# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

*A diagram of a driver pass

Description automatically generated*

### UML Activity Diagrams

A diagram of a process flow

Description automatically generatedA diagram of a card payment

Description automatically generated

### UML Sequence Diagram

A diagram of a user flow

Description automatically generated

### UML Class Diagram

*A diagram of a driver pass

Description automatically generated*

## Technical Requirements

Hardware

* System shall have a server that delivers high performance
* System shall be compatible with all web browsers and operating systems
* System shall have secure network to prevent unauthorized users from accessing users’ data

Software

* System shall run on a cloud-based operating system
* System shall have a database management system to store and manage all customer data
* System will be created with Java or Python programming language on the backend and HTML/JavaScript on the frontend

Tools

* Proper integrated development environment’s (IDE’s) to support and compile programming languages
* Monitoring tools such as security information and event management tools (SIEM) to track data and detect suspicious activity

Infrastructure

* System shall have a cloud infrastructure such as AWS
* System shall have best security practices such as web application firewalls (WAF), multi-factor authentication (MFA), and secure socket layer (SSL) certificates
* System shall have regularly scheduled backups to restore and recover data