# 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

A diagram of a driver pass use case diagram

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### UML Activity Diagrams

**Activity Diagram 1 – Schedule Driving Lessons**

A diagram of a company

Description automatically generated

**Activity Diagram 2 – Password Reset**

**A diagram of a computer program

Description automatically generated**

### UML Sequence Diagram

A diagram of a computer program

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### UML Class Diagram

A diagram of a driver pass

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## Technical Requirements

1. Hardware:

There will be two types of hardware needed, clients and Servers for hosting the applications.

* Client hardware: Laptop Computer, Desktop Computer, Smart Phones and Tablets.
* Server-Side hardware: It will be hosted on Cloud like AWS or Azure. It needs multiple high-performance servers with high speed hard disks (or SSDs) and high capacity RAMs.

1. Software:   
   There will be client software and server software needed.

* Client Software: Windows, MacOS, iOS or Android with web browers
* Server Software: Linux/Ubuntu based Server software with Aache webservers, and Database software to storing the data.

1. Tools:  
   An IDE (integrated development Env) for Java software development and Python development, source control like GitHub, etc.
2. Infrastructure:

The entire system is hosted on Cloud platform like AWS or Azure. So, we need cloud hosting service. Database hosting service to store the data and these services should be high speed net connectivity. System Backup and Redundancy system should be created to backup and disaster management.