

## Homework 4: User management

This homework builds on and modifies the application developed in earlier homeworks. Make sure that you have addressed all the feedback you got from previous homework before working on the current one.

Notify me via email if you complete your homework before the deadline. You are likely to get your feedback earlier. If you do not notify me, I will check the status of your repository by the end of the day of the deadline.

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In this homework, we will work on user authentication/authorization. The modified application should do the following.

- At first access, it presents a welcome page where the user can either log in, or register if they are not logged in.
- If the user does not have an account, registration page allows
  - user to choose a user name and password
  - creates the user in the database
  - and asks them to log in

NOTE: we do not verify the user's identity, or even try to detect whether the user is a real person or a robot. This is something to consider in a real-world application, but for the purposes of this homework you are not required to take any of the steps to solve this problem.

- When a user logs in, (s)he is shown a page where his/her previous attempts and success rate is displayed along with date/time that they took the quiz. Furthermore, the top 5 scores of all users 'the hall of fame' so far should be displayed on this page.

NOTE: this requires you to keep all completed quiz scores in the database for each user.

- If the user does not log out, we keep them logged in for a week, after which they are automatically logged out.

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1. Make sure your `master` branch is up-to-date with latest version of your application from homework 3. tag this version as `homework3`.
  2. Change the database structure to incorporate the changes described above. Update `create-db.sql` and `test-data.sql` accordingly. Check in your changes.
  3. Divide the implementation of the above changes to at least two phases. For example, you can first add the user login part, and leave the 'hall of fame' display for the second part. Feel free to divide the task into many smaller steps that whose results you can test.

Implement one step at a time, and check in your changes after testing them.

Do not forget to push your changes, including tags, to your remote repository you have sent me earlier.