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Twitter_copy

The project involves the development of a web application similar to Twitter, which allows users to register, log in, and interact with each other through the platform. Users can follow and unfollow other users, view tweets on their newsfeed, search for specific tweets and users, and update their profile. The project is developed using PHP, HTML, and CSS.

Requirements

- PHP 7.4 or higher

- MySQL 5.7 or higher

- Web server with PHP support (XAMPP)

Installation

1. Download and unzip the project.

2. Create a MySQL database and import the **twitter_copy.sql** file.

3. Edit the **db.php** file with the database details (host, username, password, and database name).

4. Start the web server and visit the application URL.

Social Network Operation

The social network allows users to register and log in to the system by entering personal information such as email, username, first name, last name, and a bio.

Once authenticated, users will be redirected to the project's home page.

Here, they can:

- Create short text messages, which will be displayed on their newsfeed and the newsfeeds of users following them.

- "Like" tweets.

- Follow other users to see their tweets in their newsfeed.

- View and edit their profile, which contains personal information and a list of followed users and followers.

- View another user's profile, which contains their newsfeed.

Administrators also have access to additional features:

- Monitor activity on the platform, such as deleting other users' tweets.

Files Analyzed

The project is divided into 2 directories: client and server.
Inside the client directory are the files that will be displayed by users, while in the server directory there are the files needed for the MySQL database connection, footer and header, and the functions.php class containing server-side functions for managing the website.

Client-Side Files Analyzed

Five files were provided for analysis: login.php, register.php, home.php, myProfile.php, and profileF.php. Below is an overview of the functionality of each file.

1. **login.php**
   This page allows users to log in to the application by entering their username and password. It also provides a button to switch to the registration page to create a new account.

2. **register.php**
   This page allows new users to register by providing the required information, including email, username, password, first name, last name, and biography. Once registration is complete, users are redirected to the login page.

3. **home.php**
   This is the main page of the application, where users can search for other users and tweets, write new tweets, view their newsfeed, and interact with tweets likes. Also, it

is possible to view a list of new users and follow or unfollow users directly from the main page. The search bar allows users to search for specific tweets and users by entering the text or the username preceded by an "@" symbol. The home.php page also includes a common header and footer for all pages.

4. **myProfile.php**

   This page allows users to view and edit their profile, including information such as first name, last name, email, password, and biography. Users can also view the list of their tweets, "like" tweets or delete them. Additionally, the page displays the number of followers and people followed by the user, allowing them to unfollow other users directly from the profile page. Finally, users have the option to delete their account.

5. **profileF.php**

   This page allows users to view other users' profiles, including information such as first name, last name, email, and biography. Users can also view the list of the user's tweets, "like" tweets or delete them if they are their tweets. Additionally, the page displays the number of followers and people followed by the user, allowing them to follow or unfollow other users directly from the profile page.

Server-Side Files Analyzed

Four files were provided: db.php, functions.php, footer.php, and header.php. Below is an overview of the functionality of each file.

1. **functions.php**

   This file contains all the necessary functions for the application, such as user registration and login, posting and deleting tweets, retrieving profile information, searching for users and tweets, and managing notifications. The functions are used in various pages of the application to perform the different operations requested by users.

2. **db.php**

   This file handles the connection to the "twitter_copy" database. It contains the necessary information to establish a connection, such as the server name, username, password, and database name. The file creates a new instance of `mysqli` with the specified parameters and checks if the connection was successful. If the connection fails, an error message is displayed and the script execution ends.

The file is included in other pages of the application to interact with the database, execute queries, and manage user data.

3. **header.php**

   This file contains the application header, which is included in all pages to provide consistent navigation and user experience. The header includes a logo (image of the Twitter logo) that, when clicked, takes the user to the "home.php" page. Additionally, the header contains a navigation bar with links to the "home.php" and "myProfile.php" pages. The header also has a "Logout" button that allows users to log out of the application. When the "Logout" button is pressed, the current session is destroyed, and the user is redirected to the "login.php" page.

4. **footer.php**

   This file contains the application footer, which is included in all pages to provide a consistent structure and user experience. The footer contains a container with a brief copyright message indicating the creator of the application. The footer uses an external style sheet "footer.css" to apply the appropriate style to the footer content.

Conclusion

The project is a web application similar to Twitter that allows users to interact with each other and share tweets. The analyzed pages offer registration, login, creation and interaction with tweets, searching for users and tweets, and profile management functionalities. Some areas have been identified that require attention or improvements to ensure the proper functioning of the application.