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Design Document
Software Capstone
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GUI - web based
- HTML, JavaScript, CSS
- Bootstrap - Library to aid with visual design
- Vue.js - Framework to assist with JavaScript code and provide common servant-side functions

Concerning the front-end design of the software, HTML will be used for laying out the text and images of the different pages of the website. CSS will be used for formatting and design, while JavaScript will be utilized for incorporating the functionality aspect of the software. As the major functions for the front-end web page will be written in JavaScript, to ease with the development of the design and to increase the level of efficiency when coding the program, we will be using the Vue framework in order to utilize servant-side functionality on the front end. Additionally, Bootstrap's library will be utilized in order to provide neat web design characteristics (such as button and table designs) for the web page.

Server
- Linux - Debian (preferably Ubuntu)

The server doesn't particularly matter since Node runs on all major operating systems. But we are most familiar with Debian.

Server Languages
- Node with Express.js
- mysqljs

Node will contain all of the business logic for the application as well as be used to serve the HTML/JSON, and whatever else needs to be sent to the user. Express will be used to maintain routes and possibly to control views of users. We will also use mysqljs (https://github.com/mysqljs/mysql) as the driver to connect node with mysql.

Database
- MySQL

We will use MySQL to store all of the data for this system. We felt that due to the relational nature of the rooms/roommates/submissions/applications/terms it would make most sense to use an actual database. It will also be good practice using an actual database.