# 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 business process

Description automatically generated

### UML Activity Diagrams

A diagram of a software application

Description automatically generated

A diagram of a program

Description automatically generated

### UML Sequence Diagram

A diagram of a customer appointment

Description automatically generated

### UML Class Diagram

A diagram of a company

Description automatically generated with medium confidence

## Technical Requirements

*[Based on the diagrams you have created, describe the technical requirements of your system. These requirements should address the required hardware, software, tools, and infrastructure necessary for your system design.]*

Based on the diagrams I have created, there are numerous technical requirements of my system:

* The system needs the capability for users to create new accounts or log into an existing one along with account validation.
* There is also a need to update and modify existing accounts and user data logged into the system.
* Customers along with the secretary will have the capability to schedule appointments and reservations for driving, as well as update existing appointments and reservations.
* There is a need to separate the capabilities for different users in different roles. IT Admins, secretaries, customers, and administrators.
* The system requires a user interface that allows the administrator and IT admin to make modifications to the system when necessary.
* Accessing the system requires internet access through a web browser or mobile application and can be accessed offline through an excel spreadsheet download.
* A powerful internet connection is always required to successfully host a server base to maintain the system full-time.
* The system has security software requirements for usernames to be unique, and passwords to be longer than 8 characters long, with a mixture of special characters, capital letters, lowercase letters, and numbers.
* The DriverPass platform should function at a rapid pace and updates to the system should be adjusted immediately.
* The system will require a back-end cloud-based server to act as a database for storage and retrieval of information.
* There will be built-in software to define the different users and allow for accurate user login without complications.
* A user will have three opportunities to log in with their credentials before being locked out of the system for a time. The administrators will be notified of the lockout and will need to reset the user password.