# 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.]*

*A diagram of a diagram

Description automatically generated with medium confidence*

### UML Activity Diagrams

A diagram of a computer flowchart

Description automatically generated*[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 flowchart

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 diagram of a computer

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 diagram of a company

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.]*

Based on the diagrams, the system design necessitates certain technical requirements. One of the technical requirements of the system design was brought up in the interview, the need for a cloud-based system. DriverPass wants a cloud-based system to avoid dealing with backup and security. This cloud-based system must keep backups of certain data, so that reports can be accessed offline. It is likely that our firm will award a contract for this cloud infrastructure to a cloud-computing company. We expect that an outside cloud-computing company will deliver on all our requirements, while minimizing costs.

Another technical requirement for the system design is the ability for the platform to be accessed from mobile and desktop devices. The platform must be able to recognize the type of device requesting access, and display the appropriate UI based on the device. There will be extra development time and resources building out the platform to accommodate these devices. The DriverPass website must be secure for all devices. We recommend the HTTPS protocol when sending requests to the server, HTTPS can prevent against many cyber-attacks.

The last technical requirement is the various forms of verification. The main processes that require verification are new account registration, credit card transactions, and resetting a password. New account registration would require verification with a government entity, to prove the person is who they say they are. Credit card transactions would require verification through the credit card merchant. Resetting a password could be verified locally through the cloud-servers, all the user data should be backed up on the server.