# 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 picture containing text, black, surface

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### UML Activity Diagrams

1. **Student Login Use Case**

**Diagram

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1. **Purchase Package Use Case**

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### UML Sequence Diagram

Graphical user interface

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### UML Class Diagram

**Timeline

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## Technical Requirements

The DriverPass system is dependent on the internet connection and modern browser-supporting devices. We are using a cloud service to host the application. So, we do not need a lot of physical hardware but we still need a machine to monitor and deploy the application. We can divide hardware requirements into two categories: Server, and Client. For the server, we need an internet provider, electricity, and a computer with an internet connection. For the client side, they need to have the device with an internet connection and a modern web browser. Currently, we support any chromium-based browsers, safari, and firefox. The client devices need to have a power supply or battery.

For server hosting, we need autoscaling and automated backup capabilities. We need to use continuous integration and delivery with blue-green deployment support. Furthermore, we need to use container service to host our application and reverse proxy and firewall to prevent unnecessary threats including DDoS attacks. The database needs to be in private VPN and encryption enabled.