CS3563 DBMS-II

భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
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Assignment 2
Report

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1 Summary

The tech used in the project are Node as server-side framework, Flutter as client-side framework & PostgresSQL as database for the stack-exchange app clone for all devices web, android & iOS. It allows user to create their account, access posts created by other users, comment on them or answer them. It also allows user to post their questions which he can edit whenever he wishes to do so. The application also supports assigning/removing/re-assigning tags/multitags feature to posts for better user experience. The app also supports an autocomplete search bar which can be used to search for a post createsd by an user or with respect to tags.

2 Overall system architecture

Following technologies are used:

1. PostgresSQL as database
2. Flutter as front-end framework & all sort of designing
3. NodeJS for back-end

Hence, it is a three-tier application accessible on all sort of devices.

3 Programming languages used

1. Dart
2. JavaScript
3. PL/pgSQL

4 Contribution of each group member

1. Varun Gupta (cs21btech11060):
   (a) Login - Create an account for each user with their default password being the same as their username. Users should be able to login to the system using username and password. Allow new users to create accounts. Use cookie to provide session to authenticated users. You can let thecookie be stored permanently. Demonstrate that after the user removes the cookie, the user is logged out of the system.
   (b) Create Posts - A user can create a post and assign tags to them. The tags have to be one of the existing tags only. It would be useful if the user can be helped with the tagging process through autocompletion.
   (c) Edit Posts: A logged in user should be able to see all the posts the user has written. The user should be able to update the content/tags of their own post or even delete them.
2. Gautam Singh (cs21btech11018):
   (a) Autocompletion Search - Support search of tag name and user display name using autocompletion. While showing the result, list both the name and id for tags and users.

(b) Search Posts: Search by user id, Search by single tag, Search by multiple tags.

(c) Answer to Posts - A user can search for posts and give answers. The interface should show the posted question and all the answers.

3. Maloth David (cs21btech11035):

(a) Create a database named cqadb. Create appropriate tables with constraints and then populate the tables using the above data dump.