Seminar on Enterprise Software

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Goal

To help you to deliver a high-quality master thesis on time

- **Spring**: Focus on Literature reviews
- **Autumn**: Thesis Development
Requirements for Pass Grade

- **Attendance**
  - At most 1 absence is allowed in the presentation sessions (the introductory seminar does not count)
  - Additional absences are allowed only for: maternity, documented health reasons, military duties
  - Erasmus students (who are abroad during the course) are not required to attend the presentations
  - People who moved to Tallinn are suggested to register to the seminar that takes place in TUT, which gives 3 credit-points and is designed in a similar way as the seminar on Enterprise Software. The course code is ITX8301 and the title is Masters seminar I (or ITX8302 - Masters Seminar II, whichever is available this semester).
Requirements for Pass Grade

• In due time (all deadlines are set to 23:59 (EEST))
  – Submit topic, supervisor and presentation time slot (via e-mail f.m.maggi@ut.ee) (4 October). By this deadline we will also discuss what to do for people who are already working on the thesis report and want to improve it. See https://sep.cs.ut.ee/Main/StudentProjects2019 for projects offered by the Software Engineering & Information Systems Research Group.
  – Submit report and slides by Sunday before your presentation (via e-mail f.m.maggi@ut.ee)
  – (8 December) Erasmus students should assume that they present in slot 6 with deadline 8 December and by then submit report, slides and screencast of the presentation

• Score at least 3 out of 5 in each of the two evaluation criteria:
  – Quality of Presentation
  – Quality of Written thesis report
Schedule

• 13 September
  – Introductory seminar

• 4 October - deadline for identifying topic, supervisor and presentation time slot (via e-mail f.m.maggi@ut.ee)

• 8 November – student presentations start
  – 8 November, 15 November, 22 November, 29 November, 6 December, 13 December
  – After every presentation I will give individual feedback about oral presentation, slides and written report

• 8 December Erasmus students should assume that they present in slot 6 with deadline 8 December and by then submit report, slides and screencast of the presentation (via e-mail f.m.maggi@ut.ee)
Presentation

• Present the following:
  – The problem statement
  – Review of the state of the art
  – Summary of what you plan to do in terms of contribution and optionally evaluation

• Each student has a time-slot of 15 minutes: 12 minutes for the talk + 3 minutes for Q&A
Criteria for Evaluation of Presentation

• The lecturer will give a grade to your presentation based on the following criteria (one point per criterion):
  – **Slides**: Is the amount of text appropriate? Are figures and tables used appropriately where possible?
  – **Public speaking/oratory**: Is the posture appropriate? Is the voice level and intonation engaging? Is the gesturing appropriate? Is the rhythm engaging?
  – **Structure**: Is the structure of the presentation clear? Are the transitions between logical parts of the presentation clearly articulated?
  – **Content**: Does the presentation highlight the main points of the paper? Is the level of detail appropriate? Are examples used appropriately?
  – **Timeliness**: Does the presentation use the allocated time appropriately? Is the time limit respected?
Presentation Schedule and Allocation

• Course Website:

• Message board:
  – https://piazza.com/ut.ee/
Tips for your presentation

• Writing and presenting literature review (by K. Mahmood)
  – http://www.slideshare.net/kmahmood2/6-writing-and-presenting-literature-reviewkhalid

• Preparing Effective Oral Presentations in 7.17 Project lab

• Research skills

• Oral Presentation Skills
  – http://people.engr.ncsu.edu/txie/publications/oral_presentation_skills.pdf
Requirements for Thesis Draft


• The **final draft (in total around 12-15 pages)** should contain the following
  – Title page
  – Abstract
  – Table of contents
  – Introduction / motivation / problem statement (section **Introduction**)
  – Literature review (section **Related work**)
  – Plan of the contribution
  – List of references

• The Introduction should contain: motivation, scope, research problem, research questions

• The Literature review should include at least 5-7 papers

• The length of the Literature review depends on the topic and the volume of relevant state of the art, but it should be roughly between 8 and 10 pages long

• The document should explain the expected contribution of the thesis and optionally how to carry on the evaluation (2-3 pages)

• The document should include well-formatted references
Evaluation of Thesis Drafts

• The lecturer will grade the drafts using the evaluation criteria 1-3 available at

• Additional rules
  – Draft contains a copy/paste of more than 10 consecutive words from any source → -1 point per copied fragment
  – Reproducing/re-drawing 1 or 2 pictures or tables is tolerated, if you explicitly cite the origin of the picture/table in the caption, else -1 point
Tips for Writing a Thesis


• 13 Ingredients of a Winning Thesis Proposal

• How theses get written: some cool tips
Useful Material for Section: Related Work

Systematic Literature Survey – Protocol


- **Background**: The rationale for the survey.
- **Research questions** that the review is intended to answer.
- **Search strategy** that will be used to search for primary studies
  - including *search terms* and
  - *resources* to be searched.

Resources include
- digital libraries,
- specific journals, and
- conference proceedings.
Systematic Literature Survey – Protocol

- **Background**: The rationale for the survey.
- **Research questions**: The specific questions that the review is intended to answer.
- **Search strategy**: The strategy to be used to search for primary studies – including search terms and resources to be searched.

Software Engineering Digital Libraries
- Scopus
- Web of Science
- Google scholar
- IEEEExplore
- ACM Digital library
- SpringerLink
Systematic Literature Survey – Protocol

- **Study selection criteria**
  - Study selection criteria are used to determine which studies are included in, or excluded from, a systematic review
Systematic Literature Survey – Protocol

• **Study quality assessment checklists and procedures**
  – The researchers should develop quality checklists to assess the individual studies

• **Data extraction strategy**
  – Design data extraction forms to accurately record the information researchers obtain from the primary studies
  – Linked to the research questions
Systematic Literature Survey – Protocol

• Synthesis of the extracted data
• Collating and summarising the results of the included primary studies
  – Descriptive (non-quantitative)
  – Quantitative
How bibliography needs to be organized?

References should appear as

- **Book with one author:**

- **Book with two authors:**

- **Book with more than two authors:**

- **Journal article:**

- **A publication in press:**
How bibliography needs to be organized?

References should appear as

- **Edited book:**

- **Chapter in an edited book:**

- **Report from a university:**

- **Published proceedings:**
How bibliography needs to be organized?

References should appear as

• **Unpublished doctoral dissertation or master’s thesis:**

• **A presented paper:**

• **Web site:**
How bibliography needs to be organized?

**In-Text Citations**

- In-text citations should appear with author surname followed by publication year in parentheses
  
  (Brown, 2002)

- Citing several references in-text:
  
  - In most organizations, data resources are considered to be a major resource (Brown, 2002; Krall & Johnson, 2005; Smith, 2001).
  
  - Brown (2002) states that the value of data is recognized by most organizations

  - “In most organizations, data resources are considered to be a major organization asset” (Smith, 2001, pp. 35-36) and must be carefully monitored by the senior management.

  - Brown (2002) states that “the value of data is realized by most organizations” (p. 45).
How bibliography needs to be organized?

In-Text Citations

• If you have organized the citations with number in brackets
  
  – In most organizations, data resources are considered to be a major resource [15; 30; 84].
How **not** to do presentation

- Don McMillan: Life After Death by PowerPoint
  - [http://www.youtube.com/watch?v=WGiePuNFXwY](http://www.youtube.com/watch?v=WGiePuNFXwY)
  - [http://www.youtube.com/watch?v=zDvm1PVtgWo](http://www.youtube.com/watch?v=zDvm1PVtgWo)
  - [http://www.youtube.com/watch?v=lpvgfmEU2Ck](http://www.youtube.com/watch?v=lpvgfmEU2Ck)