

CS 331 (Software Engineering Lab)

Assignment 1 (Total Marks = 40)

Please provide the answers to the following questions for your software engineering project:

- I. What key aspects need to be analyzed regarding the project's feasibility study?
(Discuss Technical Feasibility like tools and framework, scalability, etc; Schedule Feasibility defining timeline and milestone; Quality Feasibility like testing and maintenance; Market Feasibility by clearly assessing demand and identifying the target customers) **[Marks = 10]**
- II. Discuss the project requirements that the customer may provide, and analyze the gathered requirements. **[Marks = 5]**
- III. Prepare the Software Requirements Specification (SRS) document, including detailed functional and non-functional requirements. **[Marks = 5x4 = 20]**

A generic template for SRS is given below:

- a) Introduction (Define the purpose and scope of the project)
 - b) Overall Description (Product features, User classes and characteristics, Operating environment)
 - c) System Features and Requirements (Functional Requirements: For each major feature, define functional requirements including feature description, inputs, processing, and output.
Non-functional Requirements: Describe attributes like Performance requirements, Security requirements, Reliability, Compatibility, and Maintainability)
 - d) System Attributes (Availability, Scalability, Backup, and Recovery, etc)
- IV. Which Software Development Life Cycle (SDLC) model will you choose for your software engineering project? Please justify your choice. Write point-wise. **[Marks = 5]**