# 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 flowchart

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### UML Activity Diagrams

Login/Register Activity

A diagram of a diagram

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Learning Package Payment  
  
A diagram of a process

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### UML Sequence Diagram

A diagram of a payment process

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### UML Class Diagram

*A diagram of a company

AI-generated content may be incorrect.*

## Technical Requirements

**Hardware Requirements**

* Dedicated Servers that host and stores user data, package data, and transaction data
* Sufficient storage capacity for all data types
* High-bandwidth Internet connection
* Desktop and mobile device access for users
* Firewall to safeguard website ports
* Relation database such as MySQL
* Java application built with a webserver using Javascript for front end and Python or Java for back end.

**Software Requirements**

* Utilizing Windows Server for stability
* Mobile responsive design components
* Security software to prevent malware threats
* Backup software for website and database
* Payment gateway
* Email service for confirmation emails

**Tools & Infrastructure**

* Framework testing tools
* Version control tools such as Visual studio code and Git
* Cloud Infrastructure hosting platforms such as Windows Azure
* Security Infrastructure that prevents intrusions
* Encrypted data with regular backup procedures
* Database must have High availability