# 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 diagram

Description automatically generated*

### UML Activity Diagrams

A diagram of a user flow

Description automatically generated

A diagram of a payment process

Description automatically generated

### UML Sequence Diagram

A diagram of a customer

Description automatically generated

### UML Class Diagram

A diagram of a software company

Description automatically generated with medium confidence

## Technical Requirements

Hardware and infrastructure requirements:

* Users need a computer or mobile phone in order to access the site.
* Users need an internet connection whether that is a wired connection or wireless, they will need to be using some sort of networking hardware.
* The website will need to be hosted on servers.
* The database needs to be hosted on a server as well.

Software and tools requirements:

* The software can be built on a Linux operating system.
* The database can be a MySQL database.
* Web server can be built off a tool like Apache.
* Web front-end software can be built using React or similar framework with services like Square integrated into the software.
* Node.js, rails, or any other back-end framework could be used to create a back-end that will be hosted on the web server.