

A Test Page

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June 16, 2017

1 Hello World

If you can read this from a page which looks rather structured then you managed to install your \LaTeX -package successfully. As you can see now the content including the structural information of a document is stored in a file with the extension `.tex`. After typesetting \LaTeX generates a number of auxiliary files which are basically necessary to fix the cross references within the document.

2 Explanation of the Markup

If you look into the file `FirstLaTeXTest.tex` you can see a few lines of markup code which will be explained here. Try to link these parts to the familiar html markup and most stuff will be easy to remember.

`\documentclass` This is the very first command where the “kind” of the document is defined. `article` is the smallest class, larger documents can be `report` or `book`. Depending on the documentclass different layouts are defined, e.g., `article` and `report` are one-sided, `book` is two-sided and all the classes have different headers and footers.

`\usepackage` Despite of its core functionality \LaTeX is organized in packages. These are loaded via the command `\usepackage`. The package `geometry` allows us to set the basic geometry of our document as given in the next line or let us set the orientation (portrait or landscape) of our document.

`\title, \author, and \date` Well ...

`\begin{document}` A \LaTeX document is basically divided into two parts, the *preamble* and the *document environment*. All lines before `\begin{document}` is the preamble. With `\begin{document}` the document environment starts within which all markup to describe the content of your document is placed. This is pretty similar to the overall structure of an html document. Remember the header and the body elements.

`\maketitle` This makes L^AT_EX display the information given in the `\title`, `\author`, and `\date` commands.

`\section` This is the top level of structure possible in an article. Further commands would be `\subsection`, `\subsubsection`, and `\paragraph`. Again some analogy to the html section and p element is given.

`\begin{description}` This starts a description environment. This environment is useful to describe terms similar to the html dl element. The terms are given within square brackets and the description is given right after the term.

`\tt`, `\em`, ... Some useful visual markup commands like the use of a typewriter font, bold font, italic, emphasize text, etc. are given. Generally it is discouraged to use visual markup extensively. Generic markup like `\section`, etc., shall be used instead.

3 Next Steps

Download the template for the diploma thesis, try to typeset it and get a clear picture with your teammates about the big headlines of your thesis.