



Assignment 7

RE Tools

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I. Tasks

Individual Tasks

- Read the mandatory items in the reading list
- Prepare a critique of each mandatory paper. For each paper, we will select a student to present her or his critique orally in class (3-5 minutes). Particular questions to be addressed are:
 - What is the main message of the paper?
 - What are the expected practical benefits?
 - What are the strengths and weaknesses of the paper?
 - What questions do you have about the paper? (prepare at least two questions)
 - What is your personal opinion about the paper? Do you agree or disagree with its findings?
- Be prepared to answer the questions given in Sect. III below in class

Group Tasks

- Prepare a 10-12 minutes presentation (plus 6-8 minutes of discussion) on the theme assigned to your course group (cf. Sect. IV) and choose two students from your group to present it.
 - At the beginning of your presentation, relate your topic to the session's topic (as represented by the mandatory reading).
 - Browse/read additional papers and/or web pages where necessary.
 - Send your presentation to Norbert after the session to share it with others.

II. Reading List

Mandatory reading

[Carrillo 2011] provide an overview of current RE tools. [Kitchenham et al. 1997] describes and validates a method for systematic tool evaluation. [Bruckhaus et al. 1996] has evaluated the impact of requirements management tools on productivity.

Theme-specific reading

[Sinha et al. 2006], [Decker et al. 2007]: Tools for Requirements-Centered Collaboration
[Mich et al. 2004], [Campos and Nunes 2007]: Tools for Requirements Elicitation and Analysis
[Hoffmann et al. 2004], [Beuche et al. 2007]: Tools for Requirements Management

III. Questions

- What are typical RE tasks that are supported by tools?
- What techniques can be employed for evaluating RE tools? How do these techniques compare with respect to efficiency, rigor, and situational fit?

- How do requirements tools affect work efficiency? In which situations do they bring improvements, when not?

IV. Themes for Presentation

A. Tools for Requirements-Centered Collaboration

How can requirements tools support collaboration in a software project? How does Wiki-based support differ from support by traditional requirements management tools?

B. Tools for Requirements Elicitation and Analysis

What are the most important tools for the design of graphical user interfaces? What is the influence of the development process on tool choice? What are possible applications of natural language processing in RE? According to [Mich et al. 2004], is there a market for a CASE (computer-aided software engineering) tool supporting natural language processing? In this market study, which software activities have been perceived as crucial?

C. Tools for Requirements Management

What are requirements for requirements management tools? What are tool requirements specific for product line requirements management? Also contrast classic requirements management tools (such as DOORS or CaliberRM) with using issue trackers (such as Jira) for managing requirements.

References

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