# 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

*[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 screenshot of a 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.]*

*A diagram of a person's work flow

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### 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 white sheet of paper with black text

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.]*

## 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.]*

***Hardware Requirements for Host:***

* *A minimum of one physical server, with two recommended for backup and redundancy.*
* *Networking equipment such as cables to connect the server and other hardware.*
* *Basic peripherals like a monitor, keyboard, and mouse for server management.*
* *Reliable power supply sources.*
* *Access to a stable internet connection.*

***Hardware Requirements for Client:***

* *A desktop or laptop computer.*
  + *For desktops, additional peripherals like a keyboard, mouse, and monitor are required.*
* *A wireless adapter or Ethernet connection for network access.*
* *Adequate power supply.*
* *A reliable internet connection.*

***Software Requirements for Host:***

* *A Windows Server operating system.*
* *Software specific to the DriverPass system.*
* *Containerization tools like Docker for managing virtual machine traffic.*
* *Security applications to safeguard sensitive information against cyber threats.*

***Software Requirements for Client:***

* *A modern web browser (e.g., Chrome, Firefox, etc.).*
* *An operating system such as Windows, macOS, or Linux.*
* *Security software to protect user information during website access.*