

## **CSE305 - Software Engineering Project**

**University:** Silicon Valley Institute of Technology

**Course Duration:** Full Year (Fall and Winter)

**Instructor:** Dr. John Doe

**Contact Information:** john.doe@svit.edu

**Office Hours:** Tuesdays and Thursdays, 3:00 PM - 5:00 PM

### **Course Description**

In this upper-year course, students develop a large-scale software application, such as a web-based platform or a mobile app. The project is based on requirements provided by a real or fictitious client. Students work in groups to design, implement, and test their software, following industry-standard practices.

### **Learning Outcomes**

By the end of this course, students will be able to:

1. Conduct requirements analysis and specification for software projects.
2. Design software architecture and create detailed design documents.
3. Implement software solutions using appropriate programming languages and tools.
4. Perform testing and quality assurance to ensure software reliability.
5. Manage software projects using project management tools and techniques.
6. Communicate project progress and results through written reports and oral presentations.

### **Course Timeline and Deliverables**

#### **Fall Semester:**

##### **Table**

<b>Date</b>	<b>Deliverable</b>	<b>Description</b>	<b>Weight</b>
September 15, 2020	Team Formation and Project Proposal	Teams form and submit a proposal outlining the project scope and objectives.	10%
October 20, 2020	Requirements Specification Document	Detailed requirements analysis and specification document.	15%
November 25, 2020	Preliminary Design Review	Presentation of initial design, including architecture and key components.	15%
December 10, 2020	Midterm Progress Report	Report on progress, challenges, and next steps.	10%

#### **Winter Semester:**

##### **Table**

Date	Deliverable	Description	Weight
February 15, 2021	Detailed Design Document	Comprehensive design document with detailed architecture and component design.	15%
March 20, 2021	Implementation and Testing Report	Report on implementation progress and testing results.	20%
April 10, 2021	Final Presentation and Demonstration	Final presentation and demonstration of the software project.	15%

### Grading Breakdown

- Team Formation and Project Proposal: 10%
- Requirements Specification Document: 15%
- Preliminary Design Review: 15%
- Midterm Progress Report: 10%
- Detailed Design Document: 15%
- Implementation and Testing Report: 20%
- Final Presentation and Demonstration: 15%

**Total: 100%**

### Course Policies

- **Attendance:** Regular attendance is required. More than three unexcused absences may result in a lower grade.
- **Late Submissions:** Assignments submitted late will incur a penalty of 5% per day, up to a maximum of 25%.
- **Academic Integrity:** All students are expected to adhere to the university's academic integrity policy. Plagiarism or cheating will result in disciplinary action.

### Required Materials

- Textbook: "Software Engineering: A Practitioner's Approach" by Roger S. Pressman
- Access to version control systems (e.g., Git)
- Development tools and environments (e.g., IDEs, compilers)

### Additional Resources

- University Library
- Software Development Lab
- Online tutorials and workshops

This syllabus provides a comprehensive overview of the CSE305 course, including key elements such as learning outcomes, a detailed timeline with deliverables, and their respective weights. If you need any further details or adjustments, feel free to ask!