15-437 Team 119 Final Project - CodeBook

Functional Requirements

A non-logged in user will be able to:

- Conduct searches based on programming language, difficulty, or other tags, and be able to view a list of search results
- Search for a User and View a User's Profile
- Register an Account (either through the application, or with their GitHub account, if we choose to support this)
- Log in to their Account (either through the application, or with their GitHub account, if we choose to support this)
- Initiate an email-based password reset for a registered account

A registered, logged-in user will be able to:

- Conduct searches of posts based on programming language and difficulty, and be able to view a list of search results
- Filter search by tag
- Filter out unwanted results
- View which repository a post is from, and follow that repository (will appear in her "Followed Repos" stream)
- View all followed repositories in "Followed Repos" stream
- Save posts that were helpful (will appear in her "Saved Posts" stream)
- View all saved posts in "Saved Posts" stream
- Add languages she would like to learn to a set of "My Languages"
- View recent related posts for each language in the "My Languages" stream
- Search for a User and View a User's Profile
- View and Edit her own profile
- Rate her proficiency in various languages and stacks this information will be factored in when weighing user feedback, and will not be made public
- Comment on a Post or Repository
- Endorse a comment if it was useful
- Tag Posts with Related Keywords

- Endorse a Tag
- Rate a Post on how helpful it was based on the given search parameters
- Rate the difficulty of a post

Page Requirements

Home Page:

The home page will be what the primary url leads to. It will be the same for logged in and non-logged-in users. The page will consist of a search panel that features:

- Buttons for many common languages and stacks that a user can select to begin a search
- A search field that allows the user to further filter the search by tag, difficulty, etc
- Links to either sign in or register for an account

Search Results Page:

This page will display the posts/users which match the search queries entered by a user. Each displayed result will either be a link to a user's profile or a link to a post in the specified language which contains the file itself along with relevant information (which repository/user the file belongs to, any tags the post has, comments on the post, ratings, etc).

This page is viewable by non-logged in users.

View Profile Page

This page will display profile information for a user, including name, picture, proficiency in certain languages, recent activity, etc.

This page is viewable by non-logged in users.

Registration / Login Page:

The Registration/Login page will allow the user to do the following things:

- Register a new CodeBook account
- Register with CodeBook through an existing GitHub account
- Login with a CodeBook account
- Login to CodeBook through an existing GitHub account

This page is viewable by non-logged in users.

Password Reset Pages:

There will be a series of pages through which a user will complete email-based password reset, as follows:

- A page to initiate the process by typing in a email
- A page to notify the user that an email has been sent
- A page that a user is redirected to when clicking the link within the email, where they can enter a new password
- A page confirming the success of the password reset process

This page is viewable by non-logged in users.

A Followed Repositories Stream

This page shows a stream of repositories the user has followed. Each element in the stream contains the name of a repository, the user/creator of the repository, the content of the repository, any comments on the repository, and any tags on the repository.

This page is only viewable by logged in users.

A Saved Posts Stream

This page shows a stream of posts the user has saved. Each element in the stream contains the content of the file, the repository it is from, any comments on the post, and any tags on the post, the post's rating, the post's average rating of difficulty, etc.

This page is only viewable by logged in users.

A Language-Specific Posts Stream

This page shows a stream of the recent/popular posts associated with the languages and stacks the user has specified as their desired languages. The contents of each element in the stream will be the same as the saved posts stream or search results stream.

This page is only viewable by logged in users.

Edit Profile Page

This page will allow a user to change their profile information and set their proficiency ratings. This page is only viewable by logged in users.