# 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

*[In Module Six, you were asked to complete a use case diagram based on your system design. If you would like to make any adjustments to your diagram, please do so. Please insert your use case 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 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.]*

*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

*[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.]*

*Diagram

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.]*

* There will need to be a database for the customeraddresses, phone number, first/last names and multiple tables. Key/Value pairs for names, passwords, and usernames.
* Database will also need to store appointment information.
* Web based application for customers to purchase packages and schedule appointments
* Payment On/Off ramp for when customers purchase a package
* Internal web-based application for scheduling of drivers and cars
* Internal web-based application for administration
* Administration needs the ability to add, remove, and reschedule customer appointments
* API’s for the DMV updates
* System should be updating every 1-2 minutes in case a customer wants to cancel an appointment or something happens to a driver/car
* Will need cloud based server or in-house
* Mongo DB, Oracle DB, or AWS
* Web-based applications should probably be Angular/React based
* Will need multiple Scrum/Agile teams with at least two product owners and a scrum master
* Depending on experience of developers might need data scientist
* Depending on back end code IDE needed C# - Visual Studio or Java – Eclipse