# 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

*[You were asked to choose* ***two*** *use cases and create* ***two*** *activity diagrams, one for each use case. Please insert* ***both*** *of your activity diagrams here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s needs*

*The first use case is creating account.*

*Some attributes to be mindful of when creating the use case are creating account, register user, student portal, manage learning, take practice test, reset password.*

*Diagram

Description automatically generated*

*The second use case “. Driving lessons - appointments”*

*Some attributes to be mindful of when creating the use case Book driving appointment, cancel driving appointment, cancel driving appointment, confirm availability, confirm driver availability, confirm change, report sent to admin.*

*Diagram

Description automatically generated*

### UML Sequence Diagram

Diagram

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### UML Class Diagram

*Diagram

Description automatically generated*

## Technical Requirements

*As the infrastructure of the system is simple and user-friendly. There are no hardware limitations. I would recommend audio to enhance the user experience when interacting with the learning module. One requirement is internet connectivity, as it connects the student to the student portal, where the student will have access to the learning material, study guides, etc. The system will be encrypted using SHA-256, which is used frequently, as it is a very secure way to encrypt login information. Other ways we will implement to protect against brute forces by using two-factor authentication and limiting the number of incorrect login. If another IP address was detected, the system would trigger the two-factor authentication. If the incorrect password was typed in 3 times, the self-serve reset tool would direct the student to reach out to the ITadmin to recover the proper credentials.*