# 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 company Description automatically generated

### UML Activity Diagrams

A diagram of a company

Description automatically generated

### UML Sequence Diagram

A diagram of a company

Description automatically generated

### UML Class Diagram

A diagram of a computer

Description automatically generated

## Technical Requirements

The proposed DriverPass system requires a combination of hardware, software, and infrastructure to support its functional and nonfunctional requirements. In terms of hardware, the system will need to be hosted on cloud-based servers with reliable internet connectivity to allow users to access the system from anywhere via their computers or mobile devices. These servers should be capable of handling user data, managing reservations, storing lesson progress, and communicating with external systems like the DMV. The infrastructure should include secure, cloud-based databases like MySQL or PostgreSQL to store user information, lesson schedules, and progress tracking data. Additionally, security measures such as firewalls, secure VPNs, and data encryption protocols are necessary to protect sensitive information and ensure compliance with data protection regulations.

On the software side, the DriverPass system will require a web-based application that can run on various browsers and operating systems, such as Windows, macOS, iOS, and Android, ensuring accessibility for users and administrators. The system will integrate with third-party services like the DMV for syncing updates on driving requirements. Tools like a content management system will be needed to handle training materials and lesson content, while an account management system will allow admins to control user access and permissions. Reporting tools will be required for generating progress reports, reservation details, and compliance checks. Finally, version control software and continuous integration tools will be needed to maintain and update the system to ensure high performance and adaptability as requirements evolve.