# 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

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### UML Activity DiagramsA diagram of a computer flowchart AI-generated content may be incorrect.A diagram of a computer AI-generated content may be incorrect.

### UML Sequence Diagram

A screenshot of a computer screen

AI-generated content may be incorrect.

### UML Class Diagram

A diagram of a computer flowchart

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## Technical Requirements

*The DriverPass system is going to need a good amount of technical infrastructure that is going to be required to support the online training and reservation platform. The technical requirements are detailed below:*

*Hardware Requirements:*

*- Scalable processing power together with memory on a cloud-based server to facilitate the handling of multiple users concurrently.*

*- A big storage capacity for the reservation records, user data, test results, and system logs.*

*- SQL servers for the relational database with a high availability configuration.*

*- Client devices (computers, tablets, smartphones) that are web-enabled as the end users.*

*Software Requirements:*

*- Web server software (Apache, Nginx, or IIS) that will host the application.*

*- Database management system for relational databases (MySQL, PostgreSQL, or SQL Server).*

*- Modern web browsers (Chrome, Firefox, Safari, Edge) that will be for client access.*

*- Server operating system (Linux or Windows Server).*

*- Programming framework (such as .NET, Java Spring, or Python Django) that will handle the business logic.*

*Tools and Security Requirements:*

*- Data encryption with HTTPS/TLS for every data transmission.*

*- Different user types with Role-based access control system.*

*- Secure authentication protocols and password hashing.*

*- Automated backup and recovery tools for disaster recovery.*

*- Monitoring and logging tools for system administration.*

*Infrastructure Requirements:*

*- Cloud-hosting platform (AWS, Azure, or Google Cloud) as per client's request.*

*- Traffic spikes management through load balancing capabilities.*

*- Firewalls as part of the secure network infrastructure.*

*- Regular security updates and patches.*

*- Business continuity and disaster recovery planning.*