# 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

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### UML Activity Diagrams

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### UML Sequence Diagram

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### UML Class Diagram

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## Technical Requirements

#### Performance Requirements

* Environment should be web-based
* They system should update any time a User makes a change to any data
* The system should run fairly quickly to allow for ease of access and user friendliness

#### Platform Constraints

* Client wants the system to be able to be used on all platforms
* Will need a de-centralized cloud-based database platform to support client needs (does not want to worry about database management or security)

#### Accuracy and Precision

* Users will be distinguished by their role and ability to alter system data
* Type of input should not matter to the individual user. We can have the backend change the case of the input based on “method” requirements.
* The Tech admin should be informed of an any issue with the system. Besides that the system should be mostly self-correcting (IE change casing of user input, etc.)

#### Adaptability

* System should be very adaptable to change
* Users should be able to change all personal and business data based on role
* It admin needs to have access to all backend data to be able to maintain and modify system

#### Security

* User login should be (username: email password: security code)
* Using a third party decentralized cloud-based server will allow for secure data exchange through API’s between the client and server
* Dynamic password requirements should protect against brute force hacking (8 characters, one uppercase, 1 lowercase, 1 special character, 1 number minimum). If brute force hacking is attempted the IT admin should be notified of any multi login attempt failed consecutively in a short time