

Objektorientiertes Programmieren mit .NET und C#

Einführung in LaTeX und die Vorlage für das Proseminar

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Agenda

- What are the requirements for the essay?
- What is LaTeX?

- LaTeX development environments

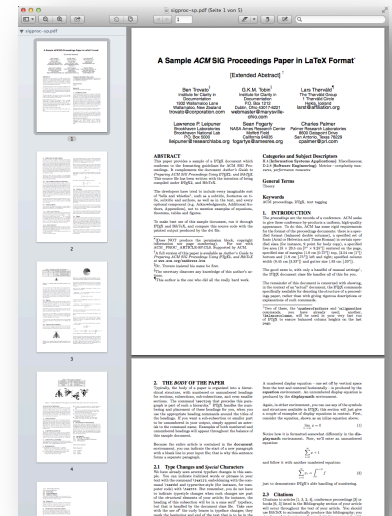
- The LaTeX template

What are the requirements for the essay?

- Each student...
 - ... writes an essay of 5-10 pages
 - a LaTeX template is provided online

<http://www.acm.org/sigs/publications/proceedings-templates>

- the template is mandatory
- The final essay consists of:
 - the final PDF file
 - **ALL (!)** sources (incl. LaTeX sources, image files, etc.)



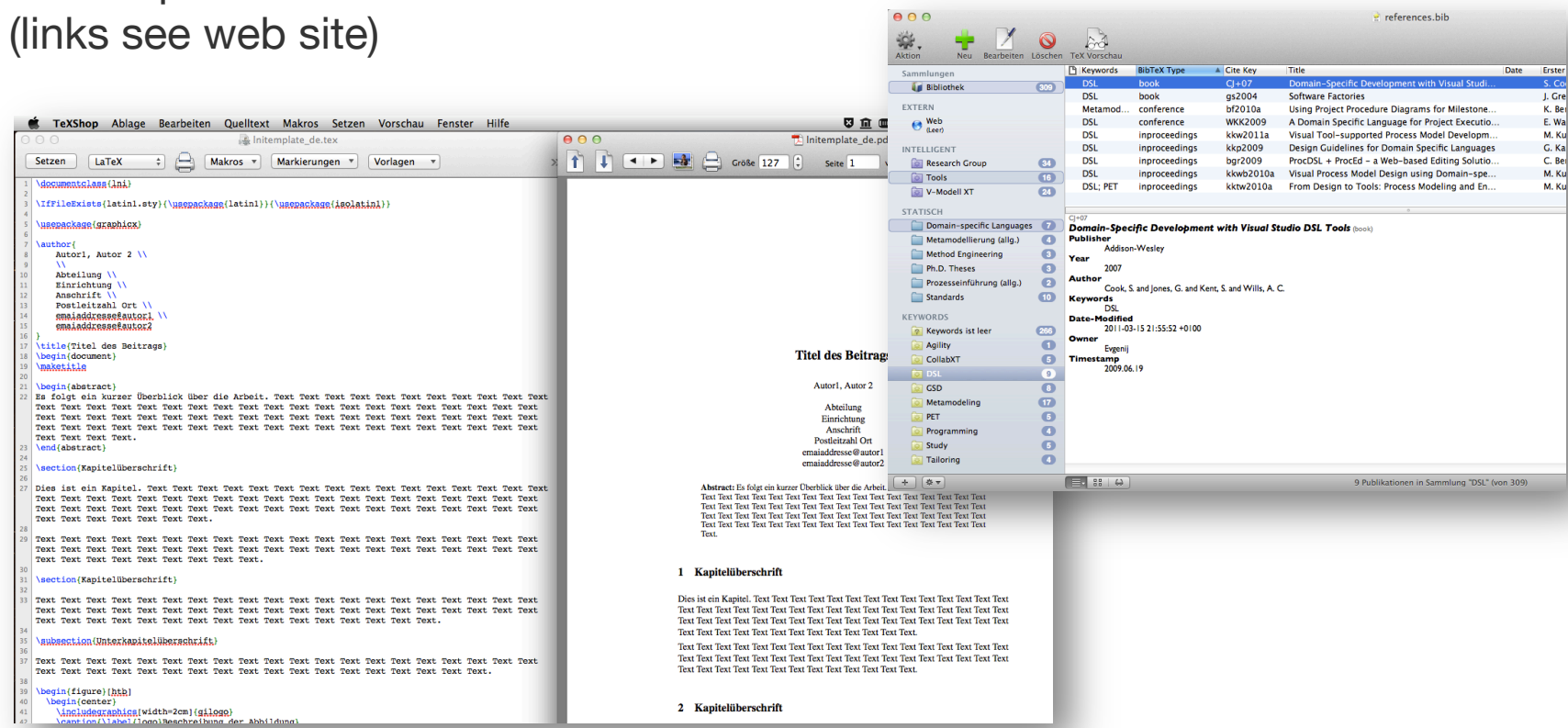
What is LaTeX?

- LaTeX = collection of scripts supporting TeX (D. Knuth)
- LaTeX is:
 - a markup-language-based type setting system
 - input = plain text files
 - language is similar to XML → if you are familiar with XML, you are in
 - layouting is done by a „compiler“ → it's not your business
 - LaTeX is our recommended environment for comprehensive publications, such as Bachelor's or Master's Thesis
- LaTeX is not:
 - a word processor



LaTeX Development Environments

LaTeX is “close” to a programming language → you need an appropriate “development environment”
(links see web site)





The LaTeX Template

- LaTeX basics (type setting and text formatting)
 - headlines:
 - `\section{Titel}` → section 1st order
 - `\subsection{Titel}` → section 2nd order, and so on...
 - formatting options:
 - `\textbf{text}` → typeset the text bold faced...
 - `\emph{text}` → typeset the text emphasized...
 - lists → „bullet list“ = `itemize`; „enumerated list“ = `enumerate`
 - `\begin{itemize}`
 - `\item list entry...`
 - `\end{itemize}`
- references:
 - literature: „... see `\cite{reference}...`“ → „reference“ = a bib-file entry
 - section: „... see Sect. `\ref{sectref}...`“ → „sectref“ = `\label{}`...

The LaTeX Template

- Prepare your essay...
→ Learning by doing!

Demo...

The screenshot shows a LaTeX source file editor with the following code on the left:

```

122 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
123 %%% Konfiguration der Makros
124 \dominon
125 \setcounter{minitocdepth}{3}
126 \setseries{minitoc} {uberic}
127 \setseries{minitoc} {\la
128 \setseries{minitoc} {**} {\affa
129 \setseries{minitoc} {section}
130 \setseries{minitoc} {subsecti
131 \setseries{minitoc} {subsubse
132
133 %%% Erstellen der Inhaltsverze
134 \tableofcontents
135 \vfill
136 \cleardoublepage
137
138 %%% Listoffigures
139 \cleardoublepage
140
141 \listoffigures
142 \cleardoublepage
143
144 \listofsubfigures
145 \cleardoublepage
146
147 \clearscrheadfoot
148 \thead{
149 \foot{Marco Ruhnmann}
150 \foot{pagemark} {pagemark}
151 \autotitle{chapter} {section}
152 \newcommand{\bavistm} {\not
153 \newcommand{\numstms} {\not
154
155 %%% \newcommand{\baselineatst
156
157 %%% \pagestyle{scrheadings}
158 %%% \pagenumbering{arabic}\setco
159
160
161 %%% Text: Content
162
163 %%% Comment this out to suppr
164 \input{chp01.tex}
165 \input{chp02.tex}
166
167 %%% Add your chapter here
168 \input{}
169
170 %%% \appendix
171 \input{app01.tex}
172
173
174 %%% \section{Literaturverzeichnis}
175 %%% bibs...
176 %%% \nocite{*}
177 %%% \bibliographystyle{gsrlalpha}
178 %%% \bibliographystyle{alpha}
179 %%% bibliography (thesis)
180 %%% \bibliography{bibl.tex}
181 \vfill
182 \pagebreak
183
184 \end{document}
185
    
```

The preview on the right shows a sample ACM SIG Proceedings paper titled "A Sample ACM SIG Proceedings Paper in LaTeX Format". The paper includes an extended abstract, author information for Ben Trovato, G.K.M. Tobin, Lars Tharvold, Lawrence P. Leipuner, Sean Fogarty, Charles Palmer, and categories/keywords. It also contains an abstract, general terms, and a section titled "1. INTRODUCTION".