SWE20001 Managing Software Projects > Project Proposal Stage > Pass Task 05P, Software Quality and Definition of Done

Table of Contents

Modification History

Date (created / modified)	Purposes
2022-01-17	Convert to asciidoc format and modify for 2022 S1
2022-02-26	Fix minor issues

Project Proposal Stage

Context of Project Proposal

Project proposal is a document, usually written by the Project Managers, to bid a project.

The software project could be an in-house project or an external project.

If it is an in-house project, it means that the Project Manager does the project for their own company and the project 'client' may be someone from other department(s).

If it is an external project, there are many different scenario. One example is one of our Government's software application done by Microsoft. Here is a common scenario.

A company wants someone to develop a software application for them. They start with a RFP (Request For Proposal) document, something like 01_R_RFP.pdf, and send these to several software vendors (e.g. IBM, Microsoft, HP, ...). The company will then receive some proposals from these software vendors and select the winning proposal. The software vendor being selected will develop the software for the company.

The portfolio work you do in this Project Proposal Stage is to prepare you, as a project manager, to write a good software project proposal.

Project Proposal Group

You have been asked to form a team of 4 – 6 students in the same tutorial and work as a team for the group tasks for the semester.

For the group tasks in Project Proposal Stage, you need to register your team in Doubtfire under the **Project Proposal Group Tasks** and submit your work as a group task.

Please do not call your group "Project Proposal Group" as there may be potential conflicts in the group names.

Pass Task 05P, Software Quality and Definition of Done - Individual Task

This document describes Pass Task 05P for your Doubtfire submission purposes.

This task aims to develop the quality requirements of a software project to ensure the quality of the software to be developed.

Suggested Timing

Start	Week 3 (before lecture)
Feedback	Ask Tutor in your Weeks 3 or 4 Tutorial class
Due	Week 5 Monday (28 March 2022) 9:00am

Task Overview

Purpose:	To practise how to develop a project proposal of a software based on its description – Quality
Tasks:	**Software Quality and Definition of Done** 1. Develop the quality requirements of a software project

Pre-requisite Task[1]	Pass Task 04P
Follow-up Task[2]	Pass Task 06P
Resources:	Lecture 3a Done Lecture 3b Quality Model Lecture 3c Goals Lecture 4 Quality Review 05_R_Def_Done_Template.docx
Feedback:	Ask your tutor for feedback

Tasks and Instructions

1. Define your own “Definition of Done” for the project

1. Remember that **Definition of Done** is a list of "conditions" you have to check to ensure that the software satisfies these conditions. You need at least 5 — 10 such conditions.
2. You may use those suggested in Ken's video (See Lecture 3a Done slides). Or, you may use ISO25010 (See Lecture 3b Quality Model slides) as a guide to identify the quality characteristics, sub-characteristics, the relevant quality metrics and threshold values.
3. Here are some examples of using ISO25010.
    a. Related to "functionality" of your software (e.g. "add a sales record"), you may want to consider the Functional Suitability characteristic. In this characteristics, there is the sub-characteristic of Functional Correctness.

        i. You may want to use "number of errors found in testing" as a quality metric for Functional Correctness. The relevant threshold value may be "5% of the total test cases". In other words, if your software satisfies the condition — "number of errors found in testing is less than or equal to 5% of the total test cases", your software will be considered as of good quality.
        ii. Another quality metric for Functional Correctness could be "number of defects per KLOC". The threshold value could be "5 defects per KLOC". Hence, if your software (after testing) has less than or equal to 5 defects per KLOC, your software will be considered as of good quality.
    b. Related to GUI component of your software (e.g. the UI of "add a sales record"), you may want to consider the Usability characteristic. In this characteristic, there is a sub-characteristics of Operability. You then need to define your quality metric to measure how users operate the UI and its threshold values.

Submission Details

Submission Format and Personal Details

Submit a pdf document in **portrait** mode[3] to Doubtfire. Remember to include the following details in the document for submission:

- Your name and student ID
- Your tutorial class including your room location (e.g. Tue 12:30 EN310)
- Your tutor's name
- Your own responses to the tasks

What to submit

Submit your own version of 05_R_Def_Done_Template.docx, properly completed and converted to a pdf file in portrait mode, as mentioned above.

[1] You or your team need to complete the pre-req (pre-requisite) task before doing this task.

[2] You or your team need to complete this task in order to do the follow-up task because the follow-up task depends on your answer in this one. Strongly suggest you keep the same team if possible. Do the follow-up tasks before the next tutorial and then ask feedback in the tutorial.

[3] Landscape mode pdf does not work properly on Doubtfire.