

Problem

Every semester, a senior project showcase is held for students to present their work to the public. Professors, alumni, and industry professionals are invited to the event in order to judge the student’s semester work. Mobile judge is the software used to automate email invites and judge grading. A problem is with the software is the lack of mobile support for an administrative user.

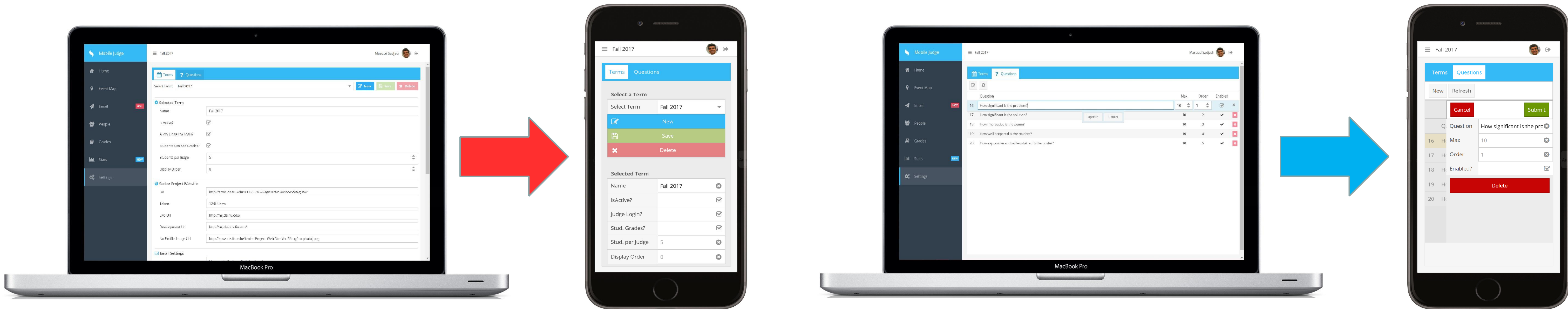
Solution

Implemented a mobile view with the same or very similar functionality to the desktop version of Mobile Judge’s settings view. The mobile view is user friendly and works on the most popular mobile devices using Android or iOS. An administrator can make changes such as editing, deleting, and changing semesters. The same applies to the questions that judges will be asking at the showcase.

Current System

The current system has a robust desktop version which can allow an admin to see stats, assign grades, send mass emails, change website settings, display an event map, and can list all judges and students at a showcase event. Judges can assign grades to students and students can see their grades. The mobile version only has a fraction of these features.

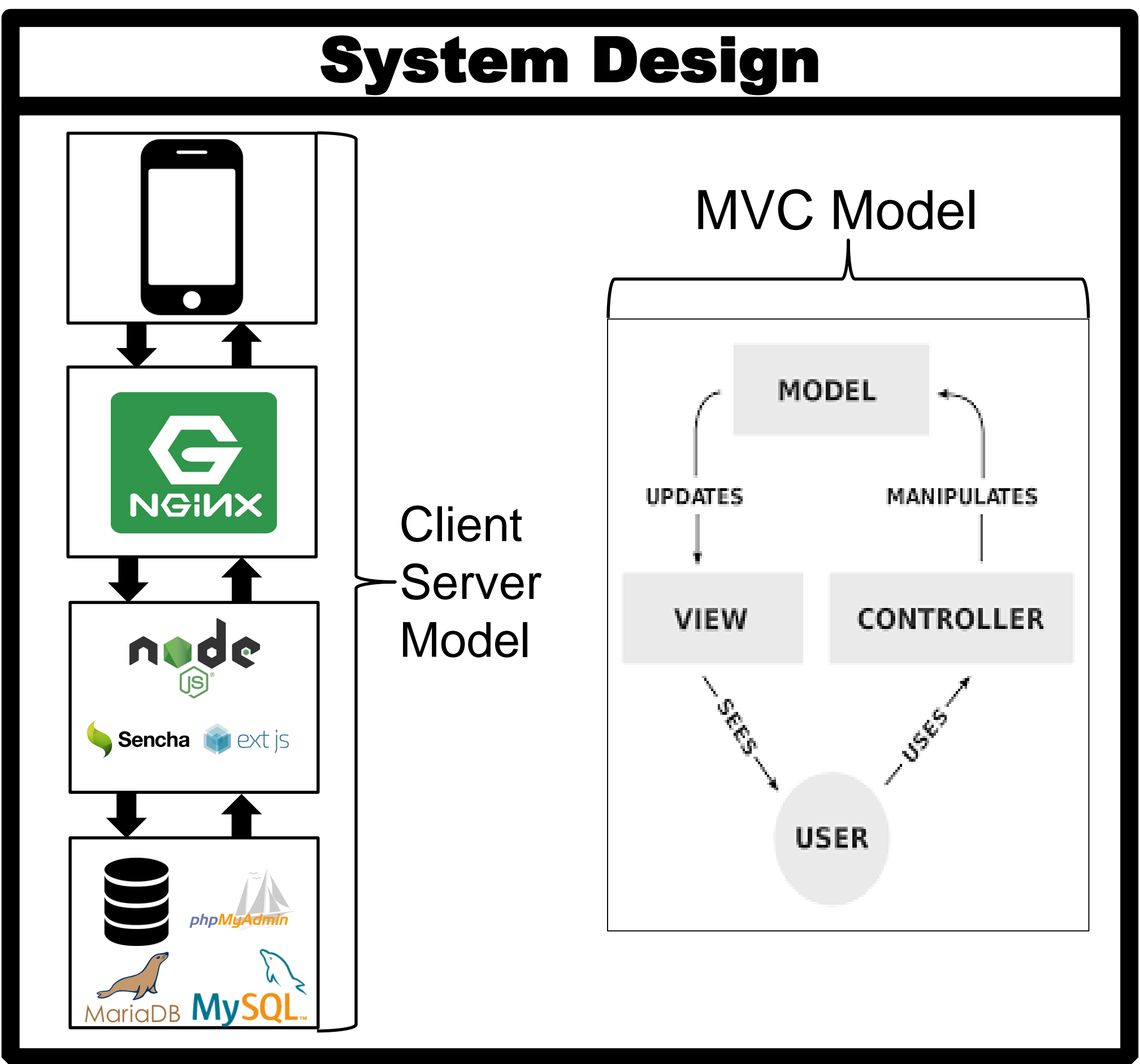
Screenshots



Requirements

- The requirements for my contribution to Mobile Judge’s mobile site:
- The added views must function on iPhone using Safari.
  - The added views must function on Android devices using Chrome.
  - The new views should be as similar as possible to the desktop view
  - Admin can change, create, edit, and delete terms.
  - Admin can create, edit, and delete judge questions.

System Design



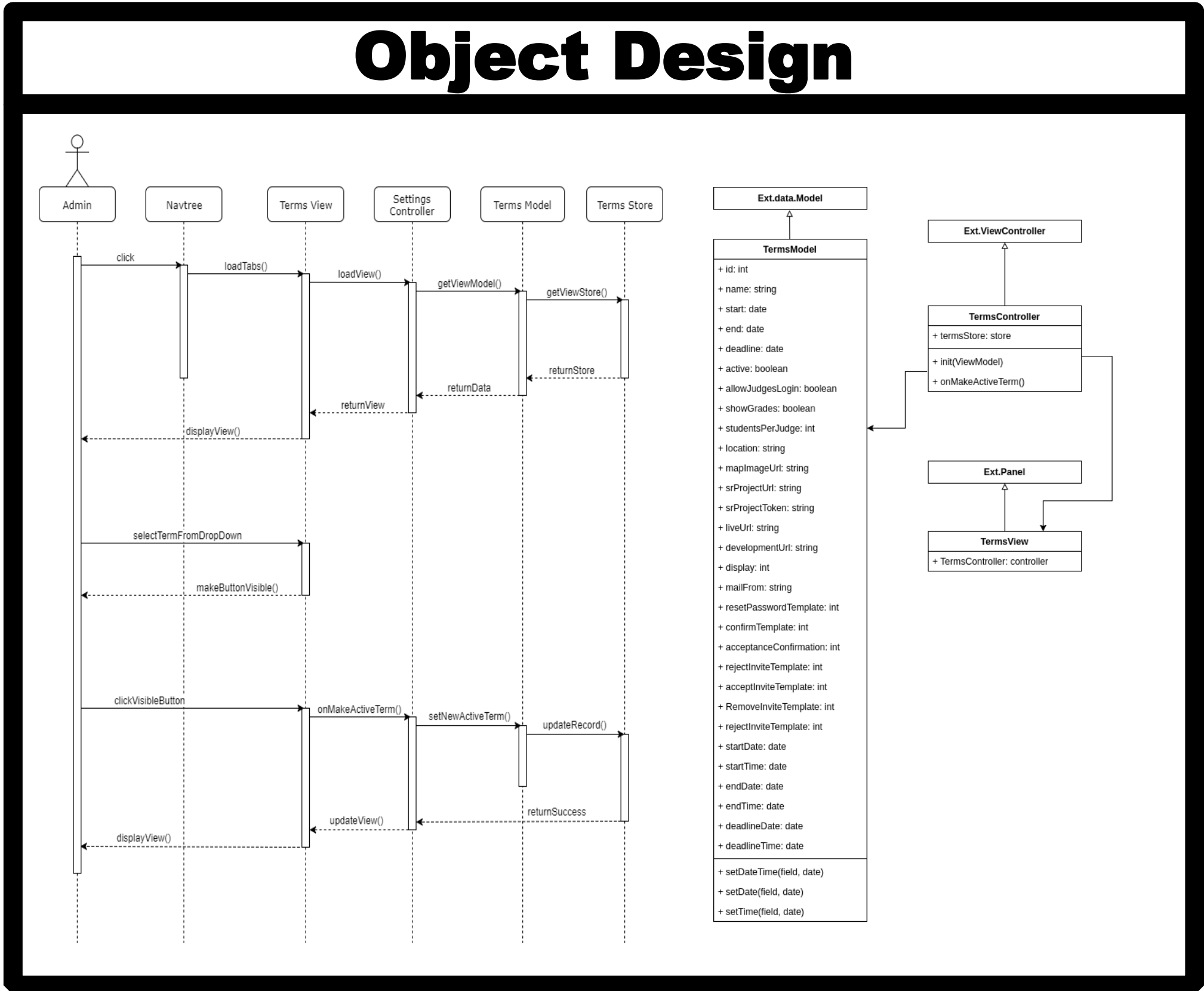
Implementation

- The web application is hosted on the FIU server.
- NGINX utilized as reverse proxy server to run NodeJS and Oauth.
- Sencha framework utilized for mobile support across many devices.
- MySQL and phpMyAdmin utilized for the database.
- WebStorm IDE utilized to develop mobile views.
- Linux virtual machine utilized as the operating system for development.

Verification

- Test case ID: 703-01
- Description/Summary of Test: Change to a different term and that the changes are seen on the site toolbar.
- Pre-condition: Administrator is logged in and on the settings page, terms tab. Another existing semester must be in the database.
- Expected Results: New term can be seen from dropdown menu and selected as well as being seen in the top toolbar.
- Actual Result: New term can be seen from dropdown menu and selected as well as being seen in the top toolbar.
- Status (Fail/Pass): Pass

Object Design



Summary

Mobile Judge has been an excellent tool in helping the management of the senior project showcase since its inception. In version 10.0, there was a focus on improving the administrative user experience on both the desktop and mobile. The software development cycle for Mobile Judge proved to be challenging but very fulfilling. It was a great learning experience and offered a glimpse into working in the industry.

Acknowledgements

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