LaTeX Template by LCS

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Contents

1 Usage of template

1.1 Template for article

3 predefined templates are given in this template:

- LCSArticle, which is the basic template

- CSArticle, which is the template based on LCSArticle for CentraleSupélec

- BHArticle, which is the template based on LCSArticle for Beihang University.

The following code gives how this document is programmed

```
1 \documentclass[english]{LCSArticle}% english can be changed to french
2 \title{\LaTeX \ Template by LCS}
3 \author{$lcs_{27}$}
4
5 \begin{document}
6 \MakeContentTitle % \MakeSimpleTitle or \MakeComplateTitle are also
     usable
7 \end{document}
```

Up to know, only 2 languages(English, French) are available.

1.2 Predefined math formulas

Different kinds of formulas are predefined. For example:

```
1 \begin{theorem}
2 This is a theorem
3 \end{theorem}
```

Result:

Theorem 1.1. *This is a theorem*

```
1 \begin{lemma}
2 Given two line segments whose lengths are $a$ and $b$ respectively
     there is a real number $r$ such that $b=ra$.
3 \end{lemma}
4
5 \begin{proof}
6 To prove it by contradiction try and assume that the statement is false
     , proceed from there and at some point you will arrive to a
     contradiction.
7 \end{proof}
```

Result:

Lemma 1.1. *Given two line segments whose lengths are a and b respectively there is a real number r such that $b = ra$.*

Proof. To prove it by contradiction try and assume that the statement is false, proceed from there and at some point you will arrive to a contradiction. □

```
1 \begin{proposition}
2 This is a proposition
3 \end{proposition}
```

Result:

Proposition 1.1. *This is a proposition*

```
1 \begin{remark}
2 This is a remark
3 \end{remark}
```

Result:

Remark 1.1. This is a remark

1.3 Predefined simple formulas

Code	Formulas
$\Deri{x}{y}$	$\frac{\mathrm{d}x}{\mathrm{d}y}$
$\ParDeri{x}{y}$	$\frac{\partial x}{\partial y}$
$DeriN{x}{y}{3}$	$\frac{\mathrm{d}^3 x}{\mathrm{d}y^3}$
$ParDeriN{x}{y}{3}$	$\frac{\partial^3 x}{\partial y^3}$
$\cst$	**constant**
$\vB$	$\boldsymbol{v}$
$\aB$	$\boldsymbol{a}$
ωB	$\boldsymbol{\omega}$
$\laplace$	$\triangle$
$\scalaire$	$\cdot$

Table 1 – predefiend math formulas

1.4 Shotcut

These shotcut are availiable:

- \TBF

Result: TO BE FINISHED

1.5 Simplified Insert Image

To insert a simple image, we just need to type in

```
1 \InsertFigure{logos/margin.png}{50pt}{caption}{label}
```

Result:

Figure 1 – caption

2 Required Packages

Several packages are preloded in this template, the following code shows how they are loaded in the template:

```
%% Language Configuration
\RequirePackage[utf8]{inputenc}%For French accents
\RequirePackage[T1]{fontenc}%For French babel
\RequirePackage{ifthen}

%% Page
\RequirePackage{geometry}
\geometry{a4paper,left=2.54cm,right=2.54cm,top=3.18cm,bottom=3.18cm}
\RequirePackage{titlesec}    %Margin

%% Bibliography & Reference
\RequirePackage{natbib} %Bibliography
\RequirePackage{hyperref} %Reference
\RequirePackage{url} % Use url as reference

%% Math
\RequirePackage{amsmath}%Math formula
\RequirePackage{amsfonts}%Math fonts
\RequirePackage{amsthm}%Theorem-like structures
\RequirePackage{amssymb}%Math symbols
\RequirePackage{mathrsfs}%Math fonts
\RequirePackage{mathtools} %Math symbols
\RequirePackage{siunitx} %Notation scientific (Ex.: \num{2e+9})

%% Graph & Color
\RequirePackage{graphicx} %use graph format
\RequirePackage[justification=centering]{caption} %Graph caption
\RequirePackage{subcaption} %Graph sub-caption
\RequirePackage{float} %Graph Placement
\RequirePackage{epstopdf} %Convert EPS to PDF
\RequirePackage{xcolor} %Colors


%% Table
\RequirePackage{diagbox} %Diagonal in tables
\RequirePackage{multirow} %Multirows

%% Programming
\RequirePackage{listings} %Programming
```