# CS 255 System Design Document Template

This template lays out all the different sections that you need to complete for Project Two. Each section has guidance to prompt your thinking. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead the goal is to complete each section based on what your client’s needs are. Remove this note when you are finished, and replace all bracketed text with the relevant information.

## UML Diagrams

### UML Use Case Diagram

*A diagram of a driver pass

Description automatically generated*

### UML Activity Diagrams

*A diagram of a computer

Description automatically generated* A diagram of a wiring diagram

Description automatically generated

### UML Sequence Diagram

*A diagram of a student

Description automatically generated*

### UML Class Diagram

*A computer screen shot of a diagram

Description automatically generated*

## Technical Requirements

The DriverPass system is designed to function on a web-based platform, utilizing cloud hosting to ensure scalability and accessibility. The hardware requirements include dependable servers to host both the application and its database. For software, the system will integrate a secure database, a flexible web framework for development, and tools to manage notifications and user roles effectively. The infrastructure will prioritize security by employing encrypted connections (SSL/TLS), along with automated backup systems and recovery mechanisms to maintain reliability. Additionally, the system will leverage essential development and maintenance tools, such as integrated development environments (IDEs) and testing frameworks, to support efficient operations.