

PROJECT ASSIGNMENT 6 (PA6)

Introduction to Software Engineering

Due Date: multiple due dates (see below)

Total score: 110 points

This is a project assignment that will be submitted by each team.

a – Test plan and test cases (40 points)

Software testing is an indispensable part of software development. In this step, you are asked to prepare a test plan, design test cases, execute test cases, summarize and report test results. All templates of these documents are provided on Moodle.

In the test plan, you should have several sections as mentioned in LN10-Software Testing. Fill all of the sections specified in the test plan template. In the test plan, you need to list the features needed for testing.

Test cases: You are required to perform functional testing, which is one of the techniques used to test your application.

Select 3 features from the application to write test cases for testing. You have to write **at least 5 test cases** for each feature. It means that at least 15 test cases in total should be created. After that, execute the designed test cases for the features that your team has implemented or prototyped. After each test execution, write the test case status Pass/Fail. Please refer to the test case template provided for more details.

Test report. Generate a test report listing all defects found. There is at least one defect that is linked with a failed test case. In the **test summary report** sheet, you should include the number of functions be tested, number of test cases, number of passed test cases, and number of failed test cases of a function.

b – Project presentation (110 points)

Each team is required to present its project work in a **25-minute** presentation. The main goal is to *sell* each team's work to the teaching staff and peers. With a few exceptions (permitted by the instructor), everyone is required to deliver at least 5-minute talk as a part of the team's presentation.

The content includes:

- Problem statement, product position statement (from the Vision document), users/market.
- Project management: team structure and responsibilities of team members.
- Software requirements: use-case model, non-functional requirements.

- Analysis and design: architecture and technologies used.
- Software testing: test environments, test plan, and test results.
- Demo: demo a key scenario of the software.

As the presentation will be delivered up to **30 minutes**, you are advised to prepare about 20-25 slides (each slide is typically delivered in 1.5 minutes).

Presentation date: <<date>>.

Venue: Lab

b – Final submission (10 points)

Each team submits the final package that contains every documents written and source code. Compress the final package into a zip file and name it as PA6-Group[GroupId]-final-report.zip.

Due date: <<date>>

Presentation grading Criteria

The presentation is graded using two components: content and delivery. The content criterion checks whether the presentation has all elements provided above and whether they are correct, logical and comprehensive (e.g., whether the problem statement is clearly stated). The delivery criterion checks how well the group delivers the presentation. It is based on the organization, transition, English, clarity, and persuasiveness of the presentation.