

# EXAMPLE (For SE Students)

Helen is a master student in software engineering study program, and she has two supervisors. Her topic is related to understanding the efficiency of Test-driven Development (TDD). Supervisor A suggests that she should run an experiment, so she can conclusively (under controlled environment) measure the effect of TDD (compared to Test-last development) on the time to complete coding tasks and number of correct tasks. Supervisor B disagrees, he suggests that Helen should observe and interview developers in industry who are doing TDD. He thinks the efficiency of TDD has a lot to do with the individual developers experience and skills, and also the contexts that the developers work in (type of software being developed, organisation culture, tools, etc.)

## EXAMPLE (For LE & GD Students)

Peter is a master student in Learning Experience and Game Development study program, and he has two supervisors. His topic is related to examining the effects of gamification in education. Supervisor A suggests that he should run an experiment, so he can conclusively (under controlled environment) measure the effect of gamification (compared to Traditional/Conventional approach) on students' learning (grades), and engagement (number of logins) etc. Supervisor B disagrees, he suggests that Peter should interview educators who are using gamification in their teaching and the students. He thinks, a big effort is required in the design and implementation of gamification for it to be fully motivating for the students. Therefore, the effectiveness of gamification is influenced by the individual educator's experience and skills, personality traits of the students, and also the educational contexts, the gamification is applied in (type of course, mode of teaching, tools, etc.).

# Compulsory Exercise # 2

Considering the potential research problem that the thesis is trying to address:

- Which research design would you choose for the topic? and why?
- How would you formulate the research questions/ hypothesis
- Which research method would you choose to address the research question? And why?

**Note:** Please write Research Design, Purpose, Research Questions (Also hypothesis (Null/Directional) if its quantitative design), Research Method