

Lecture Exercise #4 Planning and Processes

Intended learning outcome

After passing this exercise the student shall be able to:

- Apply fundamental concepts of risk planning.
- Reflect on the differences between classic project management, waterfall model and agile methodologies.

Problem description

Suppose that you've got the job to develop a new student portal for LiU. The functional requirements are the same as the one presently used at LiU, but it must be possible to access the portal from a variety of mobile platforms. The requirements on usability and reliability are high. You and your four team members start 1 October 2025 and start parallel testing 1 February 2026.

During brainstorming you came up with the following risk list

1. Unfortunately there is no SRS, so we have to run the present system to explore the requirements and document requirements based on system behavior; we might thus miss requirements.
2. The cross-platform development tool chosen, released in April 2020, can change.
3. The test users can get sick when the cold rain season starts.
4. The product may consume too much battery power so the end-users will be reluctant to use it.
5. The customer might skip the parallel test and will ask for deployment already 1 February and you will perform bug correction upon request.

Task

- a) Analyze the risks. For each risk state if it is project specific or general. Also state whether it is direct or indirect. Motivate your answers well as there can be arguments both for and against your statement.
- b) Plan for how the risks can be handled. For each risk write down a plan that is either avoidance, transfer, mitigation, or contingency; at least one risk shall have **two** different plans. Motivate your answers.
- c) You are considering using a method based on the classical waterfall model or a SCRUM-based method with one-month sprints. Describe one drawback and one advantage with each of the methods.
- d) Select two practices from eXtreme Programming that you think would be most beneficial for your project. Shortly describe the practice (1-2 sentences) Motivate why the practice is beneficial.

Report

1-2 pages of texts plus references.

Grading Criteria

Risk classification: The classifications of the risks have a sensible motivation. The classifications are the same as taught in the course.

Risk planning: The plans make sense for the context, and the type of plan is correct. The types of plans are the ones introduced in the course.

Methods used: The advantages and disadvantages of the methods are correctly described.

XP practices: The descriptions of the practices are correct and the motivation for their use is well described.