fUML Refactoring with EMF[*]

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Abstract

In this work we will present some ideas and concepts for refactoring fUML with EMF.

1 Introduction

This document is intended as a template and guideline and should support the author in the course of creating a seminar paper. Assessment criteria comprise the quality of the theoretical and/or practical work as well as structure, content and wording of the written seminar paper. Careful attention should be given to the basics of scientific work (e.g., correct citation).

2 Typographic Design

For working with LaTeX you can take advantage of a variety of books and free introductions and tutorials on the internet. A competent contact point for LaTeX beginners is the LaTeX Wikibook, which is available under `http://en.wikibooks.org/wiki/LaTeX`.

The following sections give examples of the most important LaTeX environments and commands.

2.1 Tables

Tables have to be realized with the help of the *table* environment. Tables shall be sequentially numbered for each chapter and described in terms of a short caption (cf. Table **??**).

2.2 Figures

Like tables, figures shall be sequentially numbered for each chapter and described in terms of a short caption). You could either produce your drawings directly inside Latex using PSTricks[1], Tikz[2], or any set of macros dedicated to your requirements (cf. Figure **??**). Alternatively, you may include figures prepared in external tools (cf. Figure **??**). Note, to ensure high quality printing, all figures must have at least 300 dpi.

2.3 Fonts

When introducing important terms for the first time use *emphasize*. For a consistent look and feel of proper names like `Class Diagram` and `Observer` pattern you may define macros in the main document `thesis.tex`.

2.4 Code

For short code fragments use the *verbatim* environment.

```
//Start Program
System.out.println("Hello World!");
//End Program
```

A much better alternative is the *algorithm* environment (cf. Algorithm **??**). This environment offers special formatting features for loops, operations and comments.

3 Bibliographic Issues

3.1 Literature Search

Information on online libraries and literature search, e.g., interesting magazines, journals, conferences, and organizations may be found at `http://www.big.tuwien.ac.at/teaching/info.html`.

3.2 BibTeX

BibTeX should be used for referencing.

The LaTeX source document of this pdf document provides you with different samples for references to journals [3], conference papers [6], books [2], book chapters [7], electronic standards [5], dissertations [8], masters' theses [4], and web sites [1]. The respective BibTeX entries may be found in the file `references.bib`. For administration of the BibTeX references we recommend `http://www.citeulike.org` or JabRef for offline administration, respectively.

References

[1] Business Informatics Group. http://www.big.tuwien.ac.at. Accessed: 2010-11-09.

[2] Hitz, M., Kappel, G., Kapsammer, E., and Retschitzegger, W. *UML @ Work, Objektorientierte Modellierung mit UML 2*, 3. ed. dpunkt.verlag, 2005 (in German).

[3] Huemer, C., Liegl, P., Schuster, R., and Zapletal, M. B2B Services: Worksheet-Driven Development of Modeling Artifacts and Code. *Computer Journal 52*, 2 (2009), 28–67.

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[1]`http://tug.org/PSTricks`
[2]`http://sourceforge.net/projects/pgf`

[4] LANGER, P. Konflikterkennung in der Modellversionierung. Master's thesis, Vienna University of Technology, 2009.

[5] OASIS. *Business Process Execution Language 2.0 (WS-BPEL 2.0)*, 2007.

[6] SCHAUERHUBER, A., WIMMER, M., SCHWINGER, W., KAPSAMMER, E., AND RETSCHITZEGGER, W. Aspect-Oriented Modeling of Ubiquitous Web Applications: The aspectWebML Approach. In *Proceedings of the 14th Annual IEEE International Conference and Workshops on the Engineering of Computer-Based Systems (ECBS '07), March 26-29, Tucson, Arizona, USA* (2007), IEEE CS Press, pp. 569–576.

[7] SCHWINGER, W., AND KOCH, N. Modeling Web Applications. In *Web Engineering*, G. Kappel, B. Pröll, S. Reich, and W. Retschitzegger, Eds. John Wiley & Sons, Ltd, 2006, pp. 39–64.

[8] WIMMER, M. *From Mining to Mapping and Roundtrip Transformations - A Systematic Approach to Model-based Tool Integration.* PhD thesis, Vienna University of Technology, 2008.