# 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

### UML Activity Diagrams

### UML Sequence Diagram

### UML Class Diagram

## Technical Requirements

The hardware requirements of this system is minimal, as the client has requested the product run on cloud services. This would only require us to purchase service from a Cloud Service Provider.

For software requirements, the list is a bit longer. A server Operating System like Windows Server or Ubuntu Server would run the web server. The web server would be either IIS on Windows or Apache on Linux or Windows. We would also need to run databases to hold user data, which could be mySQL or SQL. An email server would also need to be run to allow resetting of user passwords, this can be setup with built-in features in Ubuntu Server. Next on the list is an audit/log tracker, assuming the server is Ubuntu, using auditd would be the best option. The final software requirement would be a way to print reports on information within the database, such as driver notes. This can be done by using Google Data Studio, this application connects directly to the database and creates reports on request.

For tools, we would need an IDE or Code editor such as Eclipse or Microsoft Visual Studio Code to create the front end of the website. Using an SSH client such as putty or Command Prompt would allow the developers to talk to and configure the database and the server.

As for infrastructure, this will be provided by the Cloud Service Provider since they are managing networking, security, data backups, and Operating System updates.