# 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

A diagram of a driver pass

Description automatically generated

### UML Activity DiagramsA diagram of a customer service Description automatically generatedA diagram of a software application Description automatically generated with medium confidence

### UML Sequence Diagram

A diagram of a customer

Description automatically generated

### UML Class Diagram

A diagram of a computer program

Description automatically generated with medium confidence

## Technical Requirements

**Hardware:**

* DriverPass will need servers that utilize the cloud, which will provide good security.
* The servers should have a good amount of storage, memory and be able to process data at a quick pace. They should also be able to run at all times with minimal downtime for maintenance.
* Reliable network equipment such as routers, modems, etc. Also, should be able to run with any type of device such as desktops, phones and tablets.

**Software:**

* The servers should be able to run on Linux, which is what we have chosen to proceed with.
* A solid data management system that store data inputted from either the customer, driver, administration or owner.
* As Linux, uses C it would be best to use either VIM or Virtual Studio.

**Tools:**

* As mentioned above since we are using Linux which uses C to develop code, the IDE tools we will be using is either VIM or Virtual Studio.
* A good tool that we can use for performance testing is either Sysbench or Geekbench.

**Infrastructure:**

* As we mentioned, we will be using a web-based cloud service that will provide the infrastructure for DriverPass.