

L^AT_EX Workshop

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What is \LaTeX ?

- Developed by Leslie Lamport in the 1980s
- User-friendly version to use \TeX ($\LaTeX = \text{Lamport } \TeX$)
- High-quality typesetting system with minimal effort
- Produces exactly the same result across all computers (\TeX -logic)
- Usually used for technical reports and scientific articles
- Main difference between Word and \LaTeX :
 - Word: “what you see is what you get” (**WYSIWYG**) – you have to format everything individually
 - \LaTeX : “what you see is what you mean” (**WYSIWYM**) – you enter plain text and \LaTeX does the rest

First introduction I

– **Structure** of a \LaTeX document

1. **Preamble:** Defines all the necessary settings (e.g., font, line spacing, packages)

```
1 \documentclass{article}
2 \usepackage[utf8]{inputenc}
3
4 \title{\LaTeX workshop}
5 \author{Cosima}
6 \date{October 2018}
```

2. **Main document:** Your plain text

```
8 \begin{document}
9
10 \maketitle
11
12 \section{Introduction}
13 Some intelligent text here.
14
15 \end{document}
```

Result:

ℒ_TE_XWorkshop

Cosima

October 2018

1 Introduction

Some intelligent text here.

Basic steps in overleaf

Open an **empty project** in overleaf

Introduction to the basic term paper template

- Open an **empty project** in overleaf
- And open the **following link** in a new tab:
`https://bit.ly/2Gi20WN`

Trial and error: Now it's your turn...

1. Open this template: <https://bit.ly/2Gi2OWN>
2. Rename title
3. Add your name
4. Tell \LaTeX to print the title/name on your paper
5. Add your introduction from your old term paper to the template
6. Highlight some parts of the text in italics
7. Decrease the size of some parts of the text
8. Add a figure
9. Add a subsection
10. Add one reference for a book
11. Generate a list with dashes
 - *. Add a table (You may want to use the tablegenerator: <https://www.tablesgenerator.com>)
 - *. Refer to the figure included in the text (Hint: This relates to the command `label`).

Further links

- **More sophisticated template:** <https://bit.ly/2DHqGm7> (similar to the one we used during the class)
- **Cheat sheet for \LaTeX :** <https://bit.ly/2UVChSE>
- **30-minutes tutorial:** https://www.overleaf.com/learn/latex/Learn_LaTeX_in_30_minutes
- **General tutorials:**
<https://www.overleaf.com/learn/latex/Tutorials>
- **To get an idea of \LaTeX :** <https://bit.ly/2OoudKm>
- **Templates:** <https://www.overleaf.com/latex/templates>
- **If you are lost:** Google, <https://tex.stackexchange.com>, and/or <https://stackoverflow.com/questions/tagged/latex>