# 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

*Diagram

Description automatically generated*

### UML Activity Diagrams

Diagram

Description automatically generated

### UML Sequence Diagram

Diagram

Description automatically generated

### UML Class DiagramDiagram Description automatically generated

## Technical Requirements

*The DriverPass system requires specific technical requirements to operate effectively. The system consists of a web application that needs to be hosted on a third-party hosting service. Users will access the application via their web browsers. A database of customers and their account information will need to be connected to the application, with an authentication service to authenticate users when they log in. The DriverPass application will also need to access an outside payment service to accept payments from customers, as well as have access to the DMV for updating laws and driver requirements.*

*The required hardware for the system includes internet-capable devices such as smartphones, tablets, laptops, or monitors with keyboards and mice. Additionally, a server is needed for the use of the cloud, power sources and charging cables, internet hardware such as modem and router, and a company phone for customers to reach the secretary. A POS system is required for payment processing.*

*The software required for the system includes high-speed internet, compatible web browsers, cloud-software, cloud-based database, activity tracking software, connectivity to DMV information with notifications for updates enabled, and security software with encryption. The tools required include programming software such as Eclipse and cloud software. The required infrastructure includes a building to house employees as well as the cloud server, widespread high-speed internet connectivity in DriverPass building, and cars for driving appointments.*

*To minimize the technical requirements for customers, it is recommended that the system be cloud-based, and the hosting be stored within the cloud, with the contents of the program and its users stored in state-based memory for some transactions, while the bulk of the account-based information will be stored in cloud servers. The customer will need internet with a strong enough signal to connect for a sustained amount of time in the case of assigned material or learning material. The system will primarily run through a custom UI made by the company that functions through the internet on a web-based platform, making it more accessible for all.*