



UNIVERSITI KUALA LUMPUR KAMPUS KOTA
MALAYSIAN INSTITUTE OF INFORMATION TECHNOLOGY

Name of Course	SOFTWARE QUALITY
Course Code	ISB 42703
Lecturer	Dr Juliana Jaafar (jjuliana@unikl.edu.my)
Semester / Year	SEPTEMBER 2022
Due Date	<u>Deliverables</u> <ol style="list-style-type: none"> 1. Project group title and scope – Week 4 (25th Oct 2022) 2. Project proposal presentation (.ppt)– Week 8 (29th Nov 2022) 3. Project Presentation & SQA Plan report – Week 12 (27th Dec 2022)

Assessment	Assignment (5 members) Group Project (5 members)
Weightage	Assignment - Project proposal presentation (.ppt) - 10% Project Presentation(.ppt) & SQA Plan report - 40%
Course Outcome to achieve: <u>CLO2:</u> To evaluate software quality techniques and approaches in software project. (C5, PLO6) <u>CLO 3:</u> To construct software quality techniques and approaches in software project which are applied to various business domains. (A5, PLO5)	

Group Project

Objective: To develop a **comprehensive Software Quality Plan** for the selected project.

This is a reverse engineering task where you need to evaluate the available software project and develop a comprehensive Software Quality Plan for the project.

Project Proposal/Final Presentation

1. Introduction of the project
 - a. Company background
 - b. Business Process
 - c. Problem statement
2. Project product i.e. Deliverables
3. Aims, Scope (Assumption and Limitations), Objectives of the project
4. Revisit the requirements and specify the requirements and quality requirements for the system
5. Identify a set of quality attributes for the selected system and the metrics for the specified quality attributes
6. Project methodology and tools (development and SQA).
7. Project detail timeline and milestones **INCLUDING** the SQA activities
8. Software development standards/procedure standards to adhere
9. In **each phase**, specify the **SQA activity** (e.g. document review, code inspection, unit testing, UAT, etc.) to be executed and for each SQA activity, define the following: -
 - a. The objective(s) of the SQA activity
 - b. The team members (including the leader) of SQA activity
 - c. The procedure/strategy of the SQA activity
 - d. The tools and techniques of the SQA activity
 - e. The input
 - f. The outcome
10. Define and analysis of project risks which includes the definition of risk, implication of the risk, mitigation and contingency plan for the risk.
11. Summary.

SQA Plan Report

1. Introduction

- 1.1. Purpose – *Describe the purpose of SQA plan*
- 1.2. Scope

2. Project Overview

- 2.1. Introduction – *Introduction on the project*
 - 2.1.1. Aims, Scope (Assumption and Limitations), Objectives
- 2.2. Problem statement
- 2.3. Project requirements
 - 2.3.1. Functional requirements
 - 2.3.2. Non-functional requirements
- 2.4. Software development methodology
- 2.5. Project Tools and Techniques (Development and SQA)
- 2.6. Product deliverable
- 2.7. Project timeline and milestones - *including the SQA activities*

3. Reference Documents – *List and describe the standard or guideline documents used to develop the SQA plan*

4. Minimum Requirements Documents – *Describe the documents should be produced during the development to the end of the deliverables of the product that need to be reviewed, verified or validated.*

- 4.1. Project Management Plan
- 4.2. Software Requirement Specification
- 4.3. ...
- 4.4. ..
- 4.5.

5. Quality attributes requirements – *Quality attribute requirements of the product. List the quality attributes identify for the product and define the metrics and tools/techniques (if any), strategies or procedures to assure the system possess the quality attributes when delivering the system*

6. SQA Activities – *For each SQA activity of each phase, state the objective/purpose of the SQA activity, the SQA members to execute the SQA activity, the procedure/strategy or tools used of the SQA activity*

- 6.1. Software requirement phase
- 6.2. Software design phase
- 6.3. Software development phase
- 6.4. Software process improvement
- ...
- ...

7. Testing Strategy

- 7.1. The purpose of testing for the project
- 7.2. Testing levels (Unit, integration, System Testing) – *For each testing level, describe the purpose of the testing, the strategy/the procedure how to execute the testing and the completion criteria. Also, define the techniques and/or tools applied for each of the testing level.*
 - 7.2.1. Unit testing
 - 7.2.2. Integration testing

7.2.3. System testing

8. **Risk Control and Management** – *Identify the risks of the project based on the strategy to control and manage the risk.*
9. **Summary**

Evaluation Criteria

	Items	Marks
Project Presentation (Proposal & Final) – 60%	Project and product introduction	10
	Product Requirements and Specification (Quality)	20
	Methodologies and Tools (Development & SQA)	10
	Quality Attributes and Quality Metrics	30
	Project timeline and milestones (including SQA activities)	30
	SQA Activities and Strategy	40
	Risk Analysis	20
	Summary	10
	Content Presentation and Layout	10
	Presentation	10
	Teamwork & QA	10
	Total Marks	200 Marks
Project Report – SQA Plan – 40%	Project and product introduction	10
	Project Overview	20
	Reference Documents	10
	Minimum Requirements Documents	10
	Quality attributes requirements	30
	SQA Activities and Strategy	40
	Testing Strategy	30
	Risk control and management	20
	Structure of the report	10
	Formatting	10
	Language, Grammar and References	10
	Total Marks	200 Marks