Problem

• The Senior Project Showcase is one of the most important events held for soon to be graduating Computer Science students looking to show off their work at the end of the semester. With alumni, professors, and people in the industry all in attendance, some will adjudicate, appraise, and evaluate the showcased work. A coordinating platform is crucial to be able to effectively host such an event.

Solution
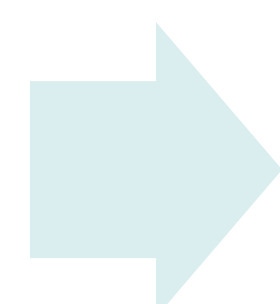
Mobile Judge was created in order to have a centralized web-based application that addresses the needs of the students, judges, and administration simultaneously. The platform allows students to view their grades and any feedback that a judge may have left. It allows judges to be able to know the names and locations of the students that they will be assessing. It also allows them a central location to record their evaluations. Administration can manage emails, users, and grades while concurrently keeping a record of all pertinent information.

Current System

• Allows Judges: to register onsite at the event, to grade students and leave feedback, to view locations
• Allows admins: to see both a student and judge view of the grades tab, to see statistics, to approve/pend/deny grades, to send emails, to change certain settings, and to synchronize new semesters
• Allows students: to view their grades after the event as well as a location map

In a new semester, the grades tab is not populated since grades have yet to be entered
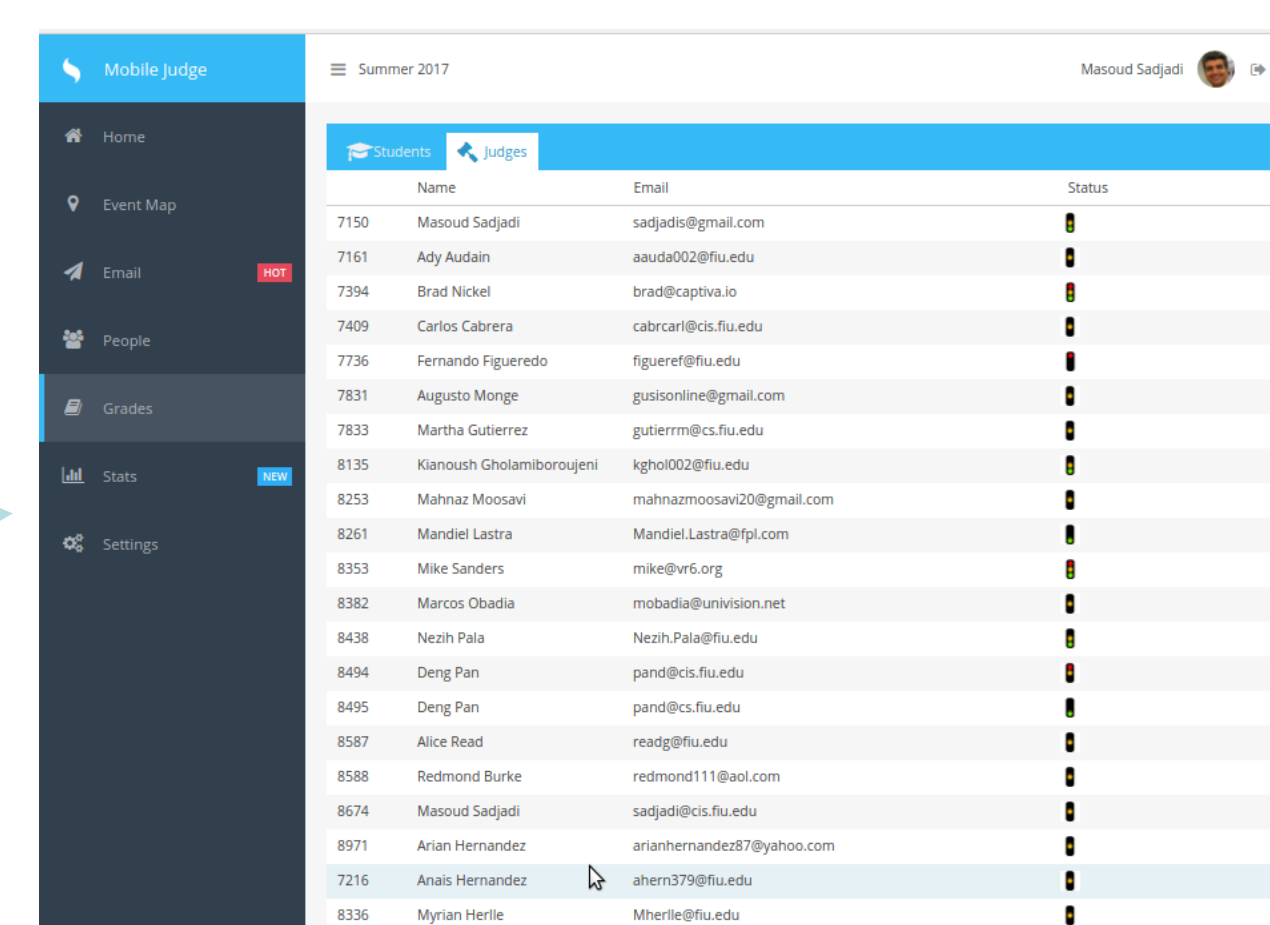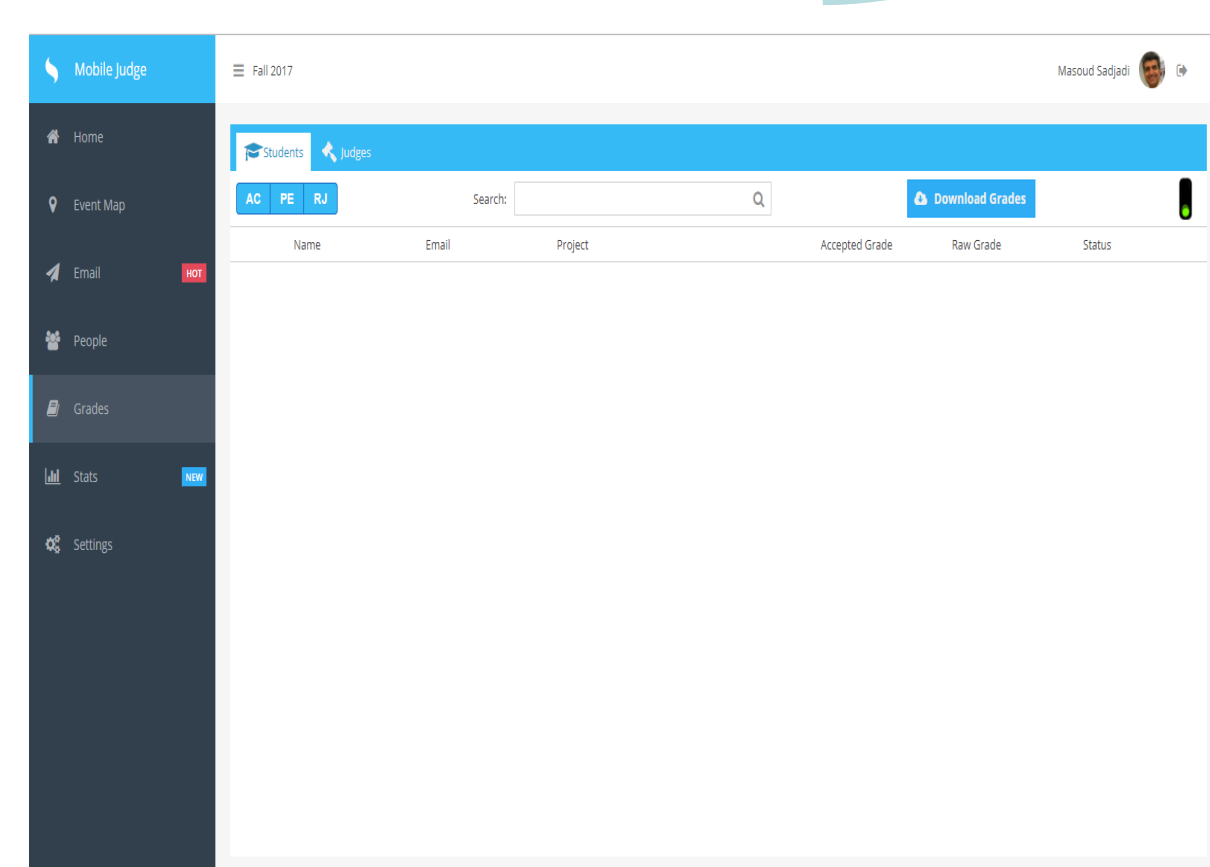
Pictured above: Judge Tab inside the Grades tab with working lights

Clicking on a Judge will open up a window with a populated list of Students that the Judge has been assigned
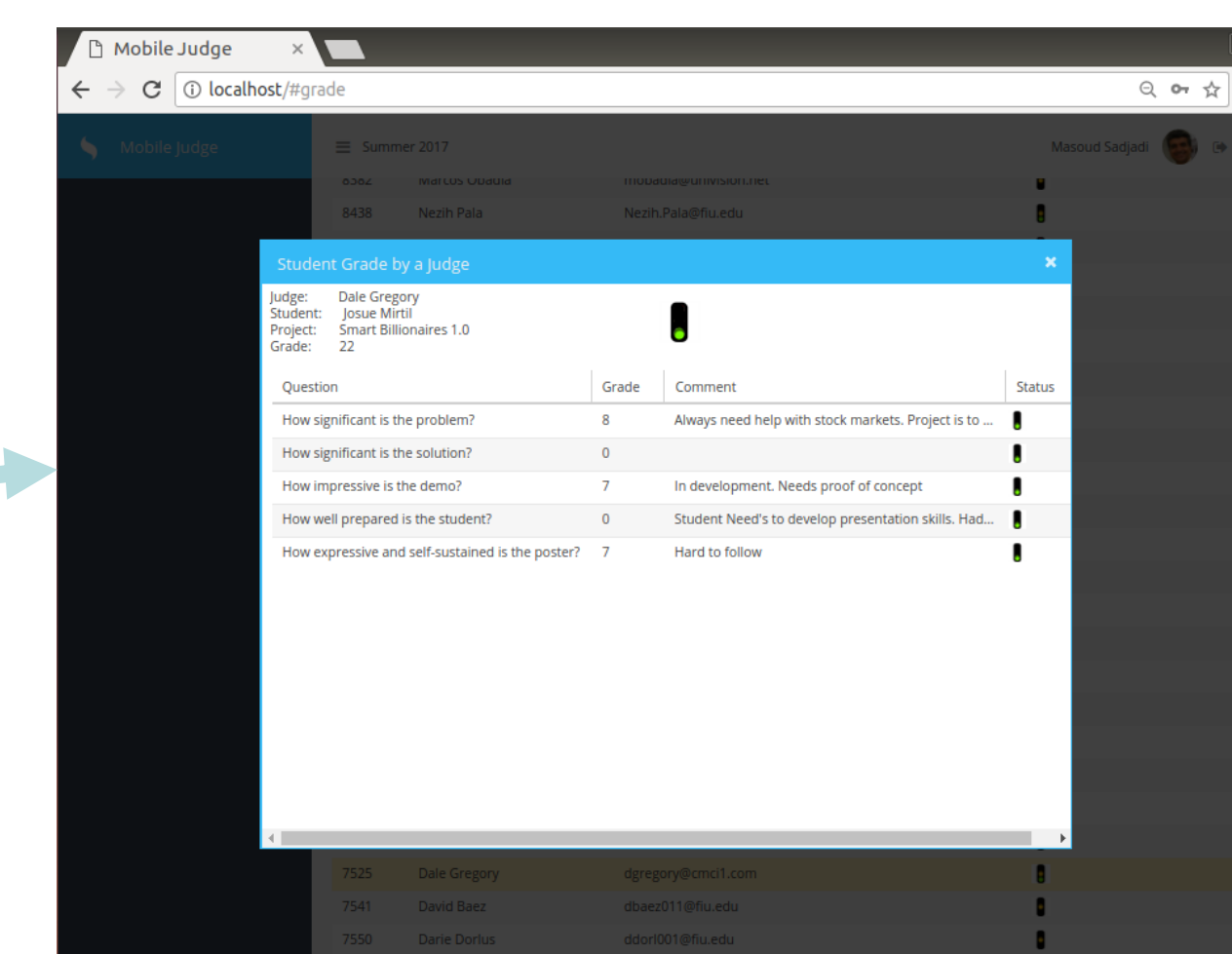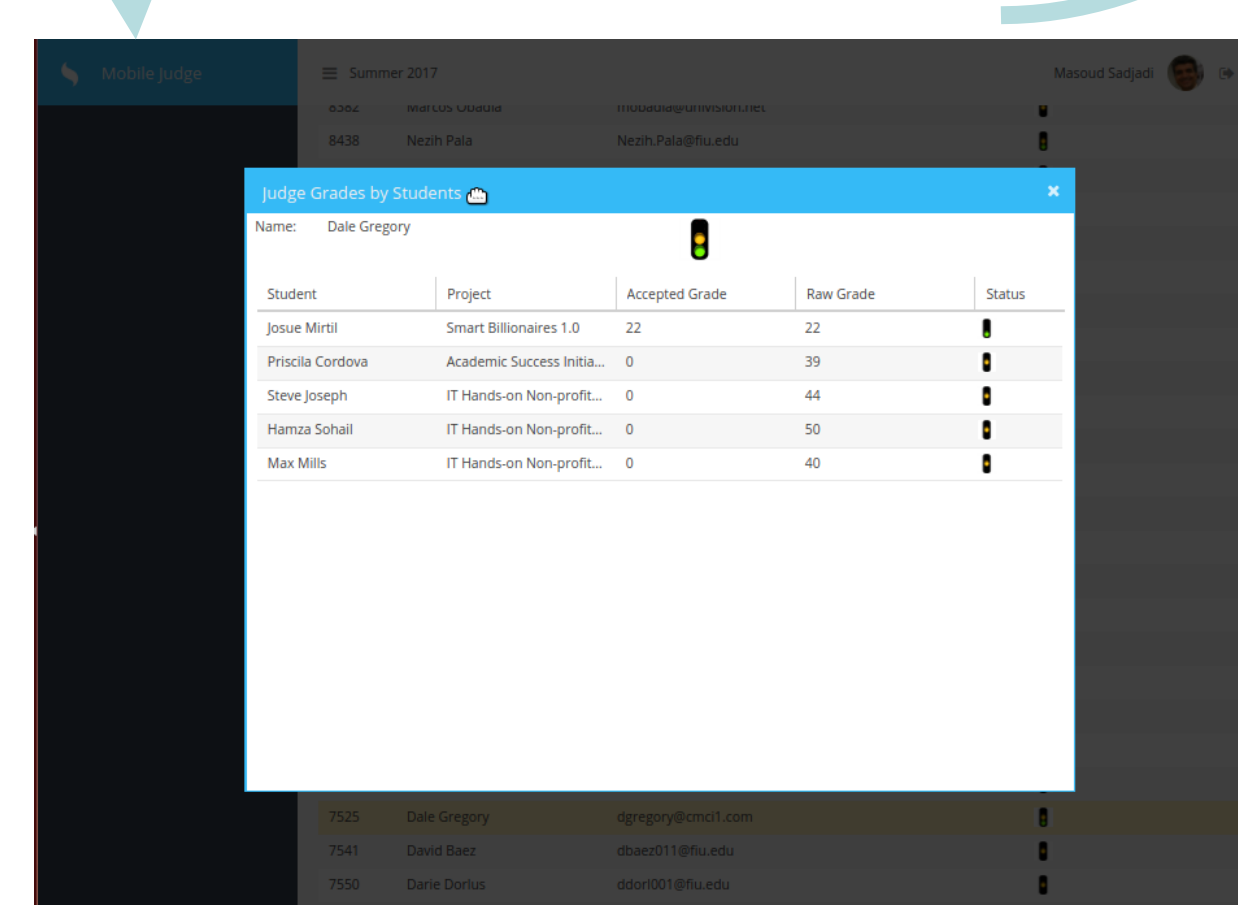
Clicking on an individual student will show the question as well as the feedback given from the judge

System Design
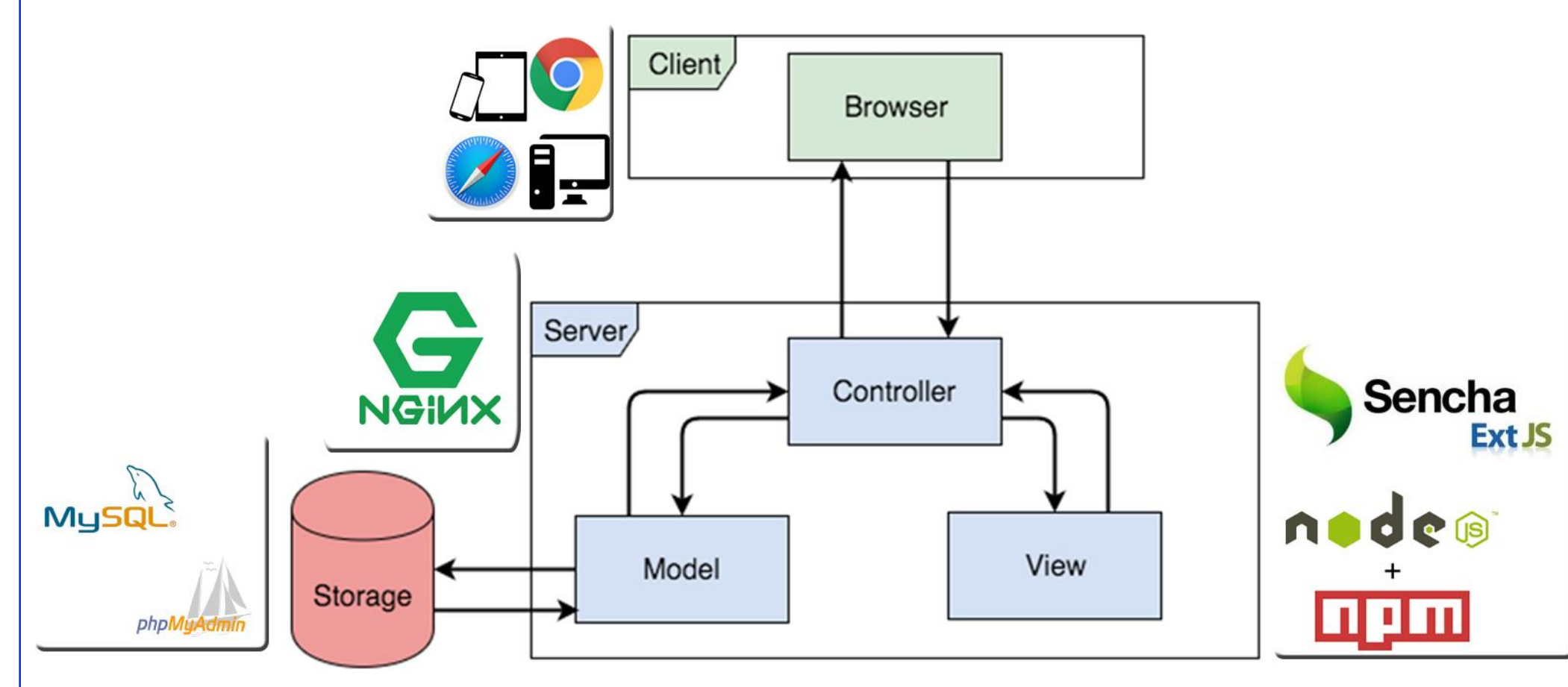
Requirements

• The requirements that were necessary for this version of Mobile Judge offers Admins:
• A web-app that can populate new terms cleanly without old grades appearing from students who were in the class before
• A new way to view individual judges and a list of their students to globally or individually approve, pend, and/or deny a judge's decision
• In that same view, admins can click on an individual student and view the feedback given by the judge

Object Design
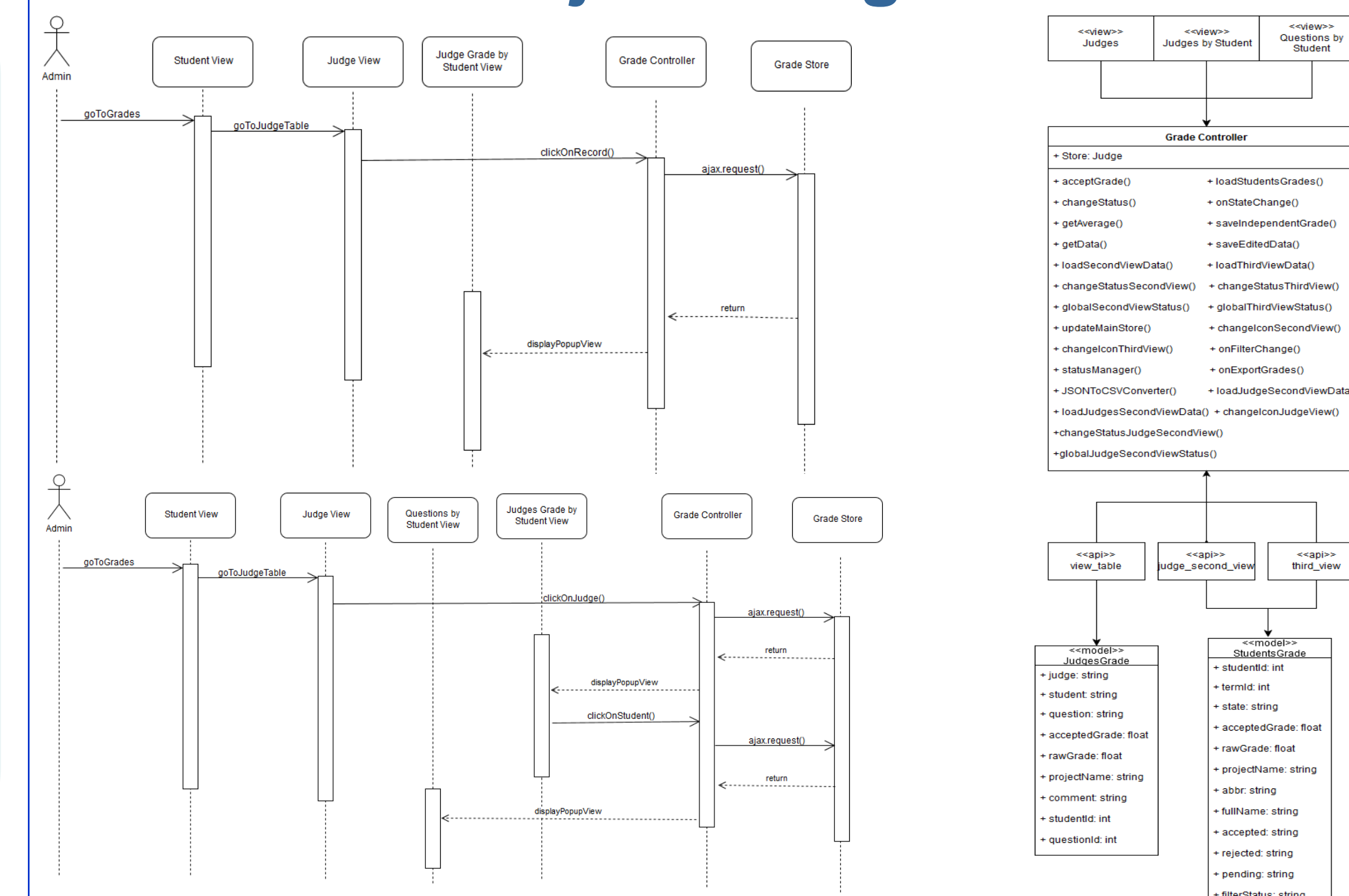
Implementation

• OAuth used for Authorization
• NodeJS as backend
• NGINX is used as the server to run OAuth and NodeJS
• PHPMyAdmin and MySQL used for database
• Web-App is hosted on FIU server
• Ubuntu 14.04 used as virtual machine for development
• Sublime text editor mainly used for programming environment
• Sencha ExtJS – used for cross browser support

Verification

Test case ID: 010-01
Description/Summary of Test: Log in as an Admin click on the Grades tab, then click on the Judges tab. Click on a Judge and then a Student.
Pre-condition: Must be an admin and must have judges and students already assigned to each other.
Expected Results: When clicking on the judge tab a popup should appear with a populated list of students that the judge was assigned to and when clicking on the student the popup should change to the student's questions and the grades.
Actual Result: Clicking on a judge shows a popup that has a list of students that correctly belong to the judge and clicking on a student in the popup shows a list of the questions that the judge graded.
Status (Fail/Pass): Pass

Test case ID: 020-01
Description/Summary of Test: Log in as an Admin and view the Grades Tab.
Pre-condition: Students that have already taken VIP classes are present in the Database and are currently enrolled this semester.
Expected Results: When checking the previous semester the Grades for those students are properly available and then when checking the current semester everything is blank.
Actual Result: Everything is blank in the current semester and the previous semester had everything recorded properly
Status (Fail/Pass): Pass

Summary

• Mobile Judge is an ongoing project aimed at providing a better user experience before, during, and after the showcase for students, judges, and its administrators. In version 10.0 focus was placed on adding more usability for the admin, allowing them to use the new views to make decisions quicker and more effectively.