# 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, schematic

Description automatically generated*

### UML Activity Diagrams

*Diagram

Description automatically generated*

*Diagram

Description automatically generated*

### UML Sequence Diagram

*[You were asked to create a sequence diagram based on* ***one*** *of the use cases you chose. Please insert your sequence diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s needs.]*

*Diagram

Description automatically generated*

### UML Class Diagram

*Diagram

Description automatically generated*

## Technical Requirements

* The system should be updated every time a change is made so that it saves the information, any big updates that will change the system design or interface should be scheduled
* Owner wants to be able to download an offline report
* The system will need to have a database of all the student’s information and all employees information, this database needs to be available to be downloaded.
* This database must be secured to prevent any outside hackers.
* We should implement a username and password for each user, and the password should be ciphered ones it is entered
* If we use input case-sensitive it will give more security to the users
* If any problems were to happen the system should immediately inform an admin so that it can be fixed ASAP.
* An IT admin should be allowed to update any users information such as reservations, course progress and more.
* If there was a “brute-force” hacking attempt, the account should be locked, it will send an email to both an admin and the user of the attempt and require a password change.
* If a user forgets their password, they can reset the password through their email.
* The system shall have access to the database for every user that logs in.
* The system shall be able to book reservation for users
* The system shall be able to change a course progress
* The system shall provide all available courses and tests
* The system shall show what driver the student is paired to and what time and date the reservation is
* The system shall show all three course offers to the user
* The system shall be able to disable packages
* The system shall be connected to DMV to keep up with recent rule changes
* The system shall provide registration information
* The system shall provide driver notes, driver photo, student photo and student information
* Interface should show available classes, and reservation times to the user
* It should be able to show information specific to the user, admin, or student
* Each user should be able to check their course progress, see their current reservations, future reservations and more
* The user will interact through a mobile phone, computer or anything that has web availability