# CS 255 System Design Document Template

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## UML Diagrams

### UML Use Case Diagram

A diagram of a diagram

Description automatically generated

### UML Activity Diagrams

A diagram of a user account

Description automatically generated

A diagram of a software process

Description automatically generated with medium confidence

### UML Sequence Diagram

A diagram of a login sequence diagram

Description automatically generated

### UML Class Diagram

A screenshot of a computer screen

Description automatically generated

## Technical Requirements

Based on the business requirements, a Linux system will be the operating system used to host the web server. Since this is a web application, JavaScript will be the programming language used for development, including both the front and back-end. Additionally, the Eclipse IDE will be used for development with JavaScript. For the initial launch, a 16 RAM GB desktop will be used to host the server (with the ability to scale if the customer base grows). Additionally, one performance requirement is that the load time for any pane on the home page is no more than 5 seconds. Additionally, the website must be accessible by a user on any operating platform and any web browser. To ensure a more secure application, the system must lock a user’s account if they put in an incorrect password more than three times.

Reference

(2023, Sept. 9). *How To Pick the Right Dedicated Server Specs [Ultimate Guide]*. RedSwitches,

<https://www.redswitches.com/blog/dedicated-server-specs/#:~:text=Any%20CPU%20with%208%2B%20cores,for%20hosting%20most%20web%20services.&text=The%20simple%20truth%20in%20server,faster%20your%20server%20will%20perform>.