



Winter term 2012/2013

Forschungskolleg Softwaretechnologie (Academic Skills for Software Engineers)

Target of this exercise is to get started with \LaTeX and \LaTeX tools. You should compile the \LaTeX example file after each step of the exercise and investigate the impact of your last changes on the outcome PDF!

1. Install and set up a \LaTeX compiler and editor of your choice.
2. Download the \LaTeX example for Bachelor and Master theses from http://st.inf.tu-dresden.de/files/service/st_thesis_layout.zip and create a new \LaTeX project based on this example.
 - (a) Investigate and explore the structure of the `sample.tex` file.
 - (b) Alter the file in a way that your name and a topic of your choice appear on the front page of the thesis.
 - (c) Alter Chapter 2 and create some new sections, subsections and paragraphs. Observe how the table of contents updates dynamically after each change and recompilation.
 - (d) Do some experiments with different text formats (e.g., bold font and italics, or font sizes).
 - (e) Alter Section 1.3. *Overview* in a way such as it explains the remaining structure of the thesis. Use \LaTeX references to refer the other chapters and sections.
 - (f) Integrate a figure into the document and create an explanatory text referencing the figure.
 - (g) Create an itemization and one enumeration. Try to modify the itemization's bullets with other symbols or text.
 - (h) Create a table and try to modify the alignment of its columns as well as the options to draw vertical and horizontal borders.
3. Create a new BibTeX bibliography called `sample.bib`.
 - (a) Add at least two items to the bibliography and inspect the differences between different kinds of entries (e.g., `@Book` and `@Inproceedings`).
 - (b) Within your \LaTeX example insert some citations to the newly added literature.
 - (c) Add a bibliography to the end of your \LaTeX document.
4. (Optional) Create a listing containing an excerpt of Java code.
 - (a) How can you modify the listing to show its line numbers?
 - (b) How can you highlight key words and comments in different colors?
 - (c) How can you import listings from text files?

Last modification: October 15, 2012