

Guide for thesisdteti Class File

Introduction to LaTeX

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Introduction

Why thesisdteti?

- LaTeX is based on the idea that it is better to leave document design to document designers, that is the community maintaining thesisdteti class file.
- Authors should focus only with the writing of the documents.
- Open source class file allows everyone, including authors, to contribute back and improve the class file.

Where is thesisdteti?

thesisdteti is available at GitHub repository ([here](#)). Although it is more recommended to use Git to stay updated, a static .zip file is available ([here](#)).

Document Class

Document Class Options

Default Setting

```
\documentclass[master,bahasa,table,xcdraw]{thesisdtetiugm}
```

Setting Options

- <bachelor/master/doctoral>: degree
- <bahasa/english>: language
- <table>,<xcdraw> (optional): supports coloring table

External Files

`\input`

The `\input{PATH/TO/FILENAME.tex}` inserts valid LaTeX code from the specified file.

`\include`

The `\include{PATH/TO/FILENAME.tex}` inserts valid LaTeX code from the specified file by inserting on different page.

`\include` allows the use of `\includeonly` to specify list of file that will be included upon rendering.

Using `\includegraphics`

```
\includegraphics[width=10cm]{images/sample-fig.png}
```

Setting `\includegraphics`

- `<width=WIDTHcm>` (optional): adjust the width of the image
- `<FILE_NAME>.ext`: the extension supports various type such as `.png`, `.jpg`, and even `.pdf`.

It is more recommended to not using both `<height>` and `<scale>` parameters. Stick with known `<width>` or page area for the images and let the document decides the height. Alternatively, not using any parameter is also possible to let LaTeX decides the resize.

Using `\lstinputlisting`

```
\lstinputlisting[%  
  language=Python,%  
  caption={CAPTION \textit{SUPPORT ITALIC}.},%  
  label={lst:FILE_NAME}]%  
  {codes/FILE_NAME.py}
```

Using a Custom Function of `\inputeq`

`\inputeq` is a custom command to import equation from separate file. The downside of this function is it uses multiple calls of `open`, `read`, and `find` to look for the equation, making the compilation slightly slower but almost negligible. Read `main/equations/equations.tex` for the detail of the syntax in creating your own `texttteequations.tex` file.

Syntax for `\inputeq`

```
\inputeq{equations/equations}{miqp-obj}
```

Tables

Table 1: Tabel Tinggi Berat

ID	Laki-laki		Peremp	
	Tinggi Badan (cm)	Berat Badan (kg)	Tinggi Badan (cm)	
A23	173	62	173	
A25	185	70	185	
A10	162	78	162	
Total	520	210	520	

Table 2: Tabel Tinggi Berat 2

ID	Laki-laki		Perempuan	
	Tinggi	Berat	Tinggi	Berat
	Badan (cm)	Badan (kg)	Badan (cm)	Badan (kg)
A23	173	62	173	62
A25	185	70	185	70
A10	162	78	162	78
Total	520	210	520	210

tabular vs tabulary

`tabular`

Default table.

`tabulary`

Use package `tabulary`, support auto warp text using capital letter for column (LRC). The width of the table can be maximized using `.`

Numbering

itemize vs enumerate

itemize

Bullets. Use `\begin{itemize} ... \end{itemize}`.

-
-

enumerate

Numbers. Use `\begin{enumerate} ... \end{enumerate}`.

- 1.
- 2.