# Les bases du LATEX

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#### Résumé

The goal of this document is to present LATEX basics, by showing both commands and results for common uses/packages.

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<sup>\*</sup>Remerciements sous forme de houblon transformé acceptées

 $<sup>^{\</sup>dagger}coucou2$ 

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# 1 Encoding and language selection

## 1.1 Usepackage

\usepackage[T1]{fontenc} % police selection
\usepackage[utf8]{inputenc} % input encoding
\usepackage[french]{babel} % Language selection

#### 1.2 How to use

Nothing special to do. Just use your choosed language as usual.

#### 1.3 Results

éèùàôûü...

### 2 Abtract

## 2.1 Usepackage

No needs for article class.

#### 2.2 How to use it

\begin{abstract}

Qu'est que c'est?. C'est une phrase français avant le lorem ipsum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

\end{abstract}

#### 2.3 Result

#### Résumé

Qu'est que c'est?. C'est une phrase français avant le lorem ipsum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

## 3 Table of content

## 3.1 Usepackage

No needs for article class.

### 3.2 How to use

Basic:

\tableofcontents

It is possible to change some parameters like the maximum allowed depth :

 $\verb|\counter{tocdepth}{4}| \% \text{ set TOC depth to } 4$ 

### 3.3 Result

## Table des matières

## 4 Lists

## 4.1 listes à puce

#### 4.1.1 How to use

```
\begin{itemize}
  \renewcommand\labelitemi{X}
  \item chat
  \begin{enumerate}
    \item chat 1
    \item chat 2
    \item chat 3
  \end{enumerate}
  \item chien
  \item singes
  \begin{itemize}
    \item babouin
    \item chimpanzée
  \end{itemize}
\end{itemize}
\end{itemize}
\end{itemize}
```

#### 4.1.2 Result

X chat

- 1. chat 1
- 2. chat 2
- 3. chat 3
- X chien
- X singes
  - babouin
  - chimpanzée

## 4.2 environement description

#### 4.2.1 How to use

```
\begin{description}
  \item[chat] boule de poils
  \item[chien] boule de poils plus grosse
\end{description}
```

## **4.2.2** Result

chat boule de poilschien boule de poils plus grosse

## 5 Environement non formaté

## 5.1 How to use

```
\begin{itemize}
  \item chat
  \begin{enumerate}
    \item chat 1
    \item chat 2
    \item chat 3
  \end{enumerate}
\end{itemize}
```

### 5.2 Result

```
\begin{itemize}
  \item chat
  \begin{enumerate}
    \item chat 1
    \item chat 2
    \item chat 3
  \end{enumerate}
\end{itemize}
```

## 6 Extended Headers and footers (fancyhdr)

### 6.1 Usepackage

\usepackage{fancyhdr} %extended Headers and footers

### 6.2 Simple example

This is how to create the simple example you can see on this page.

```
\pagestyle{fancy}
\lhead{CoucouHL}
\chead{CoucouHCenter}
\rhead{CoucouHR}
\lfoot{coucouFL}
\cfoot{coucouFCenter}
\rfoot{\thepage}
\renewcommand{\headrulewidth}{0.4pt}
\renewcommand{\footrulewidth}{0.4pt}
```

## 6.3 Redefining plain style

```
\fancypagestyle{plain}{%
  \fancyhf{} % clear all header and footer fields
  \fancyfoot[C]{\textbf{\thepage}} % except the center
  \renewcommand{\headrulewidth}{0pt}
  \renewcommand{\footrulewidth}{0pt}}
```

# 7 Layout

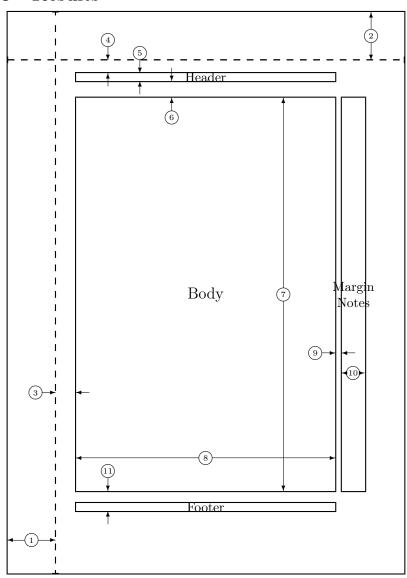
# 7.1 Usepackage

\usepackage[reals]{layout}

## 7.2 How to use

\layout

## 7.3 Results



- 1 one inch + \hoffset

- 11 \footskip = 30.0pt \hoffset = 0.0pt

\paperwidth = 597.50787pt

- 2 one inch + \voffset

- 3 \oddsidemargin = 31.0pt 4 \topmargin = 20.0pt
  5 \headheight = 14.49998pt 6 \headsep = 25.0pt
  7 \textheight = 592.0pt 8 \textwidth = 390.0pt
  9 \marginparsep = 10.0pt 10 \marginparwidth = 35.0pt \marginparpush = 7.0pt (not shown) \voffset = 0.0pt

\paperheight = 845.04684pt

## 8 Polices

#### 8.1 Default

No needs

## 8.2 How to change sizes

<pre>{\tiny text}</pre>	text
{\normalsize text}	text
{\large text}	text
{\Large text}	text
{\LARGE text}	text
{\huge text}	text

## 8.3 Style

## 8.3.1 Graisse et italique

```
\begin{tabular}{ll} & gras \\ $$ \text{textit{italique}} & italique \\ $$ \text{textbf{\textit{text}}} & text \\ $$ \text{textsl{slanted}} & slanted \\ $$ \text{SMALL CAPS} \\ \end{tabular}
```

## 8.4 Caractères spéciaux

Command:	Result:
\verb \  or \textbackslash	\
\verb {  or \{	{
\verb }	}

CoucouHL		CoucouHCenter	CoucouHR	
	\verb \$	\$		
	\verb ^	^		
	\verb %	%		
	\verb _	-		
	\verb -	-		
	\verb &	&		
	\verb ~	~		

coucouFL coucouFCenter 13