

Theory of Science – Experiments and Evaluation

Exercise 3

To be worked on in the exercise session March 25. Written solutions prepared individually during the following week. Solutions for this and last week's exercises due on March 29 in a single pdf document.

Think about and describe how you would experimentally evaluate the performance of a system or design you are developing (e.g., in the project of the current or some previous semester).

- What is the purpose and functionality of your system (brief description)? What would be the performance measure with which you can measure the quality of your system?
- Would there be an alternative, existing solution to which you could compare your solution?
- How do you set up an experiment to collect empirical data for the comparison?
- State precisely a null hypothesis you would like to test. Which of the tests described in the lecture would be suitable for testing your hypothesis based on your data? If none of them seems applicable, in what respect do these tests not fit your data or your hypothesis?

Total expected length of solution: approx. 1 page.