Nowadays students who are seeking answers for school-related questions usually use search engines as their main source of information; but in most cases this information is unreliable and incomplete. This project was envisioned to fulfill this need; to allow students to communicate with mentors that are experts in their field. In our mentoring platform students can post a question of any subject and it will be assigned to the most expert entrepreneur to get the most reliable and accurate answer. In senior project class, these platforms could be used for communication within team members and their mentors.

**Current System**

Students use search engines to get answers to their questions or communicate with their professors during office hours or any other way professors establish. These are channels are insufficient for the students and professors, since both usually have very tight schedules, and the www sometimes has information in which they can not rely on.

In the project I’m responsible for providing the users with an Internal Mail Service that will be used for communication within the platform, as well a notification system was developed to alert the users through emails of everything that is going on the platform that may require his/ her consent. Furthermore, I developed tools for the system administrator to manage the User Profiles, Domains, Sub-Domains, the creation of new administrators.

**Propose System**

• Communication & Notification Subsystem
  The communication subsystem is a key subsystem that provides functionality derived from the mentoring module. This communication will be vital to the ticket system as users may frequently send time-sensitive information regarding projects or questions made by mentees.
  - Allow users to send a message to another user.
  - Allow users to read a message.
  - Allow users to delete a message.
  - Send ticket due email notification.
  - Send new message email notification.
  - Send password change email notification.
  - Send profile change email notification.
  - Send ticket assigned email notification.
  - Send comment added to a ticket email notification.

• Mentoring Subsystem Administration
  - Allow System Administrators (SA) to create new administrators.
  - Allow SA to change user profile information and scope.
  - Allow SA to manage Domains and Sub-Domains.
  - Allow SA to disable and enable users.

**Requirements**

The Model-View-Controller (MVC) architectural pattern was maintain for future integration of the Virtual Job Fair platform.
- Yii framework: used to create MVC applications with PHP
- PHP: object-oriented programming language used for models, views and controllers
- HTML, CSS, JavaScript & AJAX: standard web languages and technologies used for structural, presentational and behavioral aspects of the website.
- SQL & phpMyAdmin: query language and DBMS used to view and manipulate database

**System Design**

The PHPunit software testing framework was used to verify that all subsystem followed specification and performed as planned.

<table>
<thead>
<tr>
<th>Test Case ID</th>
<th>Purpose</th>
<th>Test Setup</th>
<th>Input</th>
<th>Expected Output</th>
<th>Actual Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-TC26 (Rainy Day)</td>
<td>Test email validation in the when sending a new message.</td>
<td>User is in the send message page (send.php) and already specified the email Subject, and Message.</td>
<td>User click Send button</td>
<td>Error message in the top of the page.</td>
<td>Same as expected the user got a JavaScript error message.</td>
</tr>
</tbody>
</table>

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