Seminar on Enterprise Software

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

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

- Attend at least
  - 8 out of the 10 presentation sessions (including “your” session)
- In due time (all deadlines are set to 23:59 (EEST)):
  - Submit topic and presentation time slot (via e-mail f.m.maggi@ut.ee) (4 March). By this deadline we will also take an appointment for people who are already working on the thesis report and want to improve it.
  - Submit the report by Friday before your presentation
- Score at least 3 out of 5 in each of the two evaluation criteria:
  - Quality of Presentation
  - Quality of Written Literature review or thesis report
Schedule

• **28 February**
  – Introductory seminar

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

• **28 March** – student presentations start
  – 28 March, 4 April, 11 April, 18 April, 25 April, 2 May, 9 May, 16 May, 23 May, 30 May
  – *After every presentation I will give individual feedback about oral presentation and written report (we take an appointment for this, possibly in the same day of the presentation)*
Additional Rules

• In case of absence at the oral presentation:
  – second chance possible only if you give advance notice and you justify your absence

• **Failure in**
  1) identifying topic and presentation time slot,
  or
  2) submitting the document
  **in due time results in grade F**

• Only a 24-hour delay is allowed for the submissions. In this case, a penalty of one point will be applied
Presentation

• Present the following:
  – The problem statement
  – Review of the state of the art
  – Identified gaps in the state of the art

• 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 (section Introduction)
  - Literature review (section Related work)
  - 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 what gaps have been identified in the state of the art, and what is the expected contribution of the thesis given the identified state of the art
- 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

• An example: https://arxiv.org/pdf/1705.02288.pdf

• **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** 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.

    - **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)