Vertically Integrated Projects, 2017, Fall
Mobile Judge 10.0

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Problem

At the end of each semester, students enrolled in the VIP and Senior Project course perform a showcase to display the project that they have been working during the semester.

The showcase allows the students to demonstrate the skills that they have learned during their tenure at the University. Members from the industry and academia are invited via email to act as judges. However, a central platform is needed to set up the event, as well as to manage the grading of students and to compile statistic of the showcase.

Solution

Mobile Judge was created as a centralized platform that aims to ease the process of inviting judges from industry and academia to the showcase, as well as to provide a platform were judges can register, grade students, and leave feedback. Students are able to view their grade and feedback. The administrator can invite via email all potential judges, manage the users and grades. In Mobile Judge, statistics of the showcase can be compiled and displayed.

Current System

Admins can:

- Send emails to students/judges.
- Sync students from the Senior Project Website.
- Update the users information from within the system.
- Download report of Judges, Students, and Grades.
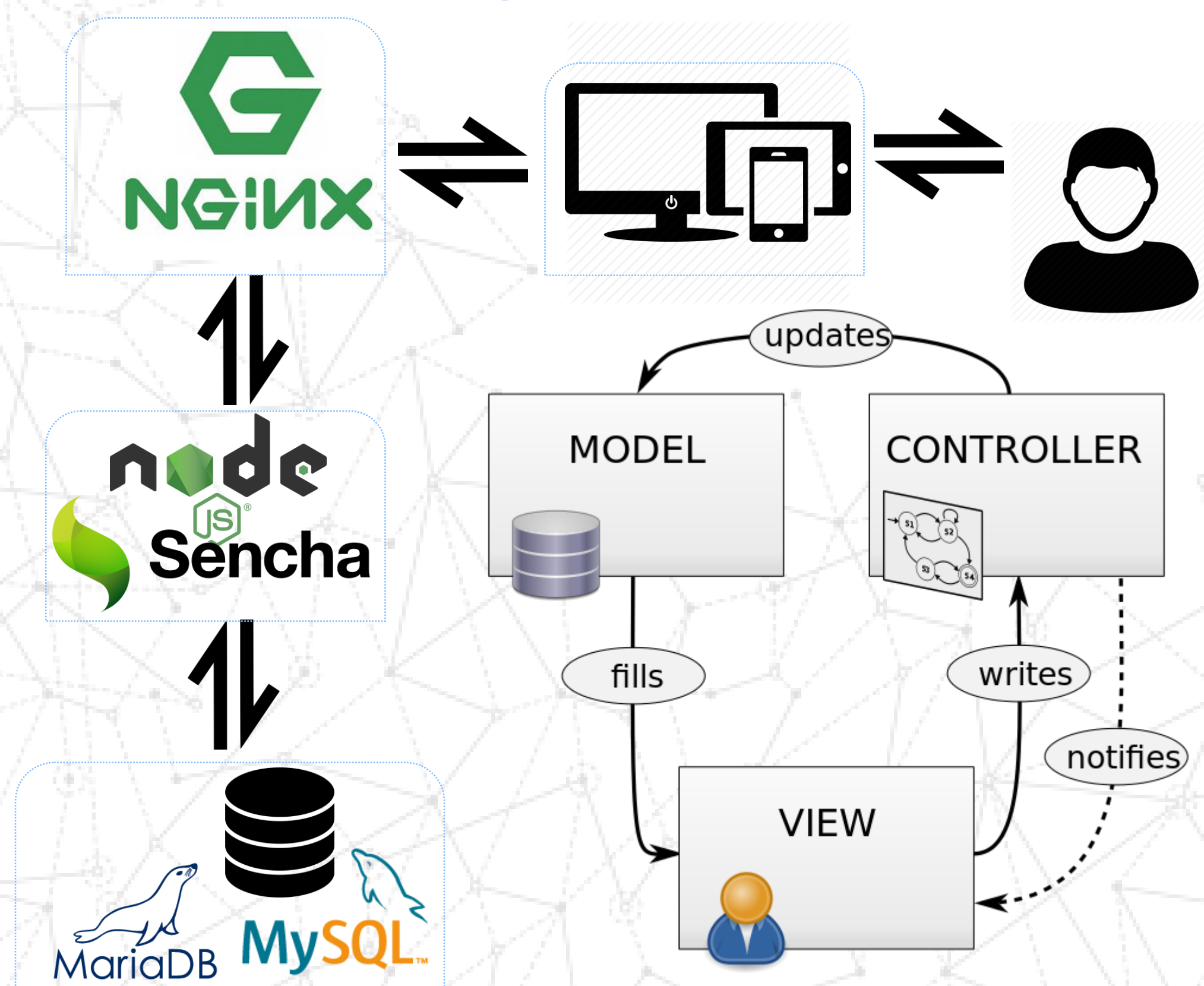- Make pending grades accepted/rejected in real-time.

Judges can:

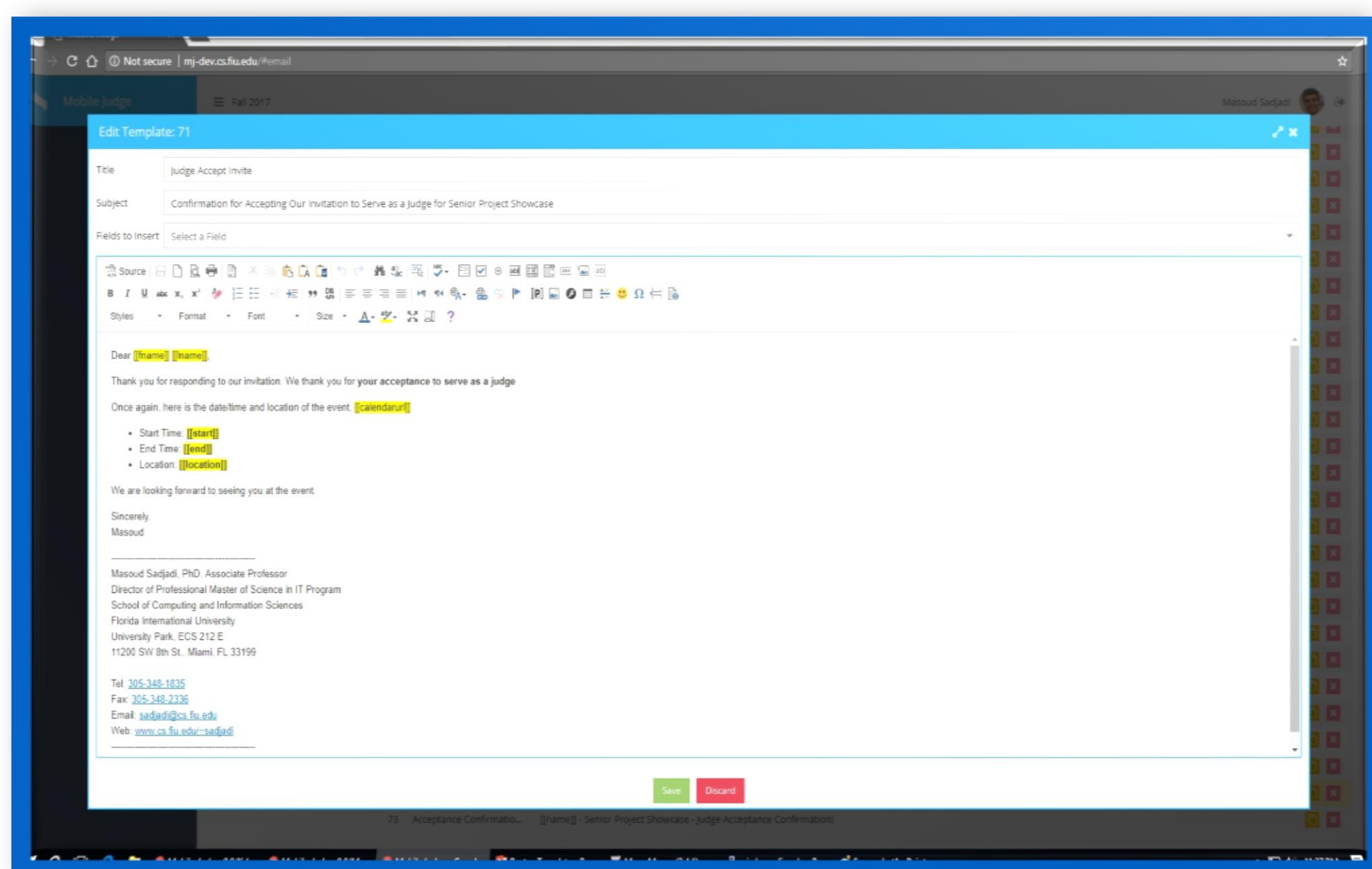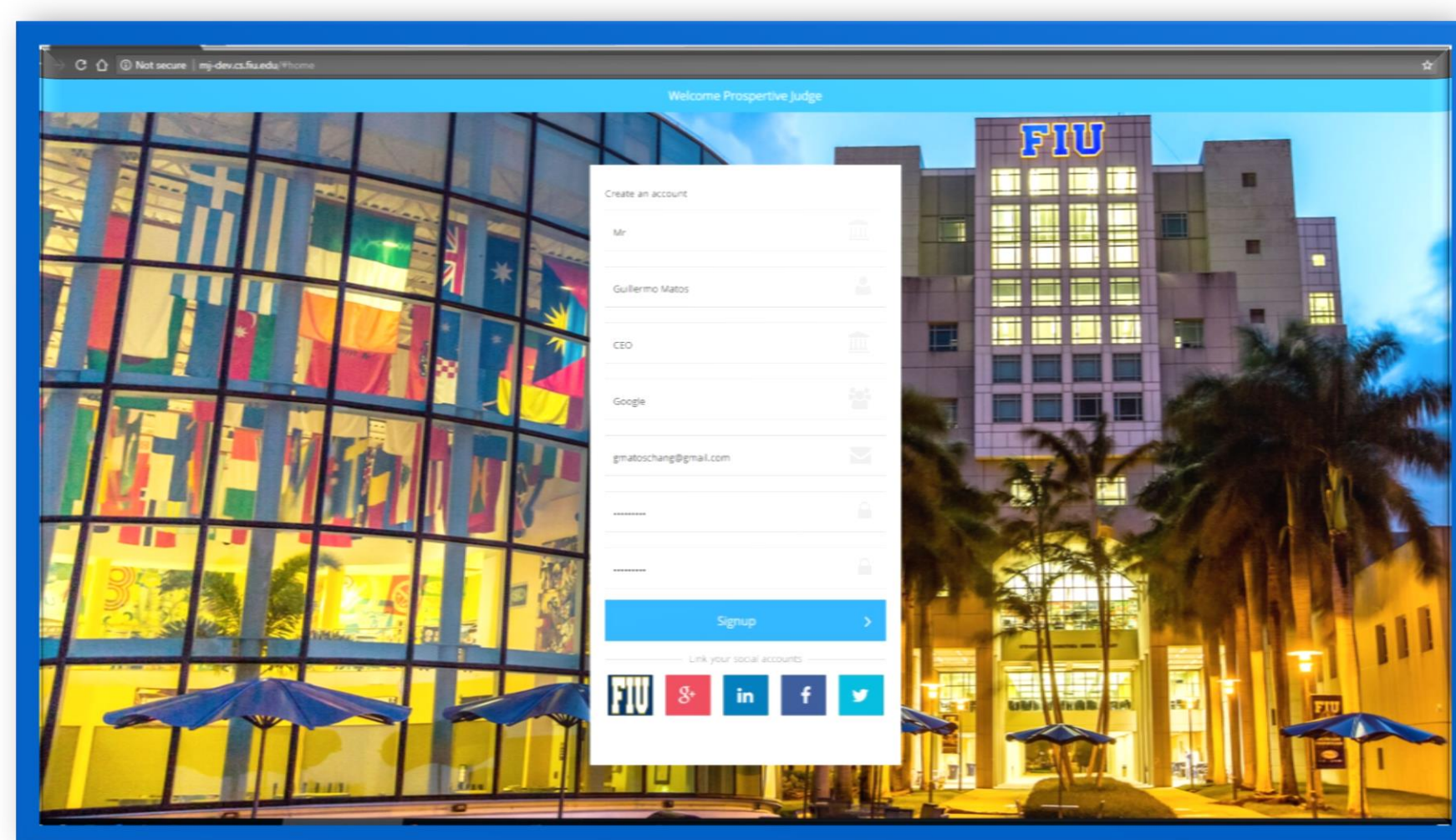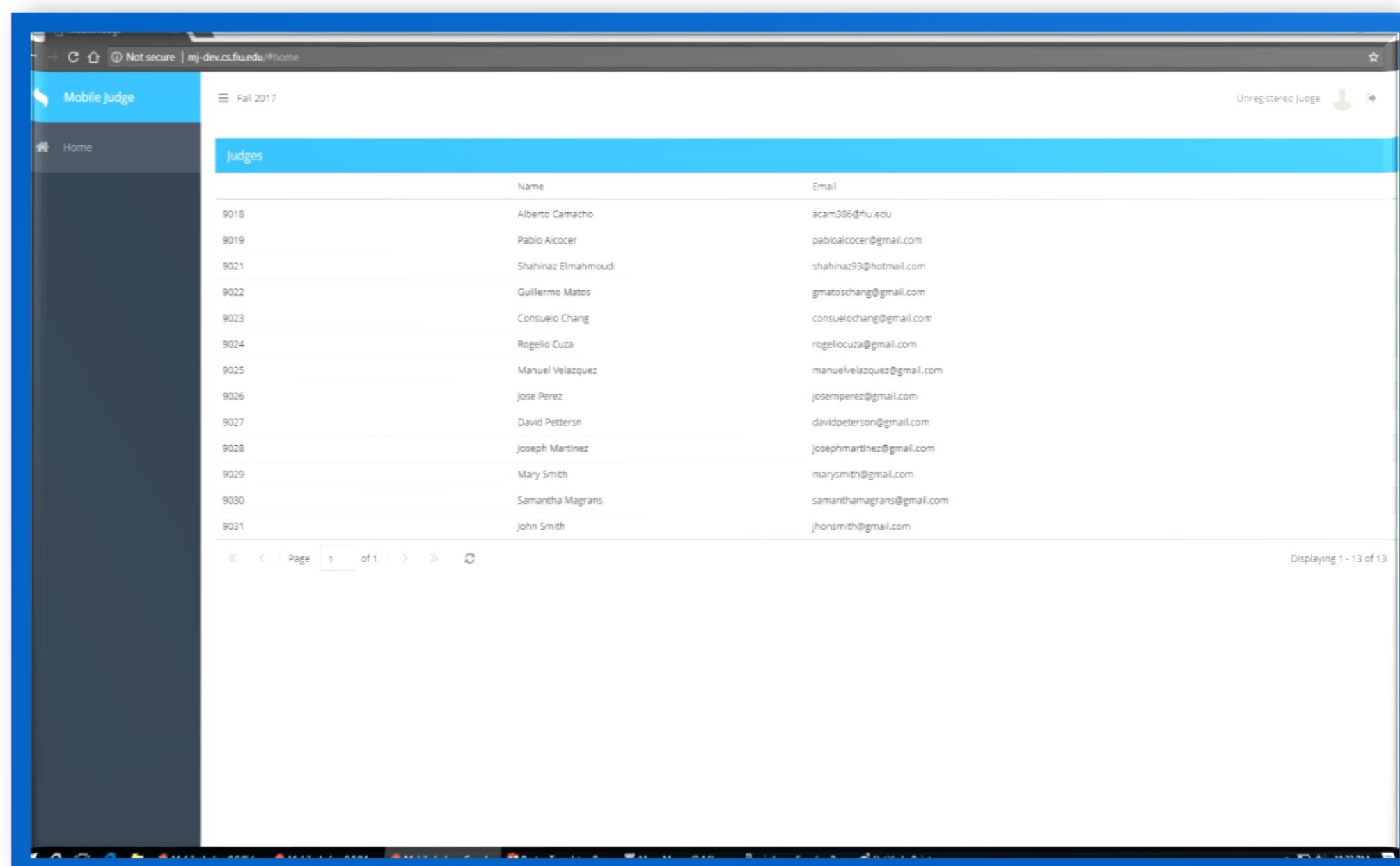- Register, select conflicts, grade, view showcase map, leave comments.

Students can:

- View grades, assigned locations, and map.

System Design

Screenshots

Requirements

Judge Accept Invitation

- Acceptance link redirects to static page
- Students are NOT assigned to judge
- An email confirmation is sent to the judge.

New Unregistered Judge User

- Unregistered Judge user able to login
- Create a Home view for the new user type
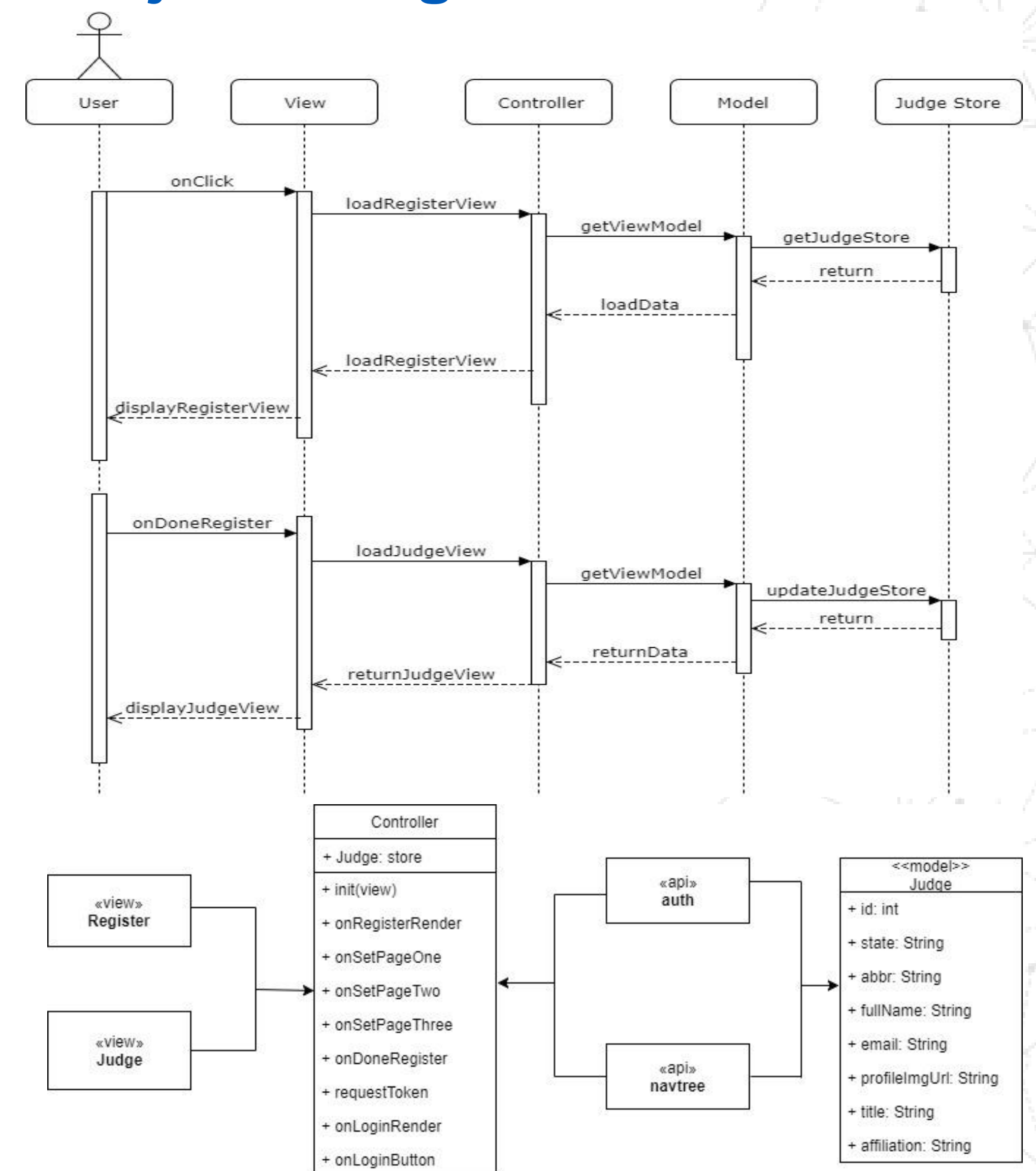
Unregistered Judge Tab View

- Unregistered Judge Tab is created
- User able to see all the pending judges including himself

Link New User to Registration process

- Judge status changes from pending to accepted
- Students are assigned to judge
- Judges able to login
- Judge is removed from the Unregistered Judge Tab View

Object Design

Implementation

- Sencha ExtJs: used for Cross Browser Support, Mobile Support, View Rendering.
- NodeJS: handled Routes and Requests
- Oauth: for Third Party Authorization
- Nginx: was the Server to run NodeJS and OAuth
- Mysql/MariaDB/phpmyadmin: DBMS, used for database, to hold all the information
- PM2: utilized as a production process manager for the Node.js applications
- WebStorm: IDE used to develop code for Mobile Judge

Verification

Test case ID: 696-01
Description/Summary of Test: A potential Judge, clicks on his/her name and is redirected to a registration page. Fill out form, clicks on done. It is redirected to Judge Home view and assigned students to judge.
Pre-condition: Unregistered Judge is logged in and Potential Judge clicks on his/her name
Expected Results: Redirected to Judge Home View and list of Students to grade appears
Actual Result: Redirected to Judge Home View and list of Students to grade appears
Status (Fail/Pass): Pass

Summary

Mobile Judge has been one of the core projects of the showcase since its creation. MJ has the extra responsibility of being the only product used by the participants during the showcase, therefore, providing a agreeable user experience is vital.

In this version 10.0 the focus was on improving the administrative side by giving the administrator a finer control of the diverse features, as well as to modify the registration process to be perform on-site. Mobile Judge provides a glimpse into the software development cycle and professional work experience