Module 5- Computer Systems (2022-23) Project



Software Design Document Template

Project Name:	Team ID:
Team Members:	Mentor(s):

Instructions:

- i) You must explain all the given sections clearly and concisely.
- ii) You must fill in the basic information about your projects such as Project Name, Team Members, Team ID, and Mentor(s).
- iii) Make sure to consider the checklist of the Design phase provided in the Security by Design document.
- iv) The length of the document should be 4 to 8 pages.

1. Introduction

(The **brief overview** of your application.)

2. Functional/Non Functional Requirements

(This section is **mandatory for those teams who have changed their project requirements** for some genuine reasons in consultation with their mentors and they have not mentioned these requirements in the Requirement Analysis document).

3. Architectural Design

(Create diagrams to depict a high-level impression of your system using UML diagrams that should include Use case, Class, Activity, and Data flow diagrams (at least one diagram for each category).

The diagrams can be drawn using online tools, i.e. draw.io (free tool), etc.

Write the motivation for all your UML diagrams to highlight the project features and requirements.

This section aims to understand the system and its basic components, how the components interact with each other, data repositories, security requirements in design such as trust boundaries, input/output points, swapping/updating firmware for fixing bugs, and adding new features to the product, etc.).

4. Product User Interface

(In this section, you should **create illustrations using Wireframing tools** (Pencil Project, Mockplus, etc.), based on the Software Requirement Specification (SRS) of your application, **for example**, the menus required for the interface, buttons, and its tasks (Toolbar), any other functionality like events, sub-events, controls, status bar, etc.)

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5. Prevention/Mitigation Criteria (Security Controls)

(In this section, you should **specify the criteria to avoid/remove the risks** identified in the design.)

6. The cost involved (if any):

(This section is used to mention the **cost involved** to implement the necessary security controls for your application. This includes both time and money-related costs.)

7. Conclusion:

(You should give the **concluding remarks** of your document. You can do this by **highlighting noteworthy design decisions** and **challenges** for the next phase that you recognized.)

Reference:

(Utilize this section to mention the **research papers/articles** you referred for the document.)