# 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.]*

**Chart, diagram, bubble chart

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.]*

The system being developed for the client DriverPass has a few technical requirements. The system must be developed as a cloud base system, and we must consider that the owner must be able to load and download data. The owner must be able to download data and work on it in multiple places even locations without an internet connection. This is why a cloud-based system is a great choice not only the owner, but all users will be able to gain access to the system from multiple locations. The system must allow for the owner to complete a download of data so it can be edited from areas with no internet. The databases should be maintained and run by the cloud provider this is a great cost saving choice and the cloud provider will be responsible for data security within these databases they manage. Important information for the users of the DriverPass system will be stored in these databases which could be a high cost if the client decided to handle their own databases and security. When using the cloud expansion of data storage is usually simple and cheap to expand as you just pay for more storage to the provide instead of buying physical data storage for a system the company could be managing and maintaining. All data being transferred between users and the system whether in-house or over the internet must be encrypted via SSL to guarantee security and data integrity. The system should design to run on Linux and there are many free tools to help design and test the system that can save some budget to be used in other areas.