CSC309 - Assignment 4
Topic Details

Abstract

A web app that allows students to share and discuss past test/exam solutions.

Team Info:

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Description:

As regular users of the U of T exam repository, we find the current state of the web app leaves much to be desired for. While the exams are made readily available, there are no solutions posted. This model isn't particularly helpful for students who are using the past exams as a studying strategy. Often students end up attempting these exams and discussing them in some third party forums (Piazza) which are not designed for this specific purpose.

Our app brings this tired model to the internet age. Exams can be accessed via a simple search or category. Once the exam is found, questions are listed in numerical order along with the number of solutions made by various users for that particular exam.

The user can then choose to click on any question they wish to get the details for and/or view any answers that may have been provided by other users. If the user agrees with a solution they can "upvote" it. Conversely, users my downvote any solution they feel is insufficient. If they have an alternative solution, they may upload their own as an image or plain text for other users to see.

Solutions with the most upvotes will be displayed first. If the user finds that the provided solution is confusing or incomplete, they can post a comment for that solution clarifying that solution. Multiple users can comment on a posted solution. This comment will be visible to all users and the solutions provider will be notified of the comment posted.

The questions themselves will be labeled in plain text. A user will be able to see all the comments they have made in the user profile. Here they can also change their personal info, as well as privately message other users who they follow.

Required Features Checklist:
- Profiling:
  - Each user has a user-profile, and a page that displays their profile details. Users can edit their info, review posting history and other miscellaneous details.
- User Authentication and Authorization
  - All visitors can view information made available to the public (i.e. exams, questions, solutions, comments).
  - Visitors must make an account and sign in as an authorized user to upload solutions and make comments.
  - Users and Admin accounts are authorized after a successful login accordingly.
- Social Network

- - A user can follow other users in order to receive notifications in their mailbox when the followee posts a new solution.
    - Users can befriend other users and share messages through the app's mailbox system as well as receive notifications about their recent activities (i.e. posting solutions, commenting etc.).
  - Rating and Commenting
    - As mentioned earlier, each user may comment on any solution posted by any user. Each solution may be upvoted (rated up) and downvoted (rated down) accordingly.
  - Search and Recommendation Feature
    - A search bar is provided for any visitor to utilize. The user has the option to search by courses or users. If a user has provided their campus data, then exams from their university take precedence in their search query.
  - Admin
    - All admins can perform basic admin functionality such as changing passwords; adding, updating, and deleting users and their information; and initializing/repopulating the database.
    - Only admin users can edit the info of other users (i.e. user detail, comments, solutions etc.) and remove posted solutions from the site.

Task Distribution:
We opted to apply the MVC design pattern for our app to promote a separation between the data, presentation and interactions layers. As such we decided:

Members	Tasks
Kumar, Waref	Model ie, Databases, Session info.
Humair, Kumar, Waref, Nargiza	View ie. Front-end, HTML, CSS etc.
Nargiza, Humair	Controller ie. Request processing, security