# 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 process

Description automatically generated*

### UML Activity Diagrams

A diagram of a flowchart

Description automatically generated

### A diagram of a check calendar Description automatically generated

### UML Sequence Diagram

### A diagram of a process Description automatically generated

### UML Class Diagram

## A diagram of a computer program Description automatically generatedTechnical Requirements

Based on the diagrams and the business requirements document, the technical requirements for the system to function ideally need to include:

* Hardware:
  + Server with a redundant server
  + Client
    - Desktop/ Laptop/ Tablet/ Phone with internet connection
* Software:
  + Server Operating System
    - Linux for security and stability, unless the organization’s preference is Windows
  + Web Server:
    - HTTP server for handling web requests
  + Database:
    - SQL based
* Infrastructure:
  + Cloud service (AWS, GCP, Azure, etc.)
* Network:
  + High-speed internet connection
  + VPN (for remote access to the system)
* Security:
  + Authentication and authorization
* Data Encryption:
  + SSL/ TLS
* Backup and Recovery:
  + Automated backups of database and application data
* Firewall:
  + To restrict access from unauthorized users or locations