Project 4: Implementation

Team Stitch: Stitching people together

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GitHub: https://github.com/debugduck/Stitch

Change Log:

For the architecture, we used layered architecture as we have planned with three layers. As for the requirements, we made no changes to the planned requirements. We implemented the high priority requirements as well as some of the medium priority requirements. As for the design some changes were made. we changed the technology that we planned to use for our server side development. Instead of using Node.JS, we are using PHP and Apache. The class diagrams were not implemented as planned as we did not use object oriented design. However, the methods and functions that were included in our requirements are still implemented with our new technology.

Technology:

We used MySQL to manage the database, and the SQL language to create and manipulate the database. The built in phpmyadmin feature from the XAMPP package was used to initially set up our database structure, and to check whether the our web application successfully updated the database as expected.

For our web server, we used the Apache HTTP server which allowed us to connect our front end interface with our database. The PHP language was used to interact with the database and our server, and handle all the HTTP requests from the front-end and update/retrieve information from the mySQL database.

For our front end, we used HTML and CSS to create the basic UI features of the web app, such as navigation, and handling the frontend input/output with Javascript. We also used Google’s Material Design Lite for making templates that enhance the interface of the event manager.

We also used Github as the version control system for this project with a central repository shared between all the team members. Each member pulled and pushed as needed to keep up to date with the changes made by the other team members.

Source File Descriptions:

Index.php: This is the welcome page that explains what the application is, and also has button linking to sign up page. If a user is already signed in, it displays a customized message for the user.

50% Claire

50% Sharon

about.html: This is a page to explain the application in more detail to users who are not logged in.

100% Claire

sign_in.php: This is the UI for the login page, users who are already registered can sign in through this page.

50% Claire

50% Sharon

login.php : This provides login authentication. It checks the entered username and password with the associated record in the database. It contains only php code

50% Tri

50% Sharon

sign_up.php: This is the page where gmu students can sign up to use the application. User information is verified, and added to the records.

33.3333333333333333333% Claire

33.3333333333333333333% Tri

33.3333333333333333333% Sharon

event_page.php : This is the events UI that makes the events accessible and available to the users to view and join. It mostly has javascript code to dynamically add HTML elements for all the existing events.

50% Claire

25% Sharon

25% Hayder

logout.php: This file implements functionality to log out the user. It destroys all existing sessions and redirects to the sign in page.

100% Tri

create_event.php: This is the form for creating new events. Data entered by the user is fetched and inserted into the database as a new event.

50% Claire

50% Sharon

connect_db.php: This file includes the credentials and function needed for our web application to connect with our MySQl account and database. This also includes the functions that retrieves all the events and user information from the database. This file is included in many of the other files in order to connect to the database.

100% Sharon

join_event.php: This file communicates with the database when the user decides to join an event. It takes the information of the specified event and the user Id and saves it to our database.

80% Hayder

20% Sharon

user_profile.php: This file displays a logged in user's information, including what their username is and the event they've joined.

100% Claire

utility.js: This file contains a function that checks if user is logged in and changed the appropriate html elements as needed. This was placed in separate JS file to reduce code redundancy.
50% Sharon
50% Claire

server.js: Node.Js server that connects the MySQL and the front-end together. It renders HTML file to browser, and handles HTTP requests.
100% Hayder

createEvent.js: JavaScript file that creates events and inserts them into MySql
100% Hayder

Software Reuse:

We used some existing open source javascript and css files to support our web application. We used the Google Material Design API packages as a framework for the User Interface of our web application. This allowed us to reuse existing classes for our HTML elements which enhanced our UI. We also used the jQuery package to be able to use AJAX and other jQuery selector functionalities. This aided in implementing the on-click functionalities of some buttons. Lastly, the PHP methods that act as the driver to MySQL, which allow us to access and manipulate the database. These methods are part of the open source driver for MySQL which is provided by Oracle. The reuse was necessary because it gives us access to the database, and therefore they must be reused.