# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

A diagram of a diagram

AI-generated content may be incorrect.

### UML Activity Diagrams

*A diagram of a driver pass

AI-generated content may be incorrect.*

*A diagram of a lesson activity diagram

AI-generated content may be incorrect.*

### UML Sequence Diagram

*A diagram of a diagram

AI-generated content may be incorrect.*

### UML Class Diagram

*A diagram of a computer program

AI-generated content may be incorrect.*

## Technical Requirements

*The DriverPass system will be a web-based application with the ability to run on various platforms and operating systems, including browsers and mobile devices. It will be optimized for various screen sizes, ensuring smooth performance on desktops, tablets, and smartphones. The system will be supported on Windows, Mac, Linux, iOS, and Android, among others, to cover users on various devices. To ensure scalability and reliability, the app will be deployed on a cloud hosting platform like AWS or Azure. The backend would be MySQL or MongoDB for secure storage of data with provision for student records, lesson timetables, and payment support. Security features would involve HTTPS encryption, multi-factor authentication (MFA), and role-based access control (RBAC) to manage permission and protect sensitive information. The system will be integrated with third-party services for safe payment and DMV notifications, while load balancing and caching functionality will optimize the performance. Stable operation and defense against threats will be guaranteed through routine data backups, security scanning, and auto-update functionality. Furthermore, the platform will conform to WCAG guidelines for accessibility, making the platform safe, scalable, and user-friendly for students and staff.*