



Requirements Engineering II

Assignment 4

Requirements Engineering and Social Computing

Prof. Dr. Martin Glinz, Dr. Norbert Seyff, Dr. Eya Ben Charrada, Emitzá Guzmán

I. Task

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 and Eya after the session to share it with others.
- Did you or members of your team use social computing approaches for Requirements Engineering? Discuss potential benefits, but also limitations and report your experience and opinion in your presentation. What does existing social software lack to support Requirements Engineering?

II. Reading List

Mandatory reading

The first workshop on “Requirements Engineering for Social Computing” was held at the IEEE International Requirements Engineering Conference in 2011. There [Copra2011] discussed the nature of social computing and challenges. [Dalpiaz 2011] identified social threats and the new challenges for Requirements Engineering and [Solomon et al. 2011] discussed how to use social media for collaborative work.

Theme-specific reading

[Lim et al. 2010], [Lim and Ncube 2013]: Social Networks for Stakeholder Identification and Analysis
[Boehm et al. 2001], [Kukrea and Boehm 2012], [Seyff et al. 2015]: Social Software for Requirements Elicitation and Negotiation

[Pagano and Maalej 2013], [Galvis Carreano and Winbladh 2013]: User Feedback for Continuous Software Evolution

III. Questions

- What RE activities can be supported with social software?
- What are the benefits, limitations and threats of Social Software within RE?
- Which social software (e.g., facebook, twitter) could be used within RE?
- What does existing social software lack to support RE?

IV. Themes for Presentation

A. Social Networks for Stakeholder Identification and Analysis

How can stakeholders be identified using StakeNet? What are the experiences and lessons learned?

B. Social Software for Requirements Elicitation and Negotiation

What is (Easy)WinWin? What RE activities are supported by WinBook? How can elicitation and negotiation be applied with the help of social networks? What are the benefits and limitations?

C. User Feedback for Continuous Software Evolution

How can user feedback be analyzed and categorized? What is the impact of user feedback?

References

- Boehm B., P. Gruenbacher, R. Briggs (2001). Developing Groupware for Requirements Negotiation: Lessons Learned. *IEEE Software* **18**, 3. 46-55.
- Chopra, A.K. (2011). Social Computing: Principles, Platforms, and Applications. *Requirements Engineering for Social Computing (RESC)*, 26-29.
- Dalpiaz, F. (2011). Social Threats and the New Challenges for Requirements Engineering. *Requirements Engineering for Social Computing (RESC)*, 22-25.
- Galvis Carreano, L.V., K. Winbladh (2013). Analysis of user comments: an approach for software requirements evolution, *International Conference on Software Engineering (ICSE)*, 582-591.
- Kukreja, N., B. Boehm (2012). Process implications of social networking-based requirements negotiation tools. *Conference on Software and System Process (ICSSP)*. 68-72.
- Lim, S.L., D. Quercia, A. Finkelstein (2010). StakeNet: using social networks to analyse the stakeholders of large-scale software projects. *International Conference on Software Engineering (ICSE)*. 295-304.
- Lim, S.L., C. Ncube (2013). Social networks and crowdsourcing for stakeholder analysis in system of systems projects. *System of Systems Engineering (SoSE)*. 13-18.
- Pagano, D., W. Maalej (2013). User Feedback in the AppStore: An Empirical Study. *IEEE International Conference on Requirements Engineering (RE)*.
- Seyff, N., I. Todoran, K. Caluser, L. Singer, M. Glinz (2015). Using popular social network sites to support requirements elicitation, prioritization and negotiation. *Journal of Internet Services and Applications* **6**,7.
- Solomon, B.S., D. Duce, R. Harrison (2011). Methodologies for using Social Media Collaborative Work Systems. *Requirements Engineering for Social Computing (RESC)*. 6-9.