



Requirements Engineering II

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Assignment 7: RE for Software Product Management

1. Tasks

- Read the mandatory items in the reading list
- Be prepared to answer the questions given below in class
- Prepare a 15 minutes presentation (5-10 slides) on the theme assigned to your course group. Browse/read additional papers and/or web pages where necessary.

2. Reading list

Mandatory reading

[Regnell and Brinkkemper 2005] give an overview on requirements engineering in for software product management. [Carlshamre and Regnell 2000] describe how requirements are managed in a software product management environment. [Neijmeh and Thomas 2002] describe a practical approach to software release planning.

Additional reading (for specialized groups)

Market-driven RE: [Regnell, Beremark and Eklundh 1998] and [van de Weerd et al 2006]

Requirements Management: [Gorschek and Wohlin 2006] and [Natt och Dag et al 2005]

Requirements Prioritization: [Regnell et al 2001] and [Lehtola, Kauppinen, Vähäniitty 2007]

Mandatory Browsing

<http://www.cs.uu.nl/wiki/bin/view/Spm/SpmFramework> describes a reference model for software product management.

3. Questions

- What are key elements of market-driven requirements engineering processes?
- What are the differences between Re for Software Product Management (SPM) and in-project RE?
- How can requirements engineering for SPM be performed?
- How are requirements organized to support SPM?
- How are software releases planned?
- How are requirements prioritization techniques chosen?

4. Themes for presentation

A: Overview on Market-driven RE (general overview, objectives, organization, process, challenges)

B: Continuous Requirements Management (process, requirements structure, applying continuous requirements management, possible role of linguistic engineering)

C: Requirements Prioritization for Software Release Definition (requirements evaluation, prioritization, and visualization)

References

- Carlshamre, P., B. Regnell (2000). „Requirements Lifecycle Management and Release Planning in Market-Driven Requirements Engineering Processes“, International Workshop on Requirements Engineering Process: Innovative Techniques, Models, and Tools to Support the RE Process (REP2000), Greenwich, UK.
- Gorschek, T., C. Wohlin (2006). “Requirements Abstraction Model”, *Requirements Engineering*, 11:79-101, Springer.
- Lehtola, L., M. Kauppinen, J. Vähäniitty (2007). „Strengthening the Link Between Business Decisions and RE: Long-term Product Planning in Software Product Companies“, 15th International Requirements Engineering Conference, New Delhi, India.
- Natt och Dag, J., B. Regnell, V. Gervasi, S. Brinkkemper (2005). „A Linguistic-Engineering Approach to Large-Scale Requirements Management“, *IEEE Software*, 22(1):32-39, IEEE.
- Nejmeh, B., I. Thomas (2002). “Business-Driven Product Planning Using Feature Vectors and Increments”. *IEEE Software* 19(6):34-42.
- Regnell, B., P. Beremark, O. Eklundh (1998). „A Market-Driven Requirements Engineering Process: Results from an Industrial Process Improvement Programme“, *Requirements Engineering*, 3:121-129, Springer.
- Regnell, B., S. Brinkkemper (2005). “Market-Driven Requirements Engineering for Software Products”, in A. Aurum, C. Wohlin (eds.), *Engineering and Managing Requirements*, Springer.
- Regnell, B., M. Höst, J. Natt och Dag, P. Beremark, T. Hjelm (2001). „An Industrial Case Study on Distributed Prioritisation in Market-Driven Requirements Engineering for Packaged Software“, *Requirements Engineering*, 6:51-62, Springer.
- van de Weerd, I., S. Brinkkemper, R. Nieuwenhuis, J. Versendaal, L. Bijlsma (2006). „Towards a Reference Framework for Software Product Management“, 14th IEEE International Requirements Engineering Conference (RE'06), Minneapolis, USA.