CSC309 Fall 2016

Project Proposal

MentorRock: a chat-based online mentorship webapp

1. Introduction

Currently there are many online workshops for specific topics or fields, but all of them are just one session for one course, and instructors have few interactions with students when the course is over. (Suppose that Piazza is a prime example of this) However, it is commonly the case that students have confusions and questions which they could seek advice from mentors, such as choosing a major or doing job searches. We believe such issue could be better addressed by building up long-term mentorship relations between people based on either a certain academic field or extracurricular interests. Therefore, we create this web app to achieve such goal.

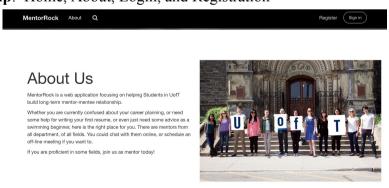
The main purpose of our web application is building long-term mentorship, focusing mainly on mentor and mentee interactions. Mentors will accept up to a limited number of mentees, create one-to-one chat sessions with each of them based on a certain course or a common point of interest. Mentees will establish a connection with a mentor by sending the mentor a request, once accepted, a connection is set up, and a unique one-to-one chat session with the mentor will be set up. User can search for mentors they are interested in by topic of interests. This application is primarily targeting university students pursuing undergraduate degree and above, as well as teachers. The users are able to view their own and other users' profiles; and are able to see the list of connections they have.

2. User interaction description and UI design

I: User Interface Design

For our project, our user interface will be divided into 2 main groups and organized as follows:

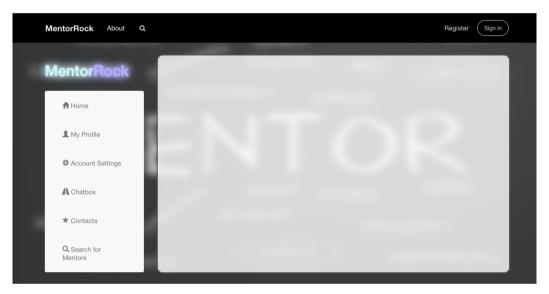
1) Access group: Home, About, Login, and Registration



Get Conneted To

(Group 1 UI Sample: Size of html entities and CSS subject to change)

- The home page is the first access point of our web app, displaying to anyone browsing our site, first-time users will also access our site from this page. Once the user logged out, this page will also be shown. The home page shows the title of our app at the top and a list of mentors with their avatar icon and names on the bottom.
- The "Login" or "Register" tabs could be found at the main navigation at the top. When users clicks "Login", they will be redirected to login with their username and password, or login using either Facebook or Google account. If the users do not have an account, they could click on "Register" to create an account by provide standard information (username, password, email, birthday, interest tags, etc) for registration. After the users logins or registers they are then redirected to the user main page.
- 2) Functional group: User and Admin Management Interface



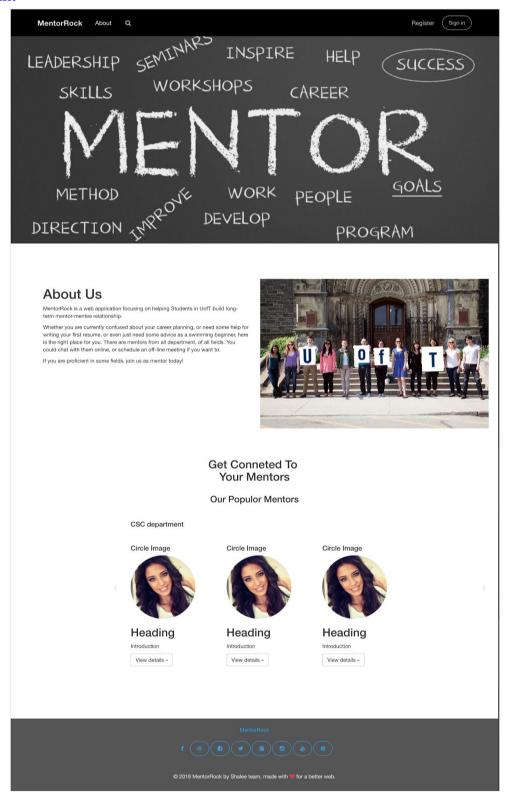
(Group 2 UI Sample: Size of html entities and CSS subject to change)

- The functional group is the core of our web application where all the main functionality lies. It realises all the user functions including browsing profiles, editing account information, establishing connections, chatting, file sharing, and more. In addition, the admin functions are also implemented here, including managing the database, such as handling the creation, update, and deletion of user accounts, mentor requests, and monitoring the chat sessions.
- The common layout template is a general navigation at the top. This template will be followed by the user pages and admin pages, but the functions provided in the tabs for the left-side navigation would be different.

II: General List of Pages Planned to Implement

Common Pages to both Users and Admin:

Home.html:

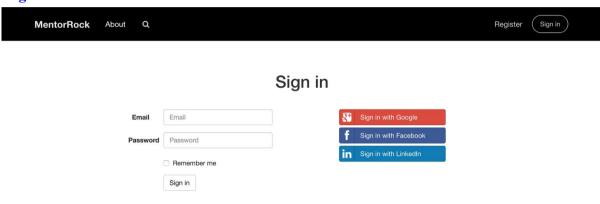


This is the home page of our web application. There will be a navigation bar at the top of the page, which contains the about, login, register tabs. The home page will contain short profile of top-rated mentors with their avatar thumbnails, their names, and their academic specializations to attract new users

About.html:

When a user clicks on the "About" navigation tab from home, they will be redirected to the About page, which gives some basic information of our web application. Introducing what this web app is about and how our chat-based system achieve long-term mentorship.

Login.html:



When clicking on the "Login" from the main navigation bar on the top, the user will be presented with a form to login using username and password. As our site enables third party authentication, the users will also be allowed to login using either their Google or Facebook account.

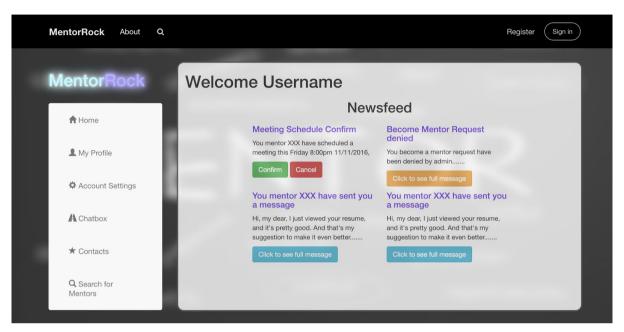
Registration.html:

For user without an account, they would register on this page. Either "Register" or "Sign Up" will lead to the registration page, where user would enter their basic information to register. Users should provide information about their field of study, extracurricular interests, contact info (i.e. email address) and an optional profile picture. Our system would suggest corresponding mentors based on the user's interests and field of study. Contact info will be useful for off-line meeting once the one-to-one mentorship is set up. The contact information of a user is visible only to the user's contacts.

Pages Available to the User:

User-Main.html:

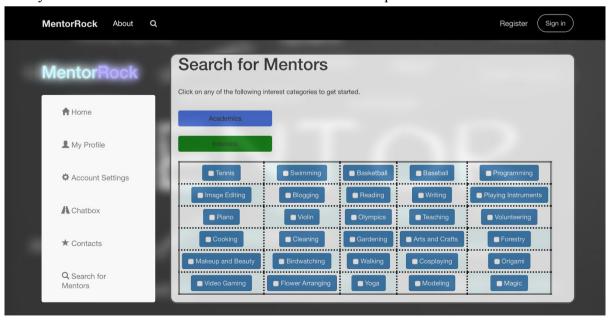
The main page of the user should be a dashboard following the functional group UI template (defined in part I), once a user either logins or registers the user will be redirected to this page, which initially shows several suggested mentors based on the user interests and field of study.



(User Main: Size of html entities and CSS subject to change)

Search-Mentor.html:

When the user clicks on the search icon on the sidebar menu of the user home page, the user will be directed to this page. The user can search for a mentor based on academic and extracurricular interests. In cases where there are no matching mentors, recommendations based on similarity in either academic or extracurricular interest will be provided.



(Search Mentors: Size of html entities and CSS subject to change)

contacts.html:

When the user clicks on "Contacts" on the sidebar menu, the user will be directed to a page where the user will be able to see the list of his/her contacts. This page will contain thumbnails of the mentors picture and a short description. When the user clicks on the thumbnail or short description of a given mentor, the user will be directed to the profile page of the mentor. For the mentee-type users, this page will show only their mentors; while for mentor-type users this page will show both their mentors and mentees. Each list entry show the icon of the mentor or mentee. When a user clicks on the chat button in an entry in the list, they will have a pop-up chat box with the particular user.



(contact.html : Size of html entities and CSS are subject to change)

chatbox.html:

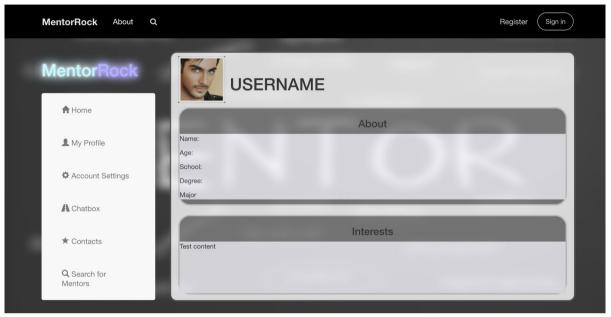
Once users has clicked a chat button, the chat box will appear in the form of a pop-up. A list of chat sessions they are currently in will be show on the left side of the page. Once a session is clicked, users can chat with a corresponding mentor or mentee.



(chatbox.html : Size of html entities and CSS are subject to change)

Profile.html:

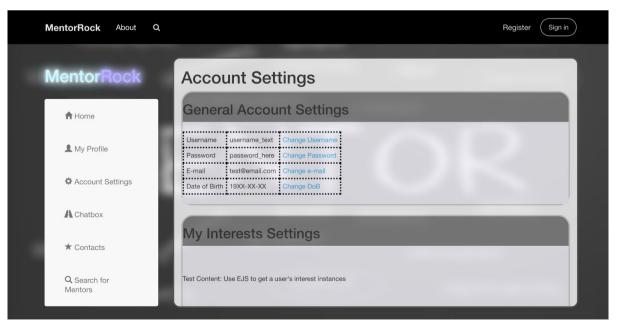
When the user clicks the one user's profile avatar, the profile page of that user will be presented. We could browse that user's basic information, send friend requests, and request to be his/her mentee if that user is a mentor who is still available(haven't reached the upper limit of number of mentees).



(User Profile Page: Size of html entities and CSS are subject to change)

If users are browsing their own profile page, there is "Edit Profile" button linking to Profile-setting.html page, enabling the user to edit their personal profile.

Profile-settings.html:

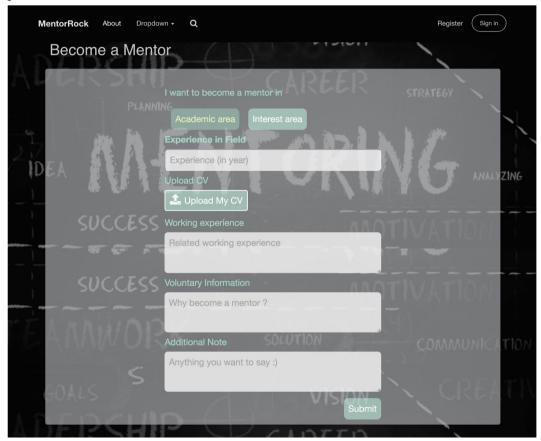


(Edit Profile/Account Settings: Html entities and CSS are subject to change)

Whether one is a user or an admin, they will be given the option to change their account information at any time. In their "Account Settings" page, their account information will be displayed as shown in the image above, and will be given the options to change the values of each field -- to upload a new profile picture, a resume and also to edit other personal information.

mentor-signup.html:

For any "Mentee" user(their status is shown on their profile page) interested in becoming a mentor, they could access this page by clicking the "Become a mentor" button. This page contains a form for the user to fill out in order for mentor status registration. Once the user submits their form, their request data will be sent to the Admin. Once the admin approves the request, the user's status will be updated.



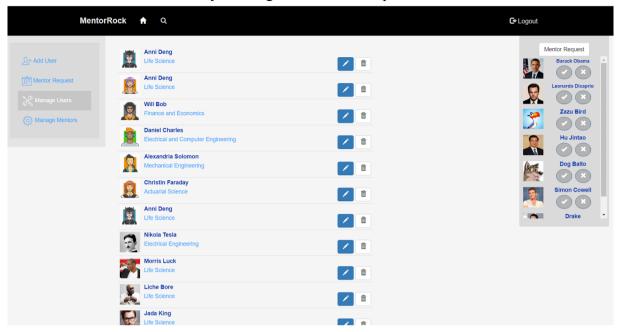
(mentor-signup.html : Size of html entities and CSS are subject to change)

Pages Available to the Admin:

Admin-Main.html:

This is the main working page for the admin. Right after the admin logins to their account, the admin will be redirected to this page, which will contain a side navigation/main menu bar with buttons to show or hide the functional elements as described below. The functional elements will be displayed in two container blocks, one on the left and one on the right. The elements in the left container blocks are dynamically changed as the admin clicks on the side navigation menu. The

right container blocks shows the newly received "become-mentor" requests at real time, the admin can choose to show/hide this block by clicking the "Mentor-Request" button on the left.

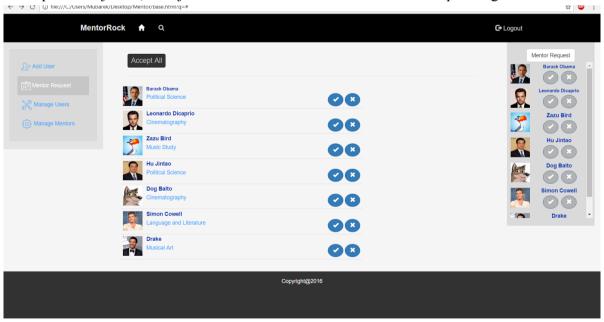


(Manage Users: to update/delete a user using the edit and remove buttons)

Elements under Admin.html:

➤ Mentor-Request:

The request block lists out the pending "become-mentor" requests sent from the user in the **become-mentor** block. The admin could either approve or reject the requests, once approved, the new mentor profile will be added to the mentor database. On the other hand, if the request is rejected, a "reject" notification will be sent to the corresponding user.



(Mentor Request: accept or reject the request to become a mentor)

➤ Add-User:

This is the page where the admin will be adding new users.

➤ Manage Users:

This block will display a sorted list of all the users who are not mentors. The admin can browse, search for selected users based on their interests and their names. The edit and remove buttons, which are designated by pencil and trash icon, the admin can update or delete a user. The information that can be updated include the user's password. Furthermore, the admin can also search and update/delete a user using either username or id.

➤ Manage Mentors:

This page will display a sorted list of all the users that are mentors. This page is for the admin to manage the mentor database. The admin could update the information of the mentor, or remove mentor from the database. The admin should be able to sort the list using either names, the time added, or other filter for the ease of management.