# 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.]*

1. Reschedule Reservation Use Case:

Diagram

Description automatically generated

1. Buy a Purchase Package:

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.]*

1. Access Account:

A picture containing table

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, schematic

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.]*

* Payment Processing System: Used to process the purchases of different driving packages.
* Employee Mobile or Computer Device(s): Used to perform the variety of admin processes involved for the DriverPass System.
* Database: Stores all transactions, activities and information concerning users on the system. This includes, but is not limited to driving lesson times, driver notes, customer information, online classes, practice tests, etc. Must be updated after every activity and after every 24 hours.
* Notification System: View updates involving DMV rules and procedures.
* Call System: Helps people reserve driving lessons, answer customer questions, or resolve basic problems. This will be normally run by the secretary.
* Cloud Server: Recommended by the owner. Used for data backup, security, and server properties of the DriverPass System.
* Input Form: Allows a customer or a secretary per customer request to fill in general student information on the system for a way to contact the customer.
* Required Hardware: Monitor, mouse & keyboard (computer) and touch screen(mobile), memory, CPU, hard disk, & RAM are all hardware needed to operate successfully on a computer or mobile device for DriverPass.
* Web Interface: Allows an online user to participate in online classes, take practice tests and to reserve a driving lesson to include the day and time. It also allows a customer to modify their reservation or cancel it.
* User Interface: Displays online test progress, driver notes, an input section for information, a link to contacting DriverPass, a special needs section, and photos of the driver and customer. Formatting provided is what the customer role would see although Admin roles can also use to assist/monitor the user.
* Universal Account Access Key: Accesses any account to restrict access to select users, reset passwords, and monitor accounts. IT role only.
* Tracking System: Monitors user activity. Shows which user created, modified, or deleted a reservation.
* The System shall be functional on any mainstream web browser. This includes:
  + Microsoft Edge
  + Mozilla Firefox
  + Google Chrome
  + Apple Safari
  + NOTE: More web browsers will become functional as scalability occurs.
* Automated Email System: Used to provide updates, send links for resetting passwords, and providing communication.
* Website: Needed to manage web pages. Will be hosted by the Cloud Server. Must contain a domain name for search engines to find the website.
* Package Management Tool: Used to disable or introduce new driving packages. Owner role only.
* A printer will be required if DriverPass admins wish to print activity reports.
* Mobile data, Wi-Fi (modem and router), or a hard-wired internet connection are needed for a device to have web-based functionality.