

Assignment 2 – Software Experiment (**MAX 5 pages**)

Assignment 2 is due February 23 (Monday), 2015 at 8.00am

If you attended Lecture 4 AND 5, you DON'T have to do this assignment

Compose a possible experiment study (using students as subjects) based on based on a SE topic that interests you. Describe the purpose of your experiment, population and size of population, instrument used (should also be created), content areas addressed, variables in the study and validity issues.

Peer-review other groups' assignments, give feedback (both oral and written)

The Report

The report **must** have the following sections and content. It **must** be formatted using the IEEE Conference Proceedings format (available on the course homepage). **NOTE! You should spend most of your effort in the methodology section!**

1. Introduction

1. Statement of the problem
2. Existing literature of the problem
3. Why it is important to conduct research about the problem
 - For the above three items, a minimum of 5 trustworthy references (in total) must be used when describing the problem, why it is important etc.

2. Purpose of the study

- Purpose statement (concise and clear) leading into RQ(s)
 - I.e. describe the purpose of your experiment

2.1 Research question

- State a clear and concise main research question that will be investigated
- State another one or two sub research questions related to the main RQ.
- State hypotheses (null and alternative) for each research question

3. Methodology

- Describe and explain the research strategy (i.e. experiment) and investigation methods that will be used for the study. Motivate your choice of experiment using relevant references.
- Describe data collection procedures, sampling method(s), independent/control/dependent variables, how the subjects were divided etc.
- Describe the population and size of population
- If any instrument is used (e.g. document needed for the experiment, pre-questionnaire to check subjects background/experience), example questions/information from **ALL** of the needed instruments **MUST** be included
- Describe and motive method for analyzing the data
- Discuss validity threats

4. References

- Use one referencing style in the report. Be consistent with how you use it.
Recommended to use the style in the IEEE template

Acknowledgement

- Write who is responsible for what part

Peer-review and discussion

Be prepared to read and give constructive feedback to each others' work.

Maximum 1 page (given during seminars)

Criteria for judging the assignment:

- **Purpose statement** - is the central purpose of focus of the study clear?
- **Relevance** - is the stated research questions relevant? Does it address a real problem?
- **Suitable research design** - is the selected research design suitable to answer the RQ? IS the research design justified?