# Marcus Smith

CS 255

6/17/2023

# CS 255 System Design Document

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 picture containing diagram, line, circle, text

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.]*

*A diagram of a payment method

Description automatically generated with low confidence*

*A picture containing diagram, text, screenshot, design

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.]*

*A picture containing text, screenshot, diagram, parallel

Description automatically generated*

### UML Class Diagram

*[You were asked to create a class diagram based on the different classes and attributes needed for your system design. You are* ***not*** *required to include methods, but you may if you wish. Please insert your class diagram here. Check to make sure that you included appropriate components and symbols and that your design meets the client’s requirements.]*

*A picture containing text, diagram, plan, parallel

Description automatically generated*

## 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.]*

*The systems technical requirements will require the system to be able to draw from the cloud and call information that is asked for by the user or administrator. It will also need to be able to use a login function to allow access to a specific account based on login credentials while locking out accounts that reach a three-limit attempt threshold. The system will also need to be accessible to the DMV and allow for information to be uploaded to update the DMV requirements and allow the admin to access them and push the update of the rules and regulations. The Registration class will be a aggregation of the User class, while the user and Admin class will be a composition of the login class. The account progress class will be a composition of the user and admin class. The System guideline class will have the admin and DMV classes be compositions of it. When it comes to the payment method, the user will need to enter verified card information to be able to make a payment, and if done correctly, they will receive a notification that it went through as well as get a receipt sent the the associated email.*