Snippets

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Daftar Isi

Basic Document Templates

Basic document

```
\documentclass{article}
\begin{document}
  Hello World!
\end{document}
```

Basic document with bibtex

Paket

cite

Contoh

```
\documentclass[11pt]{article}
\usepackage{cite}

\begin{document}

\title{My Article}
\author{Nobody Jr.}
```

```
\date{Today}
\maketitle

Blablabla said Nobody ~\cite{Nobody06}.

\bibliography{mybib}{}
\bibliographystyle{plain}
\end{document}
```

Basic document with glossaries

Paket

glossaries

Contoh

```
\documentclass{article}
\usepackage{glossaries}
\makeglossaries
\newglossaryentry{sample}{name={sample},description={an example}}
\begin{document}
\gls{sample}, \gls[format=textbf]{sample}.
\printglossaries
\end{document}
```

Basic document with bibtex and glossaries

Paket

cite	glossaries

Contoh

```
\documentclass[11pt]{article}
\usepackage{cite}
\usepackage{glossaries}
\makeglossaries
\newglossaryentry{sample}{name={sample},description={an example}}

\begin{document}

\title{My Article}
\author{Nobody Jr.}
\date{Today}
\maketitle

Blablabla said Nobody ~\cite{Nobody06}.

\gls{sample}, \gls[format=textbf]{sample}.

\bibliography{mybib}{}
\bibliographystyle{plain}
\printglossaries
\end{document}
```

Makefile

Standard Script

Makefile berikut dapat meng-compile tex file yang berisi bibtex dan glossaries.

```
.PHONY: all build1 build2 build3 bib gls

all: build1 bib gls build2 build3

build1:
	pdflatex main

build2:
	pdflatex main

build3:
	pdflatex main

bib:
	bibtex main

gls:
	makeglossaries main
```

Script dengan tambahan fitur untuk menyimpan auxiliary files di folder build

```
.PHONY: all build1 build2 build3 bib gls

all: build1 bib gls build2 build3

build1:
	pdflatex -output-directory=build -interaction=batchmode main

build2:
	pdflatex -output-directory=build -interaction=batchmode main

build3:
	pdflatex -output-directory=build -interaction=batchmode main

bib:
	biber --input-directory=build --output-directory=build main

gls:
	makeglossaries -d build main
```

Alternatif Penulisan Makefile Versi 1

Pada contoh di atas, setiap line command ditulis dalam rule yang terpisah. Semua line tersebut sebenarnya dapat ditulis dalam rule yang sama. Contohnya adalah:

```
.PHONY: all

all:
        pdflatex -output-directory=build -interaction=batchmode main
        biber --input-directory=build --output-directory=build main
        makeglossaries -d build main
        pdflatex -output-directory=build -interaction=batchmode main
        pdflatex -output-directory=build -interaction=batchmode main
```

Alternatif Penulisan Makefile Versi 2

Agar dapat digunakan secara general, maka nama file yang berulang diganti dengan variabel untuk memudahkan dalam mengganti nama file tersebut.

```
.PHONY: update all

auxFolder := build
mode      := batchmode
filename  := main

update:
        @echo "simple update"
        @echo "-------------"
        pdflatex -output-directory=$(auxFolder) -interaction=$(mode) $(filename)

all:
        @echo "run pdflatex (1)"
        @echo "----------------"
        pdflatex -output-directory=$(auxFolder) -interaction=$(mode) $(filename)
        @echo "run biber"
        @echo "---------"
        biber --input-directory=$(auxFolder) --output-directory=$(auxFolder) $(filename)
        @echo "run glossaries"
        @echo "--------------"
        makeglossaries -d $(auxFolder) $(filename)
        @echo "run pdflatex (2)"
        @echo "----------------"
        pdflatex -output-directory=$(auxFolder) -interaction=$(mode) $(filename)
        @echo "run pdflatex (3)"
        @echo "----------------"
        pdflatex -output-directory=$(auxFolder) -interaction=$(mode) $(filename)
```

Referensi

- Hiding latex metafiles

Figures

1 Figure

Paket

graphics

Contoh

```
\documentclass{article}
\usepackage{graphicx}
```

```
\begin{document}

\begin{figure}[!hb]
        \centering
        \includegraphics[width=3cm]{example-image-a}
        \caption{Contoh gambar}
        \label{fig:main}
\end{figure}

Contoh gambar ditunjukkan pada Gbr.~\ref{fig:main}.

\end{document}
```

Hasil compile

Figure 1: Contoh gambar

Contoh gambar ditunjukkan pada Gbr. 1.

2 Figures

Paket

graphicx	caption	subcaption

Contoh

```
\documentclass{article}
\usepackage{graphicx}
\usepackage{subcaption}
\usepackage{caption}

\begin{document}

\begin{figure}[!ht]
        \centering
        \begin{subfigure}[t]{.4\linewidth}
                \centering
                \includegraphics[width=0.25\textwidth]{example-image-a}
                \caption{Gambar No. 1}\label{fig:a}
        \end{subfigure}
        \begin{subfigure}[t]{.4\linewidth}
                \centering
                \includegraphics[width=0.25\textwidth]{example-image-a}
                \caption{Gambar No. 2}\label{fig:b}
        \end{subfigure}
\caption{2 buah gambar}\label{fig:contoh}
\end{figure}

Ini merujuk ke Gbr.~\ref{fig:a}. Ini merujuk Gbr.~\ref{fig:b}. Ini merujuk ke
Gbr.~\ref{fig:contoh}.

\end{document}
```

Hasil compile

(a) Gambar No. 1 (b) Gambar No. 2

Figure 1: 2 buah gambar

Ini merujuk ke Gbr. 1a. Ini merujuk Gbr. 1b. Ini merujuk ke Gbr. 1.

Equation

Contoh

```
\documentclass{article}

\begin{document}

\begin{equation}
   \label{eq:contoh}
   y=x^2
\end{equation}

Merujuk ke persamaan \ref{eq:contoh}.

\end{document}
```

Hasil compile

$$y = x^2 \tag{1}$$

Merujuk ke persamaan 1.

Table

Paket

booktabs	siunitx

Contoh

```
\documentclass{article}
\usepackage[utf8]{inputenc}
\usepackage{booktabs}
\usepackage{siunitx}

\begin{document}

\begin{table}[!h]
        \caption{Generator parameters}
        \label{tab:genparameters}
        \centering
        \begin{tabular}{ll}
                \toprule
                Parameters & Values \\
                \midrule
                Mechanical power $P_{\mathrm{M}}$ & \SI{3}{\mega\watt} \\
                Mechanical torque $T_{\mathrm{m}}$ & \SI{71.62}{\kilo\newton\meter} \\
                \bottomrule
        \end{tabular}
\end{table}

\end{document}
```

Hasil compile

Table 1: Generator parameters

Parameters	Values
Mechanical power P_{M}	3 MW
Mechanical torque T_{m}	71.62 kN m