# CS 255 System Design Document Template

## UML Diagrams

### UML Use Case Diagram

*A diagram of a software system

Description automatically generated*

### UML Activity Diagrams

A diagram of a computer program

Description automatically generated

### A diagram of a credit card Description automatically generated

### UML Sequence Diagram

A diagram of a package

Description automatically generated

### UML Class Diagram

A diagram of a server

Description automatically generated

## Technical Requirements

The technical requirement would be to include a cloud-based server to handle all of the data for the instructors, staff, students, lessons, and packages. MYSQL is my recommendation for managing the complex relationship between the entities. The application front end will be built using JavaScript and the backend can use either Java or Python, which personally I would prefer. I would use Visual Studio code and GIT for version control. The system being cloud-based will help the infrastructure to be scalable with its storage. The application will need to be regularly updated and backed up to ensure it is up-to-date, secure, and available.