# 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 diagram of a software

Description automatically generated

### UML Activity Diagrams

A diagram of a computer

Description automatically generated

### UML Sequence Diagram

*A screen shot of a computer

Description automatically generated*

### UML Class Diagram

A screenshot of a computer

Description automatically generated

## Technical Requirements

*Hardware Requirements*

*Cloud, server for web application and database. ​*

*Reliable internet access at all client locations (students, staff, admin).*

***Software Requirements***

*Browser support: Web application Proxy supports all the major browsers (chrome, Firefox). ​*

*A relational database ( example MySQL or PostgreSQL) to keep track of accounts, lesson schedules, and progress. ​*

*Robust API integration to DMV (update data and payment processing). ​*

*Auto backups and data recovery. ​*

*Tools Required*

*Lucidchart to build and manage UML diagrams. ​*

*PowerPoint or equivalent for client meetings. ​*

*Intranet company pages and IT admin database and server management interfaces. ​*

*State-of-the art web browser for all users (student, staff, admin). ​*

***Infrastructure Requirements***

*Secure browser connections over HTTPS for secure data transmission. ​*

*User authentication, authorization, password recovery and account tracking (for audit/logging). ​*

*A scalable architecture for concurrent, online scheduling and testing. ​*

*Dependable integration with DMV & other external APIs for precise information and steady business. ​*