Requirements Engineering Seminar

User Feedback for Requirements Engineering and Software Evolution

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Goal

Analyze and present scientific work in the field of requirements engineering

Do not just read and present the assigned papers, but work on related papers, and derive knowledge

Master students are expected to present a more elaborate analysis than bachelor students (e.g. (1) include more references, (2) identify issues in current research and ideas of how to overcome them).

Organization

3 ECTS

Seminar Process

1. Write seminar paper (15 pages Springer style)
2. Peer-review (2 papers)
3. Present
4. Participate in other presentations

Grading

2/3 seminar paper + reviews, 1/3 presentation

Plan

Day	Activity
23.02	First meeting
~15.03, by appointment or email	Q&A seminar topic, paper structure, main storyline (voluntary)
~30.03, by appointment or email	Review and discussion of draft (voluntary)
20.04, 23:59 CET	Paper submission deadline
2.05, 23.59 CET	Peer-review submission deadline
16.05, 23:59 CET	Camera-ready submission deadline
~23.05, by appointment or email	Review and discussion of presentation (voluntary)
TBD Beginning of June	Final presentations

Q&A Seminar Topic

By appointment

Prepare the meeting

- Draft an outline
- For each planned section have a short description of what you plan to write

Send draft outline at least 2 days before the meeting

Review and Discussion of Draft

Read the material on writing before starting to write

Send draft 7 days *before* your appointment

Have a coherent version available (details might be still missing)

Peer Reviews

Review papers from two other students

Adhere to the reviewer forms (will be provided)

Be constructive, make concrete suggestions for improvement

Check for plagiarism, let us know if plagiarism is found!

Final Presentation Day

20 min. presentation + 10 min. Q&A and discussion

Each reviewer presents two questions in the discussion

Encouraged to participate in discussions where you are not reviewer!

Final Presentation Day

Participation on presentation day compulsory

Prepare presentation well, will be part of your grade!

Train your presentation with a peer beforehand

News and Information

Visit

http://www.ifi.uzh.ch/rerg/courses/fs16/sem-re-bsc.html

http://www.ifi.uzh.ch/rerg/courses/fs16/sem-re-msc.html

Seminar Theme

User feedback for requirements engineering and software evolution

Topics

Topic
User Feedback Elicitation
Explicit User Feedback Analysis
Implicit User Feedback Analysis
Incorporating User Feedback for Requirements and Software Evolution
Social Sustainability and User Feedback

User Feedback Elicitation

- What is user feedback, what type of user feedback exist?
- Why is it important to include user feedback during software evolution and in requirements engineering?
- What strategies exist for eliciting user feedback?

References:
[1] Norbert Seyff, Florian Graf, Neil A. M. Maiden. Using Mobile RE Tools to Give End-Users Their Own Voice. RE 2010
[2] Kurt Schneider. Focusing spontaneous feedback to support system evolution. RE 2011
[3] Dennis Pagano, Walid Maalej: User feedback in the appstore: An empirical study. RE 2013
[4] Walid Maalej, Hans-Jörg Happel, and Asarnusch Rashid. When users become collaborators: towards continuous and context-aware user input. OOPSLA 2009.

Explicit User Feedback Analysis

- What challenges arise when analyzing explicit user feedback?
- What are current strategies for solving these issues?
- What are the limitations of these strategies?
- How can explicit feedback be useful for software evolution and requirements engineering?

References:
[1] Dennis Pagano, and Bernd Bruegge. User involvement in software evolution practice: a case study. ICSE 2013.
[2] Ning Chen, et al. AR-Miner: mining informative reviews for developers from mobile app marketplace. ICSE 2014.
[3] Gu, Xiaodong, and Sunghun Kim. What Parts of Your Apps are Loved by Users? ASE 2015.

Implicit User Feedback Analysis

- What challenges arise when analyzing implicit user feedback?
- What are current strategies for solving these issues?
- What are the limitations of these strategies?
- How can implicit feedback be useful for software evolution and requirements engineering?

References:
[1] Jansen, Bernard J. Understanding user-web interactions via web analytics. Synthesis Lectures on Information Concepts, Retrieval, and Services 1.1 (2009): 1-102.
[2] Nasraoui, Olfa, et al. A web usage mining framework for mining evolving user profiles in dynamic web sites. Transactions on Knowledge and Data Engineering, IEEE Transactions 20.2 (2008): 202-215.
[3] Benevenuto, Fabrício, et al. Characterizing user behavior in online social networks. IMC 2009.

Incorporating User Feedback in Requirements and Software Evolution

- Which release planning methods exist that incorporate user feedback?
- In which context could these methods be applied?
- What are the limitations of these methods?

References:
[1] Des Greer and Günther Ruhe. Software release planning: an evolutionary and iterative approach. Information and Software Technology 46.4 (2004): 243-253.
[2] Carlshamre Pär, and Björn Regnell. Requirements lifecycle management and release planning in market-driven requirements engineering processes. International Workshop on Database and Expert Systems Applications, 2000.
[3] Svahnberg, Mikael, et al. "A systematic review on strategic release planning models." Information and software technology 52.3 (2010): 237-248.

Social Sustainability and User Feedback

- What is social sustainability?
- What are current problems when analyzing and considering user feedback from a sustainability perspective?
- What techniques can help increase social sustainability in the software process when incorporating user feedback?

References:
[1] Emitza Guzman, Omar Aly, Bernd Bruegge. Retrieving Diverse Opinions from App Reviews. ESEM 2015
[2] Timo Johann and Walid Maalej. Democratic Mass Participation of Users in Requirements Engineering? RE 2015.
[3] Hanna Wallach. Big Data, Machine Learning, and the Social Sciences: Fairness, Accountability, and Transparency. https://medium.com/@hannawallach/ big-data-machine-learning-and-the-social-sciences-927a8e20460d.

Next Steps

Let us your topic preference after class

or

Send your three most favorite topics to guzman@ifi.uzh.ch, topics will be assigned on a first come, first serve basis.