra <code>biblatex</code> load-time options
<code>\setuibliatexstyle{style}</code>	Set both <code>citestyle</code> and <code>bibstyle</code> simultaneously

The ACM preset receives special handling: it checks for both `acm.bbx` and `acm.cbx` independently, because some distributions ship only one file. If the `cbx` is absent, the `citestyle` falls back to `numeric-comp` while the `bibstyle` remains `acm`.

Adding a new preset:

1. Add a `\UI@bibDefinePreset` or `\UI@bibDefinePresetWithFallback` call before `\UI@bibResolveConfiguration`.
2. Add the preset name to the `citation` choice key list.
3. Add a row to the citation preset table in Part I.
4. Document the required TeX Live package and fallback behavior.

Bahasa Indonesia

Konfigurasi sitasi diselesaikan melalui sistem preset sebelum `biblatex` dimuat. Tiga makro pabrik membuat perintah preset. `\UI@bibDefinePreset` mendaftarkan preset sederhana; `\UI@bibDefinePresetWithFallback` mencoba menemukan berkas `.bbx` lalu menginstal paket opsional jika perlu, atau menggunakan fallback numerik; `\UI@bibDefineNumericFallbackPreset` adalah pintasan untuk fallback `numeric-comp/numeric`.

Resolusi preset dipanggil oleh `\UI@bibResolveConfiguration`. Bidang override (`\UI@citationstyleoverride` dll.) diterapkan setelah resolusi preset jika tidak kosong, memungkinkan penggantian sebagian tanpa mengubah seluruh preset.

8 Package Dependency Structure / Struktur Dependensi Paket

English

All runtime packages are loaded via `\RequirePackage` in the `IMPOR PAKET DEPENDENSI` section, organized by functional group. Load order is significant: `inputenc` must precede `biblatex`; `babel` must precede `csquotes`; `hyperref` must follow most other packages.

Format-specific branches:

- Monograph: `glossaries-extra` with `automake,acronyms,symbols,numberlist,nomain`, plus `\makeglossaries` to enable automatic run.
- Journal: `glossaries-extra` without `automake`; if `paragraph=indent`: `indentfirst`; if `columns=2`: `dblfloatfix`, `cuted`, `balance`, `flushend`.

CJKutf8 is always loaded in both formats, enabling CJK text anywhere in the document without format-specific guards.

The `\UI@maxwidth` guard (defined in the graphics group) prevents images wider than `\linewidth` from overflowing the text block:

```
\def\UI@maxwidth{\ifdim\Gin@nat@width>\linewidth\linewidth\else\Gin@nat@width\fi}
```

This is applied globally via `\setkeys{Gin}{width=\UI@maxwidth,keepaspectratio}`. Individual `\includegraphics` calls benefit from this silently. Do not override it with a fixed width unless intentional.

When adding a runtime dependency:

1. Add `\RequirePackage{pkgname}` in the appropriate group.
2. Add a row to the Dependencies longtable in Part I.
3. If the package is also needed to typeset the class documentation, add it to `typesetdeps` in `build.lua`.

Bahasa Indonesia

Semua paket runtime dimuat via `\RequirePackage` di bagian IMPOR PAKET DEPENDENSI, diorganisasi per kelompok fungsional. Urutan pemuatan penting: `inputenc` harus sebelum `biblatex`, `babel` harus sebelum `csquotes`, `hyperref` harus setelah sebagian besar paket lain.

Cabang spesifik format: monograf memuat `glossaries-extra` dengan `automake`; jurnal memuat versi tanpa `automake` dan tambahan paket dua-kolom jika `columns=2`.

Penjaga `\UI@maxwidth` mencegah gambar yang lebih lebar dari `\linewidth` membantiri kolom teks. Jangan timpa dengan lebar tetap kecuali disengaja.

9 Package Configuration / Konfigurasi Paket

English

Hyperref settings (in KONFIGURASI PAKET):

- `colorlinks=false`, `pdfborder=0 0 0`: no visible link borders in print output; color contrast is not needed for print.
- `pdfpagelabels=true`, `hypertexnames=false`: required for correct PDF bookmarks when page numbering switches from roman to arabic.
- `plainpages=false`: must accompany `pdfpagelabels`.
- `pdfstartview=FitH`: opens PDF fit-to-width by default.

The `\contentsline` override patches the `hyperref` definition to ensure all ToC and list entries (including custom lists from `\newUIlist`) use `\hyper@linkstart/\hyper@linkend` for clickable links. If `hyperref` changes its `\contentsline` interface, this override must be reviewed.

WCAG-compliant color palette (all at contrast ratio $\geq 4.5:1$ on white):

Macro	RGB value	Ratio	Used for
<code>codegreen</code>	(0, 0.50, 0)	5.1:1	Comment color in <code>uistyle</code>
<code>codegray</code>	(0.35, 0.35, 0.35)	9.3:1	Line-number color
<code>codepurple</code>	(0.58, 0, 0.82)	6.5:1	String color in <code>uistyle</code>
<code>keywordcolor</code>	NavyBlue (alias)	$\geq 5.1:1$	Keywords in language definitions
<code>typecolor</code>	teal (alias)	4.5:1	Type names (minimum AA)
<code>greencomments</code>	OliveGreen (alias)	4.8:1	Comments in language definitions

When adding new code colors, verify the contrast ratio against white (`#FFFFFF`) before adding. Tools such as the WebAIM Contrast Checker may be used. Assign the color as a named `\colorlet` alias so language definitions can reference the semantic name rather than raw RGB values.

`\lstdefinestyle{uistyle}` key choices:

- `basicstyle=\ttfamily\small` — one point smaller than body text for visual contrast.
- `columns=fullflexible`: proportional horizontal spacing; enables cleaner soft-wrapping in narrow columns.
- `breaklines=true, breakindent=1em`: automatic wrapping with a visual indent to distinguish continuation lines.
- `numbers=left, numbersep=5pt`: left-side line numbers at 5pt from the code column.
- `tabsize=2`: 2-space tabs match the UI source conventions.

Caption configuration: the `uicaption` font is `\fontsize{12}{15}` to match the body text size. The `centering` justification is declared with `\parfillskip\z@skip` so the last line of a multi-line caption is also centred (standard `\centering` leaves the last line ragged).

Bahasa Indonesia

Pengaturan `hyperref`: `colorlinks=false` dan `pdfborder=0 0 0` tidak menghasilkan bingkai tautan pada output cetak. `pdfpagelabels=true` dan `plainpages=false` diperlukan agar penomoran PDF benar saat beralih dari romawi ke arab.

Override `\contentsline` memastikan semua entri daftar (termasuk daftar kustom dari `\newUIlist`) menggunakan tautan PDF yang dapat diklik.

Palet warna WCAG: semua warna memenuhi rasio kontras $\geq 4.5:1$ pada latar putih. Saat menambah warna baru, verifikasi rasio kontras terlebih dahulu.

Konfigurasi caption: font `uicaption` menggunakan `\fontsize{12}{15}` agar sesuai ukuran teks tubuh. Justifikasi `centering` memakai `\parfillskip=0pt` agar baris terakhir caption panjang tetap rata tengah.

10 Chapter Heading System (ConnyRevised) / Sistem Judul Bab (ConnyRevised)

English

The chapter heading style is derived from `fncychap v1.34` (LPPL). Only the `ConnyRevised` configuration is retained; all other `fncychap` styles have been removed. The UI-specific adjustments (v2.2.0) tighten the vertical rhythm to match the UI thesis style guide.

Conditionals (defined before the `\if@UImonograph` block):

- `\ifUCN/\ifLCN`: uppercase/lowercase mode for the chapter name label (e.g., “BAB”). `ConnyRevised` activates `\UCNtrue`.
- `\ifUCT/\ifLCT`: uppercase/lowercase mode for the chapter title. `ConnyRevised` activates `\UCTtrue`.
- `\ifinapp`: true when inside the appendix; set by the patched `\appendix` command.
- `\if@mainmatter`: defined explicitly if not already present (since `report.cls` does not define it, unlike `book.cls`).

Style variant macros:

- `\CNV/\ChNameVar`: format for the chapter-name label.
- `\CNoV/\ChNumVar`: format for the chapter number.
- `\CTV/\ChTitleVar`: format for the chapter title text.
- `\FmN/\FmTi`: apply the case-conversion modes.

ConnyRevised vertical rhythm:

- `\DOCH`: `\vspace*{-4.5em}` pulls the entire heading block upward toward the top margin, followed by `\vspace*{-1em}` to compress the gap between the label line and the chapter number.
- `\DOTI`: chapter title line, ending with `\vskip20pt` of space before body text.
- `\DOTIS`: unnumbered variant; compensates with `\vspace*{-4em}` and `\vspace*{-1em}` to match the numbered heading’s visual rhythm.
- `\@makeschapterhead`: centered, uppercase, `\vskip20pt`.

Do not change the negative `vspace` values without recompiling `example/thesis.tex` and verifying the visual rhythm. These values are calibrated to the UI 2025 formatting guidelines.

Journal **chapter** **flow:** **no** `\clearpage`, uses `\par\addvspace{\UI@journal@chapterbefore}` to insert inline spacing. `\section` and `\subsection` are redefined with `\RenewDocumentCommand` to support a starred form with optional short name for the ToC, enabling correct navigation entries without section numbering.

Bahasa Indonesia

Gaya judul bab diturunkan dari `fncychap v1.34` (LPPL); hanya konfigurasi `ConnyRevised` yang dipertahankan.

Kondisional `\ifUCN/\ifLCN` (huruf besar/kecil label bab) dan `\ifUCT/\ifLCT` (huruf besar/kecil judul bab) didefinisikan sebelum blok `\if@UImonograph` agar aman pada mode *skip-mode* TeX.

Ritme vertikal `ConnyRevised`: `\DOCH` menarik blok heading ke atas dengan `\vspace*{-4.5em}`, sedangkan `\DOTIS` mengompensasi header tak bernomor agar ritme visualnya sama dengan header bernomor. Jangan ubah nilai `vspace` ini tanpa memverifikasi ulang visual pada `example/thesis.tex`.

Pada format jurnal, alur bab bersifat *inline* tanpa `\clearpage`; `\section/\subsection` didefinisikan ulang dengan `\RenewDocumentCommand` untuk mendukung nama pendek opsional pada ToC.

11 Page Geometry and Typography Policies / Kebijakan Geometri Halaman dan Tipografi

English

Margin policy:

- Monograph: 3 cm on all four sides (UI 2025 guidelines).
- Journal: 2 cm left/right, 3 cm top/bottom (wider text block for two-column layout).
- `\addtolength{\topmargin}{-14.5pt}` corrects for `headheight=14.5pt` so the body area remains at the correct position.

`\setlength{\emergencystretch}{1.5em}` allows up to 1.5em of additional inter-word stretch before TeX emits an overfull hbox. This silently prevents many overfull warnings in narrow columns without disabling hyphenation.

Typography hierarchy (monograph):

- `secnumdepth=3`: subsubsection numbered.
- `tocdepth=3`: subsubsection appears in ToC.

- All heading levels use `\@startsection` with zero before-skip and minimal after-skip; vertical rhythm is controlled entirely by body text leading rather than heading skip parameters.

Physical page counters:

- `chapterpagecount[chapter]`: resets each chapter; used for internal logic that needs per-chapter page counts.
- `UI@physicalpage`: never resets; incremented by `\EveryShipout` after every shipped page. This provides reliable odd/even parity regardless of `\pagenumbering` resets (roman $\rightarrow$ arabic).

Utility macros and sentinels:

- `\blank`: empty sentinel macro; used in conditionals such as `\ifx\blank\npmDua` to test whether a slot is unfilled.
- `\strcompare{<string>}{<macro>}{<same>}{<diff>}`: pure L^AT_EX2e string equality: expands *macro* with `\edef`, compares with `\def`, then uses `\ifx`. Safe when *macro* contains only character tokens.
- `\UI@IfSingleAuthor{one}{multi}`: tests `\ifUI@allowmultiauthor` and `\ifx\blank\npmDua` to distinguish single-author from group theses.
- `\UI@AppendIfPresent{macro}{text}`: appends / *text* only if *macro* is not `\blank`. Used for optional second/third author data in combined display strings.
- `\UI@makaraimage`: defaults to `uithesis-makara.png`. Override with `\setmakaraimage{filename}` in the document preamble.

For journal format, `\include` is silently aliased to `\input` (`\let\include\input`) so chapter files do not produce page breaks between inclusions in the journal flow.

Bahasa Indonesia

Kebijakan margin: monograf 3 cm semua sisi; jurnal 2 cm kiri/kanan dan 3 cm atas/bawah. Koreksi `\topmargin` sebesar $-14,5$ pt diperlukan karena `headheight=14.5pt` pada pengaturan *geometry*.

`\emergencystretch` diatur ke 1.5 em untuk mencegah *overflow hbox* tanpa menonaktifkan *hyphenation*.

Hierarki tipografi monograf: `secnumdepth=3` dan `tocdepth=3`; semua level heading menggunakan skip nol di atas headings.

Penghitung halaman fisik `UI@physicalpage` tidak pernah direset dan diperbarui oleh `\EveryShipout`, memungkinkan deteksi paritas yang andal saat penomoran halaman berganti dari romawi ke arab.

Sentinel `\blank` dan pembanding `\strcompare` dipakai di seluruh kelas untuk percabangan kondisional berdasarkan tipe dokumen dan jumlah penulis.

12 Journal Two-Column Helpers / Pembantu Jurnal Dua Kolom

English

Three modes are available for full-width content in the two-column journal format. In the monograph format, all three modes degrade gracefully to standard float or text behavior.

Mode A: wide floats (`UIwidetable`, `UIwidefigure`):

- Two-column: expands to `table*/figure*`, placed by `TEX` at the top or bottom of a spread.
- One-column: expands to `table/figure`.
- Both accept an optional placement specifier (default `tbp`).
- Use for content that is a true float and can be relocated by `TEX`.

Mode B: wide non-float blocks (`UIwideblock`):

- Two-column: wraps content in the `cuted strip` environment, inserting a full-width block at the inline position.
- `\ifUI@instrip` guards against nested `strip` environments.
- `cuted` is only loaded when `format=journal` and `columns=2`; using `UIwideblock` in other configurations silently degrades to a simple centered block.
- Use when content must appear at a specific inline position in text order.

Mode C: full-width page sequences (`UIfullwidthpages`, `UIlandscape`, `UIlongtable`):

- `UIfullwidthpages` calls `\clearpage`, switches to `\onecolumn`, typesets its body, then restores `\twocolumn`.
- `UIlandscape` wraps `UIfullwidthpages` with `pdflscape`'s `landscape` environment.
- `UIlongtable` uses `longtable` in one-column mode (monograph) and `mpsupertabular` in two-column mode (journal, because `longtable` is restricted to single-column mode).

The seven setup commands for `UIlongtable` must be called before `\begin{UIlongtable}`: `\UIlongtablecaption`, `\UIlongtablelabel`, `\UIlongtablecols`, `\UIlongtablefirsthead`, `\UIlongtablehead`, `\UIlongtabletail`, `\UIlongtablelasttail`. All seven macros are reset to `\@empty` after `\end{UIlongtable}`.

Bahasa Indonesia

Tiga mode tersedia untuk konten lebar-penuh di format jurnal dua kolom. Pada format monograf, semua mode tetap berfungsi secara wajar sebagai float atau teks biasa.

Mode A (`UIwidetable`, `UIwidefigure`): float penuh-halaman di atas/bawah halaman. Mode B (`UIwideblock`): blok non-float posisi-inline menggunakan `cuted`. Mode C (`UIfullwidthpages`, `UIlandscape`, `UIlongtable`): urutan halaman lebar dengan peralihan kolom.

Tujuh perintah setup `UIlongtable` harus dipanggil sebelum membuka environment; semuanya direset ke kosong setelah environment ditutup.

13 Page Style System / Sistem Gaya Halaman

English

All page styles are built with fancyhdr. Page-style configuration follows a specific pattern:

1. `\UI@syncPageStyleWidth` sets `\headwidth` equal to `\textwidth`. This must be called once at class load and again after `\restoregeometry` in the journal flow (fancyhdr may retain a stale headwidth after geometry resets).
2. Named styles are defined with `\fancypagestyle{name}{...}`.
3. The twoside physical-page parity helpers are installed last.

Physical parity helpers:

`\UI@showOnPhysOdd{content}` renders *content* only when the current page lands on an odd physical sheet. The check uses `\numexpr\value{UI@physicalpage}+1\relax` because `UI@physicalpage` holds the count of the *last shipped* page; the page being typeset has not yet been shipped.

`\UI@showOnPhysEven{content}` analogous for even pages.

Named page styles and their use:

Style name	Format	Usage
<code>onlypage</code>	both	Center page number only; no footer brand. Used for mandatory front-matter pages in journal mode, and blank inserted pages.
<code>plain</code>	both	Chapter first pages. Monograph: center number + right UI footer (oneside). Journal: right header number + right footer UI.
<code>standard</code>	both	Regular body pages. Number + UI footer; twoside-aware in monograph.
<code>first-pages</code>	both	Front-matter list pages (ToC, LoF, etc.). Monograph: center number + twoside UI footer. Journal: center number + right UI footer.
<code>journal-front</code>	journal	Roman-numbered journal mandatory pages (orisinalitas through publikasi); center number only.
<code>lampiran-first</code>	monograph	First page of each <code>lampiranBab</code> ; right header with running title (no continuation suffix).
<code>lampiran</code>	monograph	Continuation pages of an appendix; right header with running title plus “(lanjutan)”.

`\setfirstheaderfooter`, `\setoddevenheader`, `\setoddevenfooter` are imperative helpers that rebuild fancyhdr slots for the current page according to the active print mode. They are called by `\clearchapter` after every chapter break to reset the running header correctly.

`plagiarismcheck=true` overrides ALL named styles to `\fancyhf{}` with zero rule widths after all styles are defined, clearing every header and footer from the compiled PDF for plagiarism detection tools.

Bahasa Indonesia

Semua gaya halaman dibangun dengan fancyhdr. Pembantu paritas fisik `\UI@showOnPhysOdd` dan `\UI@showOnPhysEven` memeriksa `UI@physicalpage+1` karena penghitung tersebut menyimpan halaman terakhir yang sudah dikirim, bukan halaman yang sedang disusun.

`\UI@syncPageStyleWidth` harus dipanggil ulang setelah `\restoregeometry` di alur jurnal untuk menghindari drift `\headwidth`.

`plagiarismcheck=true` menimpa semua gaya yang sudah terdefinisi dengan `\fancyhf{}` kosong, membersihkan semua header/footer dari PDF untuk kebutuhan pengecekan plagiarisme.

14 Chapter and Page Management / Pengelolaan Bab dan Halaman

English

`\ifUI@chapterautoclearenabled` controls whether the redefined `\chapter` command automatically calls `\clearchapter` before each new chapter. It defaults to `false` during front matter assembly and is set to `true` by `\makefrontmatter` immediately before switching to arabic page numbering. The first chapter after `\makefrontmatter` is handled by `\ifUI@chapterstarted`, which suppresses the call on the very first chapter to avoid an extra blank page at the start of the body.

`\clearchapter` (monograph only):

1. `\clearpage`: flushes all pending floats.
2. If `twoside` and the current physical page is odd, inserts a blank page (`\thispagestyle{empty}`, `\addtocounter{page}{-1}`) so the new chapter starts on a right-hand (odd) physical page.
3. `\setoddevenheader` and `\setoddevenfooter` reinstall the correct running header and footer.

`\forceclearchapter` always inserts a blank page in `twoside` mode regardless of current parity. Use for structural gaps (e.g., the appendix separator).

`\UI@insertdummyblank`: inserts a blank page only when the current physical page is odd. Used in monograph front matter to maintain the odd-page-start invariant without consuming a logical page number.

`\UI@insertdummyblankonlypage`: like `\UI@insertdummyblank` but also applies `\thispagestyle{onlypage}` to the blank page.

`\blankpage`: clears, inserting an empty page (empty style, no page number), then clears again. For explicit blank pages outside chapter context.

Journal `\clearpage` override: when `columns=2`, `\clearpage` is wrapped to call `\balance` before the clear and `\nobalance` after, ensuring columns are balanced at all forced page breaks.

Bahasa Indonesia

`\ifUI@chapterautoclearenabled` mengendalikan apakah `\chapter` memanggil `\clearchapter` secara otomatis. Nilai ini `false` selama perakitan front matter dan diaktifkan oleh `\makefrontmatter` tepat sebelum penomoran arab.

`\clearchapter` (monograf): (1) flush float via `\clearpage`, (2) sisipkan halaman kosong jika halaman fisik saat ini ganjil sehingga bab baru mulai di halaman kanan, (3) pasang ulang header/footer.

`\forceclearchapter` selalu menyisipkan halaman kosong di mode dua sisi, tanpa melihat paritas. `\UI@insertdummyblank` dan `\UI@insertdummyblankonlypage` hanya menyisipkan jika halaman fisik saat ini ganjil.

Override `\clearpage` pada jurnal dua kolom membungkus panggilan asli dengan `\balance/\nobalance` agar kolom selalu seimbang pada setiap *page break* paksa.

15 Vertical Spacing System / Sistem Spasi Vertikal

English

All typography lengths are declared via `\newlength` and initialized in `\UI@setDocumentSpacingDefaults`. To change any spacing, set the corresponding named length; do not inline `\setlength` calls inside page-rendering macros.

`\UI@setDocumentSpacingDefaults` is called once at class load. A document may call it again in the preamble to reset everything to defaults before making selective adjustments.

Length macro	Default	Purpose
<i>Cover and title pages</i>		
<code>\UI@title@metaRowGap</code>	0.3 cm	Gap between each metadata row on cover/title
<code>\UI@coverLogoToUniversityGap</code>	−0.25 cm	Pulls “UNIVERSITAS INDONESIA” upward toward logo
<code>\UI@coverUniversityToTitleGap</code>	0.5 cm	Between university name and thesis title
<code>\UI@coverTitleToSubtitleGap</code>	0.8 cm	Between thesis title and type label
<code>\UI@coverSubtitleToAuthorGap</code>	0.5 cm	Between type label and author block

Length macro	Default	Purpose
<code>\UI@titleInsideSubtitleToBodyGap</code>	0.3 cm	After type label on judul-Dalam page
<i>Front page general rhythm</i>		
<code>\UI@frontpage@topskip</code>	0 pt	Vertical compensation before mandatory-page heading
<code>\UI@frontpage@afterskip</code>	20 pt	Space after mandatory-page heading
<code>\UI@frontpage@sectionGapXS</code>	0.1 cm	Extra-small gap
<code>\UI@frontpage@sectionGapS</code>	0.2 cm	Small gap
<code>\UI@frontpage@sectionGapM</code>	0.4 cm	Medium gap
<code>\UI@frontpage@sectionGapL</code>	0.6 cm	Large gap
<i>Signature block</i>		
<code>\UI@frontpage@bodyTopGap</code>	2.0 cm	Space above body text on pages with signature
<code>\UI@frontpage@bodyToSignatureGap</code>	2.6 cm	Space from body text to signature table
<code>\UI@frontpage@signatureDateGap</code>	1.8 cm	Space for handwritten signature above date
<i>Pengesahan board</i>		
<code>\UI@approval@metaToStatementGap</code>	1.0 cm	Between metadata block and approval statement
<code>\UI@approval@statementToBoardGap</code>	1.0 cm	Between approval statement and board table
<code>\UI@approvalBoardRuleToNameGap</code>	−0.2 em	Pulls name upward under signature rule
<code>\UI@approvalBoardNameToRoleGap</code>	0.8 em	Between name and role label
<code>\UI@approvalBoardHeaderToRowsGap</code>	0.3 cm	Between DEWAN PENGUJI header and first row
<code>\UI@approvalBoardInterRowGap</code>	−0.5 em	Tightens spacing between board rows
<code>\UI@approvalMultiAuthorStudyGap</code>	0.2 cm	Between study program entries in multi-author Pengesahan
<code>\UI@approvalMBKMStatementToBoardGap</code>	2.0 cm	MBKM variant: statement to board gap
<i>Surat Pernyataan</i>		
<code>\UI@suratParagraphGap</code>	0.6× <code>\baselineskip</code>	Between paragraphs in Surat Pernyataan
<code>\UI@suratHeadingTopskip</code>	0.15 cm	Topskip override for Surat Pernyataan heading
<code>\UI@suratHeadingAfterSkip</code>	24 pt	Afterskip for Surat Pernyataan heading
<code>\UI@suratIdentityToMetaGap</code>	0.2 cm	Between body text and identity table
<i>Kata Pengantar, Publikasi, list pages, back matter</i>		
<code>\UI@kataPengantarDateToNameGap</code>	0.1 cm	Between date and author name in Kata Pengantar
<code>\UI@kataPengantarSingleAuthorSignGap</code>	1.5 cm	Signature space above author name (single author)
<code>\UI@publikasiHeadingAfterGap</code>	8 pt	After Publikasi double-rule heading

Length macro	Default	Purpose
<code>\UI@publikasiRuleInnerGap</code>	1 pt	Between the two rules in Publikasi heading
<code>\UI@listChapterSeparatorSkip</code>	10 pt	Addvspace written to list files at each chapter
<code>\UI@frontmatterTocPreskip</code>	−1 em	Pre-skip for front-matter ToC entries (counters the separator)
<code>\UI@lt@continuedCaptionGap</code>	10 pt	Gap before continuation-caption row in Ullongtable
<code>\UI@lampiranHeaderLineGap</code>	1 em	Gap between page number and running title in appendix header
<code>\UI@appendixSeparatorTopGap</code>	6 cm	Top vspace on the LAMPIRAN separator page

Journal-only abstract spacing lengths (`\UI@journalTitleToStudyGap`, `\UI@journalStudyToAbstrakGap`, `\UI@journalAbstractToKeywordsGap`, `\UI@journalKeywordsToAbstractGap`, `\UI@journalAbstractToKeywordsGap`) and monograph abstract spacing (`\UI@abstrakMonoMetaToBodyGap`, `\UI@abstrakMonoBodyToKeywordsGap`, `\UI@abstrakMonoAfterKeywordsGap`, and the EN variants) follow the same pattern but are omitted from the table for brevity; their defaults are documented inline in the source.

Bahasa Indonesia

Semua panjang tipografi dideklarasikan via `\newlength` dan diinisialisasi dalam `\UI@setDocumentSpacingDefaults`. Untuk mengubah spasi, tetapkan panjang bernama yang sesuai; jangan menyisipkan `\setlength` langsung di dalam makro penyusunan halaman.

`\UI@setDocumentSpacingDefaults` dipanggil sekali saat kelas dimuat. Dokumen dapat memanggilnya lagi di preamble untuk mereset ke nilai default sebelum melakukan penyesuaian selektif.

16 Internationalization Layer / Lapisan Internasionalisasi

English

The label system stores all language-dependent strings in `\def\UI@label@<name>{...}` macros. Two parallel sets of definitions exist: one inside the `if@UIenglish` branch and one in the else branch. Every label name must be defined in both branches; missing definitions silently inherit the previous run's string.

Display helpers:

- `\UI@jenjang@display`: maps the internal jenjang code to a display string: English: Sarjana → “Bachelor’s”, Magister → “Master’s”, else → “Doctoral”; Indonesian: passthrough.
- `\UI@typeNameID` / `\UI@typeNameEN`: map the internal type code to display names. `\namaTipeTesis{ID}{EN}` overrides both.
- `\UI@type@display`: single active-language type name; set to `\UI@typeNameID` or `\UI@typeNameEN` based on `\if@UIenglish`.
- `\UI@facultyDisplay`: resolved to `\fakultasID` or `\fakultasEN` based on active language.

Sensitive labels that reference runtime metadata at expansion:

- `\UI@label@approvedBody`: references `\UI@jenjang@display`, `\studyProgramSatu`, and `\UI@facultyDisplay`. This label must be re-evaluated after the metadata commands execute. Because it is a `\def` (not `\edef`), it expands lazily and is safe.
- `\UI@label@aiBodyUsed`: references `\UI@aiplatform` and `\UI@tujuanai`. Same lazy-expansion safety applies.

To add a new document type:

1. Add a `\strcompare{New Type}{\UI@type}...` link in the `\UI@typeNameEN` resolution chain.
2. Add corresponding `\UI@label@*` strings in both language branches.
3. Follow the `strcompare` pattern wherever conditionals dispatch on `\UI@type` (e.g., in `\makefrontmatter` and `\UI@typeset@pengesahan`).

Adding a display language beyond Indonesian and English would require a third parallel branch of all label definitions. The current architecture does not structurally support more than two languages without significant refactoring.

Bahasa Indonesia

Sistem label menyimpan semua string berbahasa dalam makro `\def\UI@label@<name>`. Dua set definisi paralel ada: satu di cabang `\if@UIenglish` dan satu di cabang `else`. Setiap nama label harus terdefinisi di kedua cabang; definisi yang hilang secara diam-diam mewarisi string dari run sebelumnya.

Label sensitif seperti `\UI@label@approvedBody` dan `\UI@label@aiBodyUsed` mereferens metadata run-time (`\UI@jenjang@display`, `\UI@aiplatform`, dll.) melalui `\def` (bukan `\edef`), sehingga evaluasinya ditunda hingga saat digunakan dan aman terhadap urutan inisialisasi.

Untuk menambah tipe dokumen baru, tambahkan link `\strcompare` pada rantai resolusi `\UI@typeNameEN` dan label terkait di kedua cabang bahasa.

17 Custom Table Column Types / Jenis Kolom Tabel Kustom

English

Nine column types are defined via `\newcolumntype` with the `array` package prefix mechanism. All accept a mandatory width argument.

Code	Alignment	Position	Mnemonic and use
P	raggedright	p (top)	P aragraph; standard left-aligned column
L	raggedright	m (middle)	L eft, middle-anchored
B	raggedright	b (bottom)	B ottom-left
U	centering	p (top)	U pper-centered
C	centering	m (middle)	C entered, middle-anchored
O	centering	b (bottom)	O lower-centered
E	raggedleft	p (top)	north- E ast (right top)
R	raggedleft	m (middle)	R ight, middle-anchored
T	raggedleft	b (bottom)	T enggara (SE); bottom-right

The *position* argument (p/m/b from the `array` package) controls vertical alignment in rows with mixed-height cells. Use `m` variants when columns in the same row may have different heights and vertical centering is required.

`\tabitem` expands to `~~\llap{\textbullet}~~`, a bullet point indented within a table cell. Use in `p/m/b` columns where nested `itemize` environments would not fit.

Bahasa Indonesia

Sembilan jenis kolom tabel didefinisikan via `\newcolumntype` dengan mekanisme prefiks `array`. Semua memerlukan argumen lebar. Kode kolom mengikuti mnemonik: posisi vertikal (p/m/b dari `array`) dikombinasikan dengan perataan horizontal. Gunakan varian `m` saat kolom-kolom dalam satu baris memiliki tinggi berbeda dan perataan vertikal tengah diperlukan.

`\tabitem` menghasilkan item bergaya bullet yang terindentasi di dalam sel tabel, berguna di kolom p/m/b yang terlalu sempit untuk `itemize` bersarang.

18 User Content Commands / Perintah Konten Pengguna

English

Inline formatting:

Command	Expands to	Intended use
<code>\f{text}</code>	<code>\textit{text}</code>	Foreign terms, titles
<code>\bi{text}</code>	<code>\textbf{\textit{text}}</code>	Bold-italic emphasis
<code>\bo{text}</code>	<code>\textbf{text}</code>	Bold emphasis
<code>\m{expr}</code>	<code>\boldmath{\(expr\)}</code>	Bold inline math
<code>\mc{expr}</code>	<code>\boldmath{[expr]}</code>	Bold display math
<code>\code{text}</code>	<code>\texttt{text}</code>	Inline code
<code>\latex</code>	<code>\LaTeX</code>	Alias
<code>\gls{key}</code>	<code>\gls{key}</code> or <code>\key</code>	Glossary entry; uses defined macro if available

Placeholder markers:

- `\todo{text}`: monograph: styled red-shaded box; journal: inline colored text. All `\todo` markers must be removed before final submission.
- `\todoCite`: marks a missing citation; same format as `\todo`.

PDF inclusion:

- `\inpdf{filename}`: includes all pages with `\thispagestyle{fancy}`.
- `\putpdf{filename}`: includes all pages without page style override.
- Both accept the filename without `.pdf` extension.

User-defined variables:

- `\var{cmd}{val}`: defines *cmd* as `\newcommand`; errors if already defined.
- `\Var{cmd}{val}`: defines *cmd* as `\gdef` of the uppercase value.

Caption helpers:

- `\captionsource{title}{source}`: `\caption` with a 10pt source attribution line below the caption text. Always uses centering justification.
- `\captionsourcecont{title}{source}`: continuation caption; appends “(sambungan)” suffix; does not add a list entry.
- `\captionsourcecmd` and `\captionsourcecmdcont`: analogous helpers generated by `\newUIlist` for user-defined list types.

Semantic cross-reference aliases: `\bab`, `\sect`, `\pic`, `\tab`, `\equ`, `\lst`, `\apdx` provide Indonesian nouns for cross-reference type labels. Use as `\bab \ref{bab:1}` rather than bare “Bab ...”.

Bahasa Indonesia

Perintah pemformatan inline (`\f`, `\bi`, `\bo`, `\m`, `\mc`, `\code`, `\latex`) adalah pembungkus tipis untuk perintah L^AT_EX standar. `\glo{key}` adalah alias glossary ringkas yang mencoba memanggil makro `\key` bila terdefinisi, atau `\gls{key}` sebagai fallback.

`\todo` dan `\todoCite` adalah penanda placeholder yang bersifat kondisional per format: monograf menggunakan kotak bergaya; jurnal menggunakan teks berwarna. Semua penanda ini harus dihapus sebelum pengajuan akhir.

Pembantu caption `\captionsource` dan `\captionsourcecont` selalu menggunakan justifikasi centering dan memerlukan sumber dalam argumen kedua. Varian *cont* tidak menambah entri ke daftar konten.

Alias referensi silang (`\bab`, `\sect`, dll.) menyediakan nama benda Indonesia untuk label tipe objek; gunakan bersama `\ref` untuk konsistensi.

19 Front-Matter List System / Sistem Daftar Front Matter

English

The front-matter list system provides a data-driven mechanism for registering, counting, and conditionally generating list pages. All built-in and user-defined list types participate through the same registry.

Registries:

- `\UI@listExtRegistry`: comma-separated extensions of all known list files (lof, lot, lol, loe, lox, plus user-defined). Used by `\UI@addchapterlistseparatorspacing` and `\AtEndDocument` counter persistence. `\UI@registerListExt{ext}` appends to this.
- `\UI@frontmatterListRegistry`: subset of `\UI@listExtRegistry` holding only lists that receive a dedicated page in front matter. `\newUIlist` enrolls to both registries automatically.

Entry counting: entries are counted at two independent sites — the `\addcontentsline` call site (via the replaced `\addcontentsline`) and the `\@writefile` call site (via the replaced `\@writefile`) — to ensure accurate counts regardless of which path other packages take.

Previous-run counts: `\UI@prev@count@ext` macros hold entry totals from the prior run, written by `\AtEndDocument` to the .aux file. These govern `\UI@condListPage`. After structural edits, run L^AT_EX at least twice to stabilize list-page decisions.

`\minimumListEntries{N}` sets a threshold: list pages with fewer than *N* entries are suppressed. Default is 0 (always generate).

Appendix ToC suppression: `\UI@withAddcontentslineFilter` drops appendix chapter entries from toc when `\ifinapp` is true, preventing duplicate appearance of appendix chapters in both the main ToC and the appendix list (Daftar Lampiran).

Chapter separator spacing: `\ifUI@listchapterseparatorspacing` controls whether an `\addvspace` entry is written to all non-lox list files at each `\chapter` call.

This creates visual chapter grouping in LoF, LoT, LoL, and LoE pages. Disable with `\disablechapterseparatorspaceinlists` if uniformity is preferred.

`\CAPinToC / \noCAPinToC`: switch the active `\addcontentsline` between the uppercase and normal variants. CAP mode is active during front-matter page generation.

Bold chapter entries in ToC: `\enableboldchapterintoc` and `\disableboldchapterintoc` write tocleft formatting commands to the `.toc` file at point of call, affecting only subsequent entries. They do not retroactively reformat already-written entries.

`\newUIlist{<ext>}{<cmdbase>}{<singular>}{<listtitle>}` creates a complete list type in nine steps:

1. Store list title in `\UI@UIlistname@ext`.
2. Create counter `UI@count@ext`, initialize `\UI@prev@count@ext` to 0, enroll in both registries.
3. Define `\cmdbase` as the singular noun command.
4. Call `\newlistof{<cmdbase>}{<ext>}{<listtitle>}` from `tocleft`; add `\counterwithin{<cmdbase>}{<chapter>}` in monograph mode.
5. Set tocleft formatting: `indent=0pt`, `numwidth` auto-calculated from label width, `aftersnum=.`, `presnum=\cmdbase .`
6. Define `\caption<cmdbase>`.
7. Define `\captionsource<cmdbase>`.
8. Define `\caption<cmdbase>cont` and `\captionsource<cmdbase>cont`.
9. Store print macro `\UI@UIlist@print@ext` for the rendering loop.

Bahasa Indonesia

Sistem daftar front matter menyediakan mekanisme berbasis data untuk mendaftarkan, menghitung, dan menghasilkan halaman daftar secara kondisional.

Dua registri digunakan: `\UI@listExtRegistry` untuk semua ekstensi daftar yang dikenal, dan `\UI@frontmatterListRegistry` untuk subset yang mendapat halaman tersendiri di front matter. `\newUIlist` mendaftarkan ke keduanya secara otomatis.

Penghitungan entri dilakukan di dua titik independen (situs `\addcontentsline` dan situs `\writefile`), sehingga jumlah akurat meskipun paket lain menambal salah satu jalur.

`\UI@prev@count@ext` menyimpan jumlah entri dari run sebelumnya dan ditulis ke `.aux` oleh `\AtEndDocument`. Setelah perubahan struktural, jalankan $\LaTeX$ minimal dua kali agar keputusan halaman daftar stabil.

Penekanan entri bab lampiran di ToC dilakukan oleh `\UI@withAddcontentslineFilter` ketika `\ifinapp` bernilai benar.

`\newUIlist` membuat jenis daftar lengkap dalam sembilan langkah, termasuk counter, pendaftaran, perintah noun, format tocleft, dan empat varian perintah caption.

20 Content Collector Environments / Environment Pengumpul Konten

English

All seven collector environments use `environ`'s `\NewEnviron`: the full environment body is captured to the `\BODY` token and globally stored in a designated macro. Example:

```
\NewEnviron{abstrakID}{\global\let\UI@content@abstrakID\BODY}
```

Environment	Storage macro	Rendered by
<code>abstrakID</code>	<code>\UI@content@abstrakID</code>	<code>\UI@typeset@abstrak</code>
<code>abstractEN</code>	<code>\UI@content@abstractEN</code>	<code>\UI@typeset@abstract</code>
<code>kataPengantar</code>	<code>\UI@content@kataPengantar</code>	<code>\UI@typeset@kataPengantar</code>
<code>pernyataanOrisinalitas</code>	<code>\UI@content@orisinalitas</code>	<code>\UI@typeset@orisinalitas</code>
<code>persetujuanPublikasi</code>	<code>\UI@content@publikasi</code>	<code>\UI@typeset@publikasi</code>
<code>pernyataanAI</code>	<code>\UI@content@AI</code>	<code>\UI@typeset@pernyataanAI</code>
<code>suratPernyataan</code>	<code>\UI@content@suratPernyataan</code>	<code>\UI@typeset@suratPernyataan</code>

All collector environments are declared in the *class* (not in `\AtBeginDocument`), so they are available in the preamble before `\begin{document}`.

Safe-when-empty: every `\UI@typeset@*` macro checks `\ifx\UI@content@X\empty` and renders a default template when the user omits the corresponding environment. Mandatory pages are always generated; optional environments add an override.

`\katakunci{text}` and `\keywords{text}` store keyword strings in `\UI@keywords@ID` and `\UI@keywords@EN`. If omitted, these macros remain empty and the keywords line renders blank.

`\UI@frontpageHead{title}` renders the mandatory-page heading:

- Monograph: calls `\@makeschapterhead` directly without `\clearpage`. Sets `\thispagestyle{onlypage}`.
- Journal: `\clearpage`, centered uppercase bold title with controlled spacing, `\thispagestyle{journal-front}`.

Bahasa Indonesia

Ketujuh environment pengumpul konten menggunakan `\NewEnviron` dari `environ`: isi environment ditangkap ke `\BODY` dan disimpan secara global ke makro penyimpanan yang sesuai. Environment dideklarasikan di dalam kelas (bukan di `\AtBeginDocument`), sehingga tersedia di preamble sebelum `\begin{document}`.

Mekanisme aman-saat-kosong: setiap `\UI@typeset@*` memeriksa apakah konten yang tersimpan kosong dan merender template default jika pengguna menghilangkan environment opsional. Halaman wajib selalu dihasilkan.

`\katakunci` dan `\keywords` menyimpan kata kunci. Jika tidak diisi, baris kata kunci tetap dirender (kosong).

`\UI@frontpageHead` merender heading halaman wajib secara berbeda per format: monograf memanggil `\@makeschapterhead` langsung; jurnal melakukan `\clearpage` lalu menampilkan judul tengah tebal.

21 Front Matter Page Typesetting / Penyusunan Halaman Front Matter

English

`\UI@sigTable`: a three-column `tabular` with author Name, NPM, and Signature rows. Single-author: one set of rows. Multi-author: rows for authors 1 and 2 (and 3 if present, via `\UI@ifThirdAuthor`). Always ends with a Date row showing `\tanggalSiapSidang`.

Counselor renderer selection: `\UI@setupAbstrakCounselorRenderers` selects the active renderer once during class load:

- KP / MBKM: `\UI@abstrakCounselorRowsOne` (pembimbingSatu only).
- Disertasi: `\UI@abstrakCounselorRowsThree` (up to pembimbingTiga).
- All others: `\UI@abstrakCounselorRowsTwo` (pembimbingSatu + optional Dua).

`\UI@typeset@sampul`: `titlepage + singlespace* + center`; Makara logo (2.5 cm), “UNIVERSITAS INDONESIA”, thesis title (uppercase via `\Judul/\JudulInggris`), type label, author(s) with NPM, faculty block with combined study program, city, and date.

`\UI@typeset@judulDalam`: identical structure to `sampul` but inserts degree requirement text (`\UI@label@gelarText + \gelar`) between the type label and the author block.

`\UI@typeset@pengesahan`, four variants:

- KP: simplified metadata, single supervisor, `\UI@label@kpSupervisorTitle`.
- MBKM: one or two supervisors; if two, side-by-side `tabularx` showing partner position and organization.
- Doktor/S3: `longtable` board with Promotor + Kopromotor + up to 6 Penguji with chair/member roles.
- S1/S2: `tabularx` board with up to 3 Penguji; multi-author layout uses vertical stacking with `\UI@approvalMultiAuthorStudyGap`.

External pengesahan PDF: if `\pengesahanPDF{filename}` is used, `\makefrontmatter` substitutes `\includepdf` for the built-in `pengesahan` renderer; page style is applied via the `pagecommand` key.

`\UI@typeset@pernyataanAI`: auto-selects `\UI@label@aiBodyNone` or `\UI@label@aiBodyUsed` based on `\ifx\blank\UI@aiplatform`. The user `pernyataanAI` environment overrides both.

`\UI@typeset@suratPernyataan`: renders identity block (name, NPM, study program, academic year), plagiarism statement with the typeset thesis title, sanction statement, and closing. Override via `suratPernyataan`.

`\UI@typeset@publikasi`: custom double-rule heading (two `\hrules` with `\UI@publikasiRuleInnerGap` between), then the standard publication agreement text. Override via `persetujuanPublikasi`.

`\UI@typeset@abstrak` / `\UI@typeset@abstract`:

- Monograph: `\chapter*` heading, single-spaced tabular metadata block, abstract body, keywords line.
- Journal: centered title (12pt bold), author list with counselors inline (`\UI@abstrakCounselorInline`), study program + faculty, bold heading, body, keywords.

Bahasa Indonesia

`\UI@sigTable` merender tabel tanda tangan satu, dua, atau tiga penulis secara kondisional. Selalu diakhiri dengan baris tanggal.

Pemilih renderer pembimbing (`\UI@setupAbstrakCounselorRenderers`) dipanggil sekali saat kelas dimuat berdasarkan tipe dokumen.

`\UI@typeset@pengesahan` memiliki empat varian tergantung tipe: KP (penyelia satu), MBKM (penyelia satu atau dua dengan kolom mitra), Doktor (longtable dengan promotor dan hingga enam penguji), S1/S2 (tabularx).

`\pengesahanPDF` menggantikan renderer pengesahan bawaan dengan PDF eksternal menggunakan `\includepdf`.

`\UI@typeset@pernyataanAI` memilih teks “tidak menggunakan AI” atau “menggunakan AI” secara otomatis berdasarkan apakah `\UI@aplatform` tidak kosong.

22 `\makefrontmatter` Assembly Logic / Logika Perakitan `\makefrontmatter`

English

`\makefrontmatter` is the single entry point that assembles and emits all front-matter pages. Its logic branches on the active format.

Monograph flow (12 structural steps):

1. Sampul + `\UI@insertdummyblank` (ensures sampul ends on a right page).
2. `\pagenumbering{roman}`: roman numbering begins.
3. Judul Dalam with `\addChapter` ToC entry (skipped for MBKM).
4. Orisinalitas with `\addChapter` ToC entry (skipped for KP and MBKM).
5. Page counter set: 2 for KP/MBKM (skip steps 3 and 4), 3 otherwise.

6. Pengesahan: built-in renderer or `\includepdf` if `\UI@pengesahanPDFfile` is non-empty.
7. PernyataanAI with `\addChapter`.
8. SuratPernyataan with `\addChapter`.
9. KataPengantar + Publikasi (skipped for KP and MBKM).
10. Abstrak + Abstract.
11. ToC + conditional LoF/LoT/LoL/LoE + always LoX + user-defined lists.
12. Parity page + `\pagenumbering{arabic}` + `standard` style + auto-clear enabled + running header install.

Page counter reasoning: judul Dalam occupies page i, orisinalitas occupies page ii, so pengesahan begins at counter 3. KP and MBKM skip judulDalam and orisinalitas, so the counter is set to 2.

List-page decisions (step 11) use previous-run counts, for example:

```
\UI@condListPage{\UI@prev@count@lof} {\addDefaultListPage{\listoffigures}}
```

After a clean build, all lists appear regardless of count. On subsequent runs, the prior-run count suppresses empty lists.

Journal flow (8 structural steps):

1. `\pagenumbering{roman}` + counter 1 + `journal-front` style.
2. `\newgeometry{3cm all}` + sync page style width.
3. Sampul + Judul Dalam.
4. Orisinalitas (skipped for KP).
5. Pengesahan + PernyataanAI + SuratPernyataan + Publikasi.
6. `\restoregeometry` + arabic counter from 1 + `first-pages` style.
7. Abstrak + Abstract + `standard` style.
8. If `columns=2`: set `columnsep=0.25in`, `tabcolsep=4pt`, `\twocolumn`.

`\UI@chapterautoclearenabled` is set to `true` only at the end of the monograph flow; journal flow leaves it `false` (no auto-clearpage between chapters is needed in the inline journal layout).

Bahasa Indonesia

`\makefrontmatter` adalah titik masuk tunggal untuk merakit semua halaman front matter. Logikanya bercabang berdasarkan format aktif.

Alur monograf terdiri dari 12 langkah struktural. Alasan counter halaman: judul-Dalam menempati halaman i, orisinalitas menempati halaman ii, sehingga pengesahan dimulai di counter 3. KP/MBKM melewati langkah 3 dan 4, sehingga counter diset ke 2.

Keputusan halaman daftar menggunakan jumlah entri dari run sebelumnya; setelah build bersih, semua daftar ditampilkan terlepas dari jumlah entri.

Alur jurnal: 8 langkah. `\newgeometry` mempersempit margin untuk halaman front matter, kemudian `\restoregeometry` mengembalikan margin sebelum abstrak. Jika dua kolom, `\twocolumn` diaktifkan terakhir.

`\UI@chapterautoclearenabled` hanya diaktifkan di akhir alur monograf; jurnal membiarkannya `false` karena bab tidak memerlukan page break.

23 Metadata Accumulator API / API Akumulator Metadata

English

Metadata commands follow an accumulator pattern: counters track how many items have been registered and dispatch to the appropriate named slot.

Author chain: `\penulis`, `\npm`, `\programStudi` must be called in this order for each author. Each increments or reads `@UI@penuliscount` and stores data in the `*Satu/*Dua/*Tiga` slots. Maximum three authors.

Counselor chain: `\pembimbing` stores up to three supervisors in `pembimbingSatu/Dua/Tiga`.

Examiner chain: `\penguji` stores up to six examiners in `pengujiSatu` through `pengujiEnam`.

Combined, unique study program display:
`\UI@studyProgramUniqueDisplay`: renders study program 1 always; appends “ / program 2” only if `\npmDua` $\neq$ `\blank` and `programDua` $\neq$ `programSatu` (de-duplicates identical programs for single-study group theses); similarly for program 3.

Combined, non-unique study program display:
`\UI@studyProgramAllDisplay`: renders study programs of all authors, without de-duplication.

Language-aware helpers:

- `\UI@studyProgramLabel{Satu}`: returns `\studyProgramSatu` (English) or `\programSatu` (Indonesian) based on `\if@UIenglish`.
- `\UI@studyProgramSatuDisplay` through `\UI@studyProgramTigaDisplay`: shorthand display macros.
- `\UI@StudyProgramSatuDisplay` (capital S): uppercase variant.

Scalar commands: `\judul`, `\judulInggris`, `\fakultas{ID}{EN}`, `\gelar`, `\bulanTahun`, `\tanggalSiapSidang`, `\tanggalLulus` all use `\gdef` to self-redefine onto their storage macro.

`\kota` defaults to “Depok”. Override with `\kota{city}` in the preamble. After `\begin{document}`, `\kota` is aliased to `\UI@kota` (a plain string expansion rather than a setter).

`\tahunAkademik{text}` stores the academic year string displayed in the Surat Pernyataan.

`\mitra{position}{instance}` stores partner organization data for the MBKM approval page (two-supervisor variant showing partner details side-by-side with the academic supervisor).

`\pengesahanPDF{file}` sets `\UI@pengesahanPDFfile`; when non-empty, `\makefrontmatter` substitutes `\includepdf` for the built-in `pengesahan` renderer.

Uppercase convenience macros (defined in `\AtBeginDocument`): `\Judul`, `\JudulInggris`, `\Type`, `\PenulisSatu`, `\PenulisDua`, `\PenulisTiga`, `\Fakultas`, `\ProgramSatu`, `\ProgramDua`, `\ProgramTiga` are lazily evaluated wrappers that call `\MakeUppercase` at expansion time. They are defined late (in `\AtBeginDocument`) so that any preceding setter commands are not masked.

Bahasa Indonesia

Perintah metadata mengikuti pola akumulator: counter melacak berapa item yang telah didaftarkan dan mengirimkan ke slot bernama yang sesuai.

Rantai penulis (`\penulis`, `\npm`, `\programStudi`) harus dipanggil berurutan untuk setiap penulis. Maksimal tiga penulis.

`\UI@studyProgramUniqueDisplay` menghapus duplikat program studi yang sama untuk tesis kelompok dengan satu program studi.

`\UI@studyProgramAllDisplay` menampilkan semua program studi tanpa proses penghapusan duplikat.

Makro huruf kapital (`\Judul`, `\PenulisSatu`, dll.) didefinisikan di `\AtBeginDocument` sebagai pembungkus `\MakeUppercase` yang dievaluasi saat digunakan. Definisi terlambat ini mencegah perintah setter sebelumnya tertutup oleh definisi makro kapital.

`\kota` default ke “Depok”; setelah `\begin{document}`, makro ini diubah menjadi ekspansi string biasa (bukan setter).

24 Appendix and Back Matter / Lampiran dan Materi Belakang

English

Appendix page style system:

- `\UI@lampiran@header` stores the running header text for the current appendix (set by `lampiranBab`).

- `lampiran-first`: first page of each appendix section; twoside-aware header with the running title and no continuation suffix.
- `lampiran`: continuation pages; same header with “(lanjutan)” appended via `\UI@label@lampiranCont`.
- Both styles are blank when `plagiarismcheck=true`.

`lampiranBab{title}` environment:

1. `\clearpage` (monograph only).
2. `\addappendix{title}` registers the entry and increments the `appendix` counter.
3. Sets `\UI@lampiran@header` to “*Lampiran n: title*”.
4. Saves current `\headheight` and sets a taller value ($2 \times \text{baselineskip} + 1\text{em}$) to accommodate the two-line header (page number + running title).
5. Applies `lampiran-first` to the first page and `lampiran` to subsequent pages.
6. On close: `\clearpage` and restore original `\headheight`.

In journal format, `lampiranBab` renders the appendix heading via `\@makeschapterhead` instead of page-style manipulation.

`\makeappendixseparator`: inserts a blank right-page gap (`\UI@insertdummyblank`), then a `titlepage` with centered “LAMPIRAN” (or “APPENDIX”) at `\UI@appendixSeparatorTopGap` from the top. The logical page counter is saved before and restored after the separator so the appendix body pages continue their sequence uninterrupted.

`\makebibliography`:

1. `\clearpage` (non-twocolumn only; journal two-column continues inline).
2. `\CAPinToC` activates uppercase ToC entry for the bibliography.
3. `\printbibliography` with `heading=bibintoc` and language-appropriate title.
4. `\clearchapter` ensures the next section starts on a right page.

`\makeglossarypage` (monograph only): switches to single spacing, prints the glossary via `\printglossaries`, restores main spacing, and calls `\clearchapter`. The built-in glossaries heading is used without a manual ToC entry to prevent duplicate entries.

`\appendix is patched in \AtBeginDocument`: the patch prepends `\noCAPinToC` (so appendix entries are lowercase in ToC) and, for monograph, calls `\makeappendixseparator`. The original `\appendix` then runs normally.

Bahasa Indonesia

Sistem gaya halaman lampiran menggunakan dua gaya: `lampiran-first` untuk halaman pertama setiap `lampiranBab` (tanpa sufiks lanjutan), dan `lampiran` untuk halaman berikutnya (dengan suffix `lanjutan`). Keduanya kosong jika `plagiarismcheck=true`.

Environment `lampiranBab` menyimpan dan memulihkan `\headheight` karena header dua baris (nomor halaman + judul berjalan) membutuhkan tinggi header lebih besar dari default.

`\makeappendixseparator` menyisipkan halaman pemisah LAMPIRAN sebelum lampiran pertama. Counter halaman disimpan dan dipulihkan agar penomoran tidak terganggu oleh halaman pemisah.

`\makebibliography` mengaktifkan `\CAPinToC` agar entri daftar referensi di ToC menggunakan huruf kapital, sesuai gaya UI.

`\appendix` ditambah oleh `\AtBeginDocument` untuk memanggil `\noCAPinToC` dan, pada monograf, `\makeappendixseparator` secara otomatis.

25 Code Listing Style and Language Definitions / Gaya Kode Program dan Definisi Bahasa Pemrograman

English

All built-in language definitions follow a shared color convention using the semantic aliases `keywordcolor`, `typecolor`, and `greencomments`, defined in the `KONFIGURASI PAKET` section. Using semantic aliases rather than raw colors ensures that changing the palette in one place updates all language definitions simultaneously.

Built-in languages are organized in six functional groups:

Group	Languages
(1)	ABS (Abstract Behavioural Specification), Acceleo, CSS
(2)	D, Dart, Docker, F#, GDScript, GLSL, HLSL
(3)	Java (v9, ContextJ, DeltaJ, FOP dialects), Groovy, Kotlin
(4)	JavaScript, ECMAScript2015, TypeScript, and aliases (TS, ES6, JS); Julia, Closure, Scheme
(5)	Compiled and general-purpose languages
(6)	Configuration and data formats (YAML, TOML, etc.)

To add a new language definition:

1. Add a `\lstdefinlanguage{⟨Name⟩}` block (or `\lstdefinlanguage{⟨Name⟩}[⟨dialect⟩]{⟨base⟩}` for a dialect) in the appropriate group within `STYLING NON-ALUR`.
2. Use `keywordcolor`, `typecolor`, and `greencomments` for keyword, type, and comment colors.
3. Verify all color contrast ratios meet WCAG AA ($\geq 4.5:1$).
4. No changes to listings or `\lstset` are needed; all languages inherit the `uistyle` default.

Alias languages (e.g., `TypeScript/TS`, `ES6/JS`) are defined as empty dialects of an existing language:

`\lstdefinelanguage{TS}[]TypeScript{}`

This avoids duplicating keyword lists while providing the expected language identifier to users.

Bahasa Indonesia

Semua definisi bahasa bawaan menggunakan alias warna semantik (`keywordcolor`, `typecolor`, `greencomments`) yang didefinisikan di bagian KONFIGURASI PAKET. Menggunakan alias semantik memastikan perubahan palet warna di satu tempat memperbarui semua definisi bahasa secara serentak.

Bahasa bawaan diorganisasi dalam enam kelompok fungsional: domain-spesifik dan *markup*; sistem, game, dan *shader*; ekosistem JVM; skrip dan fungsional; terkompilasi dan umum; konfigurasi dan data.

Untuk menambah definisi bahasa baru, tambahkan blok `\lstdefinelanguage` di kelompok yang sesuai dalam **STYLING NON-ALUR**. Gunakan alias warna semantik, verifikasi rasio kontras WCAG AA, dan tidak ada perubahan pada `\lstset` yang diperlukan.

26 Document Lifecycle Hooks / Hook Siklus Hidup Dokumen

English

Two lifecycle hooks finalize class behavior after the preamble and after the document body.

`\AtBeginDocument` performs:

1. Installs `\UI@addtocontents` as `\addtocontents` so the counting filter is active after all package-level patches.
2. Syncs `\cftbeforechapskip` to the active chapter-separator toggle.
3. Patches `\@chapter` to call `\UI@addchapterlistseparatorspacing` before each numbered chapter, writing `advspace` entries to all list files.
4. Patches `\appendix` to prepend `\noCAPinToC` and (monograph) `\makeappendixseparator` before the original `\appendix` runs.
5. Renames built-in string macros per active language: `\bibname`, `\contentsname`, `\listfigurename`, `\listtablename`, `\lstlistlistingname`.
6. Renames glossary strings (`\glossaryname`, `\acronymname`).
7. Redefines `\kota` from a setter to a plain string expansion.
8. Defines uppercase convenience macros: `\Judul`, `\JudulInggris`, `\Type`, `\PenulisSatu`–`\PenulisTiga`, `\Fakultas`, `\ProgramSatu`–`\ProgramTiga`, and study-program display helpers.

9. Sets `tocloft` chapter leader dots (`\cftchapleader`, `\cftchapaftersnum`).
10. Sets `tocloft` LoF formatting: `indent=0pt`, `numwidth=70pt`, `aftersnum=.`, `presnum=\pic`.
11. Sets `tocloft` LoT formatting: `indent=0pt`, `numwidth=60pt`, `aftersnum=.`, `presnum=\tab`.

`\AtEndDocument` writes all registered list entry counts to the main `.aux` file for use on the next run:

```
\immediate\write\@mainaux{\gdef\csnameUI@prev@count@ext\endcsname{n}}
```

`\immediate\write` is used so the values are present even when build tools stop after this pass and re-run separately. The glossary counter (`UI@count@glossary`) is written by separate logic.

Multi-pass implications: list-page generation decisions depend on counts from the prior run. On the very first build, all list pages are generated (`threshold=0`, `count=0`). On subsequent builds, only lists with at least `\UI@minListEntries` entries are generated. After structural edits that add or remove list entries, always run $\text{\LaTeX}$ at least twice.

Bahasa Indonesia

Hook `\AtBeginDocument` memfinalisasi perilaku kelas setelah semua paket dimuat. Pemasangan `\UI@addtocontents` sebagai `\addtocontents` dilakukan di sini (bukan saat kelas dimuat) agar filter penghitung aktif setelah semua patch tingkat paket selesai.

Patch `\@chapter` menulis entri `addvspace` ke semua berkas daftar saat setiap bab bernomor dimulai. Patch `\appendix` menambahkan `\noCAPinToC` dan halaman pemisah lampiran secara otomatis.

Makro huruf kapital (`\Judul`, `\PenulisSatu`, dll.) didefinisikan di sini agar tidak menimpa perintah setter dengan nama serupa di preamble.

Hook `\AtEndDocument` menulis jumlah entri semua daftar ke `.aux` menggunakan `\immediate\write` agar tersedia pada run berikutnya. Karena keputusan halaman daftar bergantung pada jumlah dari run sebelumnya, selalu jalankan $\text{\LaTeX}$ minimal dua kali setelah perubahan struktural.

27 Maintainer Workflow / Alur Kerja Maintainer

English

Standard workflow for code changes:

1. Edit source files only: `uithesis.dtx`, `uithesis-doc.dtx`, `uithesis.ins`, `build.lua`, and `example/` when needed.
2. Regenerate class with `l3build unpack`.
3. Sync generated `uithesis.cls` to `example/uithesis.cls`.

4. Sync internal assets from `internals/` to `example/`.
5. Run sanity checks for leaked control-sequence text.
6. Build `example/thesis.tex` silently, then inspect `example/thesis.log`.
7. Run `l3build check` and inspect any `build/test/*.diff` files.

For documentation-only updates, run at least `l3build doc`.

Bahasa Indonesia

Alur standar untuk perubahan kode:

1. Edit hanya berkas sumber: `uithesis.dtx`, `uithesis-doc.dtx`, `uithesis.ins`, `build.lua`, dan `example/` bila diperlukan.
2. Bangun ulang kelas dengan `l3build unpack`.
3. Sinkronkan `uithesis.cls` hasil build ke `example/uithesis.cls`.
4. Sinkronkan aset internal dari `internals/` ke `example/`.
5. Jalankan cek teks bocor untuk mendeteksi nama control sequence yang tercetak sebagai teks biasa.
6. Kompilasi `example/thesis.tex` secara senyap, lalu baca `example/thesis.log`.
7. Jalankan `l3build check` dan periksa berkas `build/test/*.diff` bila ada kegagalan.

Untuk pembaruan dokumentasi saja, minimal jalankan `l3build doc`.

28 Maintaining Public APIs / Pemeliharaan API Publik

English

When adding or changing public options/macros/environments:

- Update user-facing sections in this document (class options, metadata commands, content commands).
- Update examples in `example/` when behavior changes.
- Update tutorial snippets under `example/assets/codes/tutorial/` if affected.
- Avoid temporary compatibility aliases on active development branches.

Bahasa Indonesia

Saat menambah atau mengubah opsi/makro/lingkungan publik:

- Perbarui section dokumentasi pengguna pada dokumen ini (opsi kelas, perintah metadata, perintah konten).
 - Perbarui contoh pada `example/` jika perilaku berubah.
 - Perbarui cuplikan tutorial pada `example/assets/codes/tutorial/` jika terdampak.
 - Hindari alias kompatibilitas sementara pada branch pengembangan aktif.
-

29 Contribution Flow / Alur Kontribusi

English

Contribution flow in this project:

1. Open an issue or discuss the planned change.
2. Create a feature branch from the active development branch.
3. Implement changes in source files, not generated files.
4. Run build and checks according to scope.
5. Update documentation and tutorial snippets when behavior changes.
6. Submit a merge request on GitLab with: scope summary, test evidence, and migration notes if needed.
7. Address review comments and keep the branch rebased or merged according to repository policy.

The detailed policy document remains `_attributions/CONTRIBUTING.md`.

Bahasa Indonesia

Alur kontribusi pada proyek ini:

1. Buka isu atau diskusikan perubahan yang direncanakan.
2. Buat branch fitur dari branch pengembangan aktif.
3. Implementasikan perubahan pada berkas sumber, bukan berkas turunan.
4. Jalankan build dan pengujian sesuai ruang lingkup perubahan.
5. Perbarui dokumentasi dan cuplikan tutorial bila perilaku berubah.

6. Kirim merge request di GitLab dengan ringkasan ruang lingkup, bukti pengujian, dan catatan migrasi bila diperlukan.
7. Tindak lanjuti komentar review dan sinkronkan branch sesuai kebijakan repositori.

Dokumen kebijakan rinci tetap berada pada `_attributions/CONTRIBUTING.md`.

30 Testing Infrastructure / Infrastruktur Pengujian

English

The package ships two complementary test systems: an automated *l3build* regression suite that catches logical regressions in class options and public APIs, and a manual GitLab CI combination job that produces rendered PDFs for human inspection.

Bahasa Indonesia

Paket ini dilengkapi dua sistem pengujian: rangkaian regresi *l3build* otomatis yang mendeteksi regresi logis pada opsi kelas dan API publik, serta satu *job* kombinasi GitLab CI manual yang menghasilkan PDF untuk diperiksa secara visual.

l3build Unit Tests / Uji Unit l3build

English

Run all log-based unit tests with `l3build check`. Run a single named test with `l3build check <testname>`.

Test source files (`.lvt`) live in `tests/`. Each file begins with `\input{regression-test.tex}` to load the *l3build* test framework. All unasserted output is suppressed with `\OMIT ... \TIMO` so that `.tlg` reference files contain only `\TEST/\ASSERTSTR` results. This means package version updates never cause spurious failures.

File naming convention: `NN-group-description.lvt`, where `NN` is a two-digit group number. Current groups:

- 01 Class loading smoke tests — one file per option combination of `format`, `type`, `jenjang`, `lang`, and `print`.
- 02 Citation option smoke tests — one file per `citation=` value.
- 03 Metadata command API tests — `\ASSERTSTR` checks on `\penulisSatu`, `\pembimbingSatu`, `\pengujiSatu`, and scalar fields.
- 04 Text formatting command tests — `\ASSERTSTR` checks on `\f`, `\bo`, `\bi`, `\code`, and `\var`.
- 05 Spacing and paragraph option smoke tests.

06 `plagiarismcheck=true` smoke test.

07 Journal-specific environment tests — definition checks and compilation of `UIwideblock`, `UIwidetable`, `UIwidefigure`, `UIfullwidthpages`, and `UIlandscape`.

Support files shared by all tests live in `tests/support/`. After changing the class, regenerate a reference file with `l3build save <testname>` and verify `l3build check` passes before committing.

High-maintenance patterns excluded from all tests: `\showbox`, `\showoutput`, and bibliography-formatted output capture. These break on unrelated package updates.

Bahasa Indonesia

Jalankan seluruh uji unit dengan `l3build check`. Jalankan satu uji tertentu dengan `l3build check <testname>`.

Berkas sumber uji (`.lvt`) berada di `tests/`. Setiap berkas diawali `\input{regression-test.tex}` untuk memuat kerangka uji `l3build`. Seluruh keluaran yang tidak diuji ditekan dengan `\OMIT ... \TIMO` agar berkas referensi `.tlg` hanya berisi hasil `\TEST/\ASSERTSTR`. Dengan demikian, pembaruan versi paket tidak menimbulkan kegagalan uji palsu.

Konvensi penamaan berkas: `NN-grup-deskripsi.lvt`, di mana `NN` adalah nomor grup dua digit. Setelah mengubah kelas, perbarui berkas referensi dengan `l3build save <testname>` dan pastikan `l3build check` lulus sebelum melakukan *commit*.

PDF Comparison Tests / Uji Perbandingan PDF

English

PDF comparison tests detect visual layout regressions on critical page types that log-based tests cannot verify. Run them with `l3build check -ctest-pdf`.

Source files (`.pvt`) live in `tests/pvt/`. Reference files (`.tpf`) are committed to the repository after human visual review. The dedicated configuration `test-pdf.lua` sets `testfiledir = tests/pvt` and `checkengines = {pdftex}`.

Current PDF tests:

08-cover-monograph Monograph Skripsi cover and title pages – the most visually critical output.

08-cover-journal Journal article first page.

08-chapter-opening Monograph chapter-opening page with margin, header, and footer.

08-twocol-spread Two-column journal body page.

To regenerate `.tpf` reference files locally:

```
l3build save -ctest-pdf <testname>
```

Inspect the rendered PDF in `build/test/`, confirm the visual output looks correct, then commit the updated `.tpf` file.

Bahasa Indonesia

Uji perbandingan PDF mendeteksi regresi tata letak visual pada halaman-halaman penting yang tidak dapat diverifikasi oleh uji berbasis log. Jalankan dengan `l3build check -ctest-pdf`.

Berkas sumber (`.pvt`) berada di `tests/pvt/`. Berkas referensi (`.tpf`) dikompilasi ke dalam repositori setelah diperiksa secara visual. Konfigurasi `test-pdf.lua` mengatur `testfiledir = tests/pvt` dan `checkengines = {pdftex}`.

Untuk memperbarui berkas `.tpf` secara lokal:

```
l3build save -ctest-pdf <testname>
```

Periksa PDF yang dihasilkan di `build/test/`, pastikan tampilan visual sudah benar, lalu lakukan *commit* pada berkas `.tpf` yang telah disetujui.

GitLab CI l3build Job / Job l3build di GitLab CI

English

The single manual job `test:l3build` (defined in `.gitlab-ci/test-l3build.yml`) runs both log-based and PDF comparison tests in the same CI environment used to build the class.

Trigger via GitLab **Run pipeline** with the following variable:

L3BUILD_SAVE Set to `true` to also regenerate `.tpf` reference files after the check steps. Defaults to `false`.

When `L3BUILD_SAVE=true` the regenerated `.tpf` files and pre-normalization PDFs are uploaded as job artifacts (seven-day retention). Download the artifact bundle, inspect the PDFs in `build/test/`, then commit the approved `.tpf` files to `tests/pvt/`. Automatic commit back to the repository is intentionally not implemented: silently accepting a visual regression as the new reference defeats the purpose of the test.

Bahasa Indonesia

Job manual `test:l3build` (didefinisikan di `.gitlab-ci/test-l3build.yml`) menjalankan uji berbasis log dan uji perbandingan PDF dalam satu lingkungan CI yang sama dengan yang digunakan untuk membangun kelas.

Picu melalui GitLab **Run pipeline** dengan variabel berikut:

L3BUILD_SAVE Diisi `true` untuk juga meregenerasi berkas `.tpf` setelah langkah pengujian. Nilai bawaan adalah `false`.

Jika `L3BUILD_SAVE=true`, berkas `.tpf` yang dihasilkan dan PDF pra-normalisasi diunggah sebagai artefak *job* (retensi tujuh hari). Unduh bundel artefak, periksa PDF di `build/test/`, lalu lakukan *commit* pada berkas `.tpf` yang telah disetujui ke `tests/pvt/`.

GitLab CI Combination Tests / Uji Kombinasi di GitLab CI

English

The `manual` job `test:combinations:manual` (defined in `.gitlab-ci/test-combinations.yml`) compiles arbitrary option combinations and uploads the resulting PDFs as artifacts for human inspection.

Trigger via GitLab **Run pipeline**, then fill in the `COMBINATION_TESTS` variable. One test case per line:

```
[path/to/file.tex] option1, option2=value, ...
```

Blank lines and lines starting with `#` are ignored. Example value:

```
[tests/minimal.tex] monograph, type=Skripsi, jenjang=Sarjana, lang=indonesian
[tests/minimal.tex] journal, columns=2, type=Tesis, jenjang=Magister, lang=english
[example/thesis.tex] monograph, print=oneside, type=Disertasi, jenjang=Doktor, lang=indone
```

Artifacts (`combo-artifacts/`) contain one PDF and one log per case, plus a summary `combination-results.zip`.

Bahasa Indonesia

Job `manual` `test:combinations:manual` (didefinisikan di `.gitlab-ci/test-combinations.yml`) mengompilasi kombinasi opsi sembarang dan mengunggah PDF yang dihasilkan sebagai artefak untuk diperiksa secara visual.

Picu melalui GitLab **Run pipeline**, lalu isi variabel `COMBINATION_TESTS`. Satu kasus uji per baris:

```
[path/to/file.tex] opsi1, opsi2=nilai, ...
```

Baris kosong dan baris yang diawali `#` diabaikan. Artefak (`combo-artifacts/`) berisi satu PDF dan satu *log* per kasus, serta ringkasan `combination-results.zip`.

31 Changelog

Change History

v1.0.3	General: Initial public release by Andreas Febrian et al. as a $\text{\LaTeX}$ style file (<code>uithesis.sty</code>), conforming to the 2008 Universitas Indonesia thesis formatting guidelines.	75	CI improvements, attribution, and APA Indonesian citation fixes. . . .	75
v2.0.0	General: Major revision for the 2017 UI guidelines, developed at the Reliable Software Engineering Lab, Fasilkom UI. Switched citations to $\text{\BibTeX}$ with IEEE style. Added <code>listings</code> syntax highlighting support.	75	v2.1.2	General: Revised front matter pages. Added non-standard approval page layouts for internship reports and dissertations.
v2.0.1	General: Added tutorial content; updated contribution guidelines. .	75	v2.1.3	General: Added support for group thesis and <i>Kampus Merdeka</i> independent-study report formats. .
v2.0.2	General: Switched default citation style to APA. Added <code>babel</code> Indonesian hyphenation. Added <code>longtable</code> and $\text{\BibTeX}$ tutorials. .	75	v2.2.0	General: Updated formatting to the latest UI thesis guidelines (cover page, originality statement, header/footer, appendix).
v2.0.3	General: Added landscape orientation support. Introduced a separate appendix list; appendix entries no longer appear in the main table of contents. Added a custom list-of-objects mechanism.	75	v2.2.1	General: Fixed header/footer on two-sided output. Fixed <code>listings</code> auto-wrapping regression from v2.2.0. Fixed custom object and chapter numbering in the table of contents. Added <code>pdfscape</code> landscape support. Added <code>glossaries</code> glossary support.
v2.1.0	General: Experimental CJK multi-language support. Added table cell alignment and word-wrapping. Added continuation suffix for multi-page tables.	75	v2.2.2	General: Added <code>amssymb</code> advanced mathematical symbol support. Added <code>\subfigure</code> support. Fixed automatic glossary generation with <code>makeglossaries</code>
v2.1.1	General: Added <code>amsfonts</code> mathematical symbol support. Community contributions: GitLab		v3.0.0	General: Rewritten as a $\text{\LaTeX}$ document class (<code>uithesis.cls</code>); complies with the 2025 Universitas Indonesia thesis formatting guidelines. Added journal format, English language support, and AI-use declaration page. Switched to <code>biblatex/biber</code> . Published on CTAN.

Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

A	
<code>abstractEN</code>	<i>17</i>
<code>abstrakID</code>	<i>17</i>
<code>\acronymname</code>	<i>67</i>
<code>\addappendix{title}</code>	<i>65</i>
<code>\addChapter</code>	<i>61, 62</i>
<code>\addcontentsline</code>	<i>57, 58</i>
<code>\addequtotoc</code>	<i>21, 24</i>
<code>\addtocontents</code>	<i>67, 68</i>
<code>\aiplatform</code>	<i>15–17</i>
<code>\apdx</code>	<i>20, 23, 56</i>
<code>\appendix</code>	<i>45, 65–68</i>
<code>\ASSERTSTR</code>	<i>71</i>
<code>\AtBeginDocument</code>	<i>59, 64–68</i>
<code>\AtEndDocument</code>	<i>57, 58, 68</i>
B	
<code>\bab</code>	<i>20, 23, 56, 57</i>
<code>\balance</code>	<i>51</i>
<code>\baselineskip</code>	<i>52</i>
<code>\begin</code>	<i>14, 16–18, 23, 26, 27, 29</i>
<code>\begin{document}</code>	<i>64</i>
<code>\bi</code>	<i>20, 23, 57, 71</i>
<code>\bi{text}</code>	<i>56</i>
<code>\bibname</code>	<i>67</i>
<code>\blank</code>	<i>47, 63</i>
<code>\blankpage</code>	<i>21, 24, 51</i>
<code>\bo</code>	<i>20, 23, 57, 71</i>
<code>\bo{text}</code>	<i>56</i>
<code>\BODY</code>	<i>59</i>
<code>\bulanTahun</code>	<i>14, 16, 64</i>
C	
<code>\CAPinToC</code>	<i>22, 25, 58, 65, 66</i>
<code>\caption</code>	<i>22, 25, 56</i>
<code>\caption<cmdbase></code>	<i>58</i>
<code>\caption<cmdbase>cont</code>	<i>58</i>
<code>\captionsource</code>	<i>20, 24, 57</i>
<code>\captionsource<cmdbase></code>	<i>58</i>
<code>\captionsource<cmdbase>cont</code>	<i>58</i>
<code>\captionsourcecmd</code>	<i>56</i>
<code>\captionsourcecmdcont</code>	<i>56</i>
<code>\captionsource{title}{source}</code>	<i>56</i>
<code>\captionsourcecont</code>	<i>20, 24, 57</i>
<code>\captionsourcecont{title}{source}</code> ..	<i>56</i>
<code>\centering</code>	<i>44</i>
<code>\cftbeforechapskip</code>	<i>67</i>
<code>\cftchapaftersnum</code>	<i>68</i>
<code>\cftchappleader</code>	<i>68</i>
<code>\chapter</code>	<i>50, 51, 57</i>
<code>\chapter*</code>	<i>61</i>
<code>\ChNameVar</code>	<i>45</i>
<code>\ChNumVar</code>	<i>45</i>
<code>\ChTitleVar</code>	<i>45</i>
<code>\clearchapter</code>	<i>21, 24, 50, 51, 65</i>
<code>\clearpage</code>	<i>46, 48, 50, 51, 59, 60, 65</i>
<code>\cmdbase</code>	<i>58</i>
<code>\CNoV</code>	<i>45</i>
<code>\CNV</code>	<i>45</i>
<code>\code</code>	<i>20, 23, 32, 57, 71</i>
<code>\code{text}</code>	<i>56</i>
<code>\colorlet</code>	<i>44</i>
<code>\contentsline</code>	<i>44</i>
<code>\contentsname</code>	<i>67</i>
<code>\counterwithin</code>	<i>58</i>
<code>\CTV</code>	<i>45</i>
D	
<code>\DeclareOptionX</code>	<i>40, 41</i>
<code>\DeclareOptionX*</code>	<i>40</i>
<code>\def</code>	<i>47, 54</i>
<code>\disableboldchapterintoc</code>	<i>22, 25, 58</i>
<code>\disablechapterseparatorspaceinlists</code>	<i>22, 25, 58</i>
<code>\DOCH</code>	<i>45, 46</i>
<code>\documentclass</code>	<i>12</i>
<code>\DOTI</code>	<i>45</i>
<code>\DOTIS</code>	<i>45, 46</i>
E	
<code>\edef</code>	<i>47, 54</i>
<code>\emergencystretch</code>	<i>47</i>
<code>\enableboldchapterintoc</code>	<i>22, 25, 58</i>
<code>\enablechapterseparatorspaceinlists</code>	<i>22, 25</i>
<code>\end</code>	<i>17, 23, 26, 27, 29</i>
<code>\equ</code>	<i>20, 23, 56</i>
<code>\EveryShipout</code>	<i>47</i>
F	
<code>\f</code>	<i>20, 23, 57, 71</i>
<code>\f{text}</code>	<i>56</i>
<code>\Fakultas</code>	<i>64, 67</i>
<code>\fakultas</code>	<i>14, 16</i>
<code>\fakultas{ID}{EN}</code>	<i>64</i>
<code>\fakultasEN</code>	<i>54</i>
<code>\fakultasID</code>	<i>54</i>

<code>\fancyhf{}</code>	50	<code>\LaTeX</code>	56
<code>\fancypagestyle{name}{...}</code>	49	<code>\latex</code>	56, 57
<code>\FmN</code>	45	<code>\linewidth</code>	43
<code>\FmTi</code>	45	<code>\listfigurename</code>	67
<code>\forceclearchapter</code>	21, 24, 50, 51	<code>\listtablename</code>	67
G		<code>\lst</code>	20, 23, 32, 56
<code>\gdef</code>	64	<code>\lstdefineline</code>	66, 67
<code>\gelar</code>	14, 16, 60, 64	<code>\lstinline</code>	32
<code>\glo{key}</code>	56, 57	<code>\lstlistingname</code>	32
<code>\glossaryname</code>	67	<code>\lstlistlistingname</code>	67
<code>\Gls</code>	31	<code>\lstset</code>	66, 67
<code>\gls</code>	31	M	
<code>\gls{key}</code>	56, 57	<code>\m</code>	20, 24, 57
<code>\glspl</code>	31	<code>\m{expr}</code>	56
H		<code>\makeappendixseparator</code>	65–67
<code>\headheight</code>	65	<code>\makebibliography</code>	17, 18, 65, 66
<code>\headwidth</code>	49, 50	<code>\makefrontmatter</code>	14, 16–18, 39, 50, 51, 54, 60, 61, 63, 64
<code>\hrule</code>	61	<code>\makeglossaries</code>	42
I		<code>\makeglossarypage</code>	17, 18, 31, 65
<code>\ifinapp</code>	45, 57, 58	<code>\MakeUppercase</code>	64
<code>\ifLCN</code>	45, 46	<code>\mc</code>	20, 24, 57
<code>\ifLCT</code>	45, 46	<code>\mc{expr}</code>	56
<code>\ifUCN</code>	45, 46	<code>\minimumListEntries</code>	21, 24
<code>\ifUCT</code>	45, 46	<code>\minimumListEntries{N}</code>	57
<code>\ifx</code>	47	<code>\mitra</code>	15, 16
<code>\include</code>	47	<code>\mitra{position}{instance}</code>	64
<code>\includegraphics</code>	43	N	
<code>\includepdf</code>	60–62, 64	<code>\namaTipeTesis</code>	15, 16
<code>\inpdf</code>	21, 24	<code>\namaTipeTesis{ID}{EN}</code>	54
<code>\inpdf{filename}</code>	56	<code>\newcolumn</code>	55
<code>\input</code>	31, 47	<code>\newcommand</code>	56
J		<code>\NewEnviron</code>	59
<code>\Judul</code>	60, 64, 67, 68	<code>\newgeometry</code>	63
<code>\judul</code>	14, 16, 64	<code>\newgeometry{3cm all}</code>	62
<code>\JudulInggris</code>	60, 64, 67	<code>\newif</code>	40
<code>\judulInggris</code>	14, 16, 64	<code>\newlength</code>	51, 53
K		<code>\newlistof</code>	58
<code>\kampusMerdekaType</code>	15, 16	<code>\newUIlist</code>	22, 25, 44, 56–58
<code>\katakunci</code>	17, 18, 59	<code>\noblance</code>	51
<code>\katakunci{text}</code>	59	<code>\noCAPinToC</code>	22, 25, 58, 65–68
<code>kataPengantar</code>	17	<code>\npm</code>	14, 16, 63, 64
<code>\key</code>	56, 57	<code>\npmDua</code>	63
<code>\keywords</code>	17, 18, 59	O	
<code>\keywords{text}</code>	59	<code>\onecolumn</code>	48
<code>\kota</code>	15, 16, 64, 67	<code>\onehalfspacing</code>	39
<code>\kota{city}</code>	64	P	
L		<code>\pagenumbering</code>	47
<code>\label</code>	21, 24	<code>\pagenumbering{arabic}</code>	62
<code>lampiranBab</code>	27	<code>\pagenumbering{roman}</code>	61, 62
		<code>\parindent</code>	39

\UI@approval@metaToStatementGap .	52	\UI@journalAbstractToKeywordsGap	53
\UI@approval@statementToBoardGap	52	\UI@journalAbstrakToKeywordsGap .	53
\UI@approvalBoardHeaderToRowsGap	52	\UI@journalKeywordsToAbstractGap	53
\UI@approvalBoardInterRowGap ...	52	\UI@journalSectionHeadingStyle ..	39
\UI@approvalBoardNameToRoleGap ..	52	\UI@journalStudyToAbstrakGap ...	53
\UI@approvalBoardRuleToNameGap ..	52	\UI@journalTitleToStudyGap	53
\UI@approvalMBKMStatementToBoardGap		\UI@kataPengantarDateToNameGap ..	52
.....	52	\UI@kataPengantarSingleAuthorSignGap	
\UI@approvalMultiAuthorStudyGap .			52
.....	52, 60	\UI@keywords@EN	59
\UI@bibDefineNumericFallbackPreset		\UI@keywords@ID	59
.....	41, 42	\UI@kota	64
\UI@bibDefinePreset	41, 42	\UI@label@*	54
\UI@bibDefinePresetWithFallback .		\UI@label@aiBodyNone	60
.....	41, 42	\UI@label@aiBodyUsed	54, 60
\UI@bibResolveConfiguration .	41, 42	\UI@label@approvedBody	54
\UI@bibstyleoverride	41	\UI@label@gelarText	60
\UI@chapterautoclearenabled .	62, 63	\UI@label@kpSupervisorTitle	60
\UI@chapterHeadingStyle	39	\UI@label@lampiranCont	65
\UI@citationmappingoverride	41	\UI@lampiran@header	64, 65
\UI@citationpreset	41	\UI@lampiranHeaderLineGap	53
\UI@citationstyleoverride ...	41, 42	\UI@listChapterSeparatorSkip ...	53
\UI@condListPage	57	\UI@listExtRegistry	57, 58
\UI@content@abstractEN	59	\UI@lt@continuedCaptionGap	53
\UI@content@abstrakID	59	\UI@makaraimage	47
\UI@content@AI	59	\UI@maxwidth	43
\UI@content@kataPengantar	59	\UI@minListEntries	68
\UI@content@orisinalitas	59	\UI@pageNumberText	39
\UI@content@publikasi	59	\UI@pengesahanPDFfile	62, 64
\UI@content@suratPernyataan	59	\UI@prev@count@ext	57
\UI@coverLogoToUniversityGap ...	51	\UI@prev@count@ext	58
\UI@coverSubtitleToAuthorGap ...	51	\UI@publikasiHeadingAfterGap ...	52
\UI@coverTitleToSubtitleGap	51	\UI@publikasiRuleInnerGap ...	53, 61
\UI@coverUniversityToTitleGap ...	51	\UI@registerListExt{ext}	57
\UI@facultyDisplay	54	\UI@restoreMainSpacing	39, 40
\UI@footerText	39	\UI@sectionHeadingStyle	39
\UI@frontmatterListRegistry .	57, 58	\UI@setDocumentSpacingDefaults ..	
\UI@frontmatterTocPreskip	53		51, 53
\UI@frontpage@afterskip	52	\UI@setupAbstrakCounselorRenderers	
\UI@frontpage@bodyTopGap	52		60, 61
\UI@frontpage@bodyToSignatureGap	52	\UI@showOnPhysEven	50
\UI@frontpage@sectionGapL	52	\UI@showOnPhysEven{content}	49
\UI@frontpage@sectionGapM	52	\UI@showOnPhysOdd	50
\UI@frontpage@sectionGapS	52	\UI@showOnPhysOdd{content}	49
\UI@frontpage@sectionGapXS	52	\UI@sigTable	60, 61
\UI@frontpage@signatureDateGap ..	52	\UI@studyProgramAllDisplay ..	63, 64
\UI@frontpage@topskip	52	\UI@studyProgramLabel{Satu}	63
\UI@frontpageHead	60	\UI@StudyProgramSatuDisplay	63
\UI@frontpageHead{title}	59	\UI@studyProgramSatuDisplay	63
\UI@IfSingleAuthor{one}{multi} ..	47	\UI@studyProgramTigaDisplay	63
\UI@IfThirdAuthor	60	\UI@studyProgramUniqueDisplay	63, 64
\UI@insertdummyblank ..	50, 51, 61, 65	\UI@suratHeadingAfterSkip	52
\UI@insertdummyblankonlypage ...	51	\UI@suratHeadingTopskip	52
\UI@jenjang@display	54	\UI@suratIdentityToMetaGap	52

