Abstract

The "Basic Social Blog Database Application" project aims to create a comprehensive database management system for a social blogging platform. Users can register, create profiles, post updates, interact with others by sending friend requests and liking posts, edit their profiles, and manage profile photos. The primary goal is to provide a seamless and secure user experience while ensuring that users can only view posts from their friends. Additionally, an admin panel is incorporated for administrative tasks, allowing administrators to remove users along with their associated data from the platform.

Introduction:

In today's digital age, social networking and online communication have become integral aspects of our daily lives. The pervasive influence of social media platforms underscores the importance of efficient and user-friendly database management systems to support such interactions. In light of this, the "Basic Social Blog Database Application" project emerges as a response to the growing need for a personalized and interactive social networking experience. The project was conceived with the intention of creating a platform where users can connect, share, and interact in a secure and structured environment. As computer science enthusiasts, we recognized the educational value in developing a database management system that not only addresses the modern social networking demands but also provides hands-on experience for students in our field.

The core idea of the "Basic Social Blog Database Application" revolves around enabling users to create profiles, share posts, and connect with others. This project seeks to offer a comprehensive solution for social interaction, encompassing features such as user registration, profile customization, post creation, and user engagement through likes and friend requests. Our primary aim is to deliver a seamless and intuitive user experience that caters to both novice and experienced users. By offering these functionalities, we aim to foster a sense of online community while emphasizing the importance of data management in the realm of computer science.

Our project's objectives are crystal clear: First, we intend to develop a user-friendly registration system that allows individuals to create profiles effortlessly. Second, we aim to provide users with the tools to curate and personalize their profiles, including options to edit profile information and upload profile photos. Third, the core of our project centers on enabling users to share their thoughts and experiences through posts, which can be interacted with through likes and comments. Lastly, we aim to facilitate networking by implementing a friend request feature, allowing users to connect with others and expand their social circles. Through these well-defined objectives, our "Basic Social Blog Database Application" aspires to contribute to the growing landscape of social networking solutions while serving as an educational resource for database management system enthusiasts.

Objectives

❖ To implement a seamless user registration process and comprehensive profile management system, enabling users to create and personalize their profiles with ease.
❖ To develop a robust platform for users to create, share, and interact with posts, including features like likes and comments, to foster engaging online discussions.
❖ To Facilitate social networking by allowing users to send and accept friend requests, promoting connections and the growth of a vibrant online community.

Methodology

User Panel:

The User Panel is primarily designed for regular users who have registered and logged into your website. Here are the key features and functionalities of the User Panel:

✓ **User Registration:** Users can create an account by providing their personal information, including their name, email address, password, profile picture, gender, interests, bio, contact information, and username.
✓ **User Login:** Registered users can log in to their accounts using their email and password.
✓ **Profile Management:**
✓ Users can view and edit their profile information, including updating their profile picture, bio, contact details, and other personal data.
✓ **Friend Requests:** Users can send and receive friend requests to connect with other users on the platform.
✓ **Posting Content:** Users can create and publish posts, including text and possibly other media content. These posts may appear on their profile and in the main feed.
✓ **Interactions:** Users can like on posts made by themselves and others.
✓ **Viewing User Posts:** Users can view posts made by themselves and other users within the community.
✓ **User Search:** Users can search for other users by name or username to connect with them.

Admin Panel:

The Admin Panel is designed for administrators or superusers who have access to manage and oversee various aspects of the website. Admins typically have elevated privileges, allowing them to control user accounts, content, and system settings. Here are the key features and functionalities of the Admin Panel:

✓ **Admin Login:** Administrators log in and get special admin credentials to access the admin panel.
✓ **User Management**: Admins can view and manage user accounts, including adding, editing, suspending, or deleting user profiles as needed.

- ✓ **User Posts Management:** Admins can review and moderate user-generated content, including posts and comments. They can take action on inappropriate or spammy content.
- ✓ **User Profile Management:** Admins can view and edit user profile information, assisting users with any issues or updates they may require.
- ✓ **Data Analytics:** Admins may have access to data analytics and insights to monitor user activity and website performance.

The Admin Panel essentially acts as the control center for managing and maintaining the website.

Database Design (ER-Diagram):
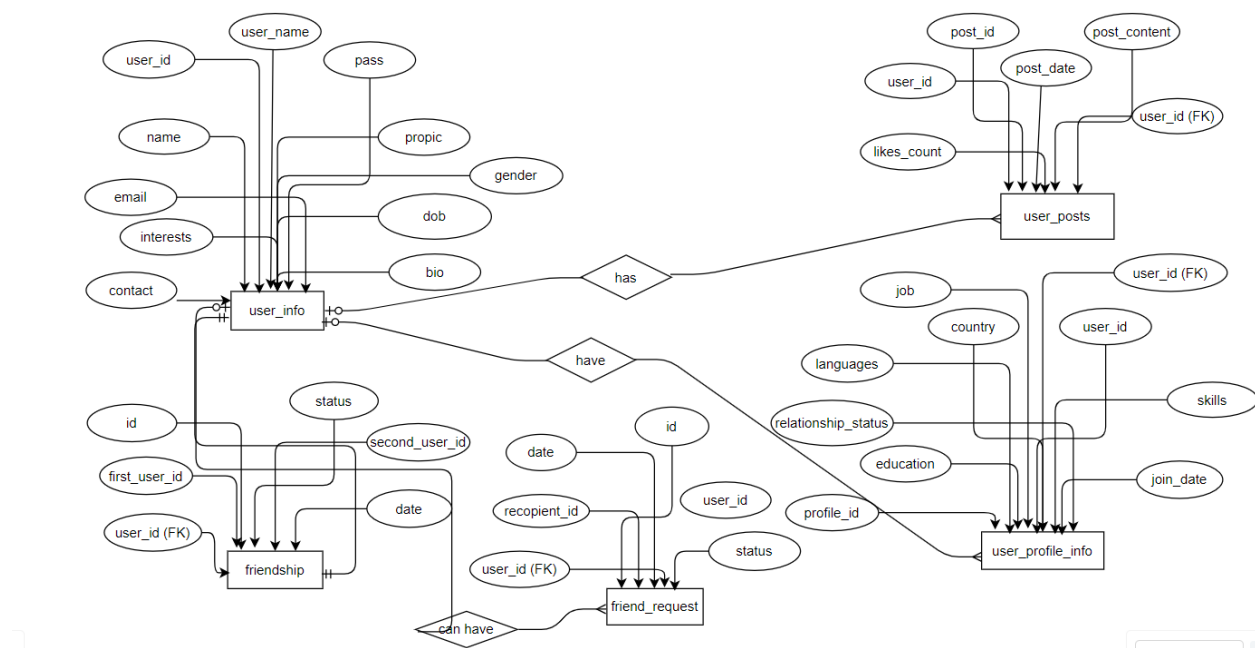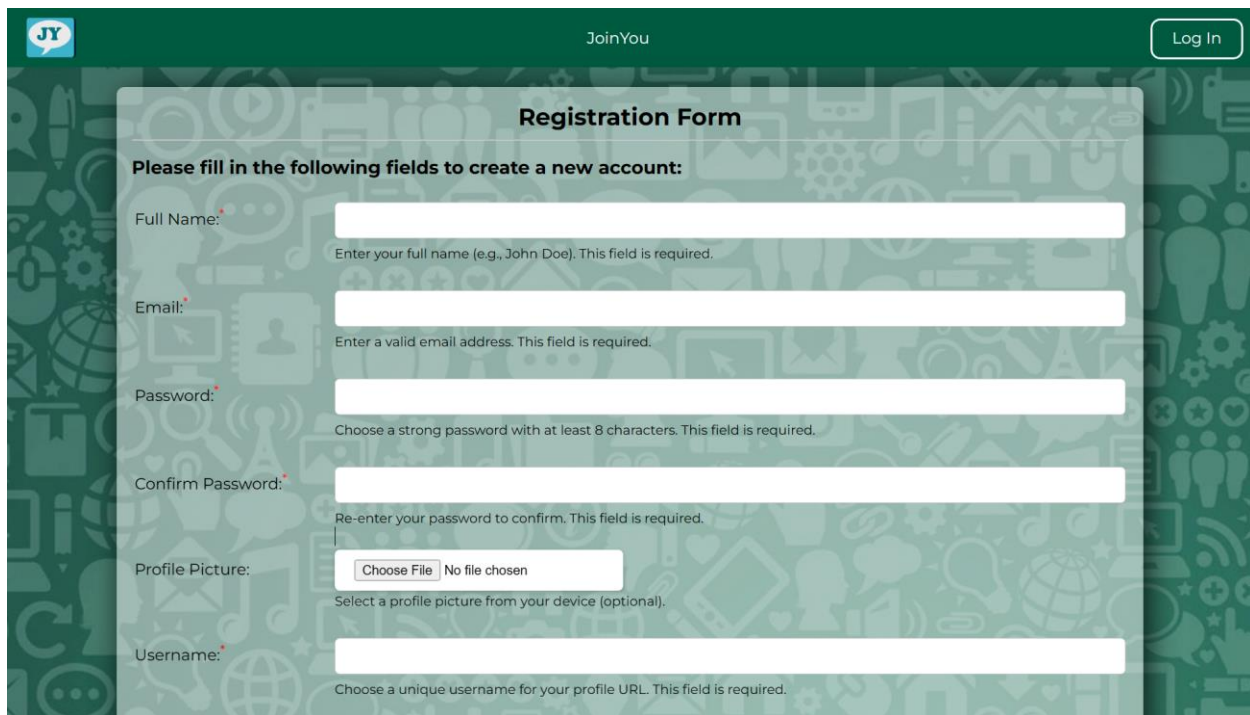
System Outputs:

For the "System Outputs" section, you should showcase key screenshots or snapshots of the webpages or interfaces in your website. Each figure should have a name that indicates the purpose of the page and a brief description. Here's what you should include:

Figure 1: User Registration Page

Description: This figure displays the user registration page where users can sign up for an account by providing their personal information.

Figure 2: User Registration Page

Description: This figure displays the user login page where users can log in for an account by providing their username or email and password.

Figure 3: User Profile Page

Description: This figure represents the user's profile page, where users can view and edit their profile details, including their picture, bio, and contact information.
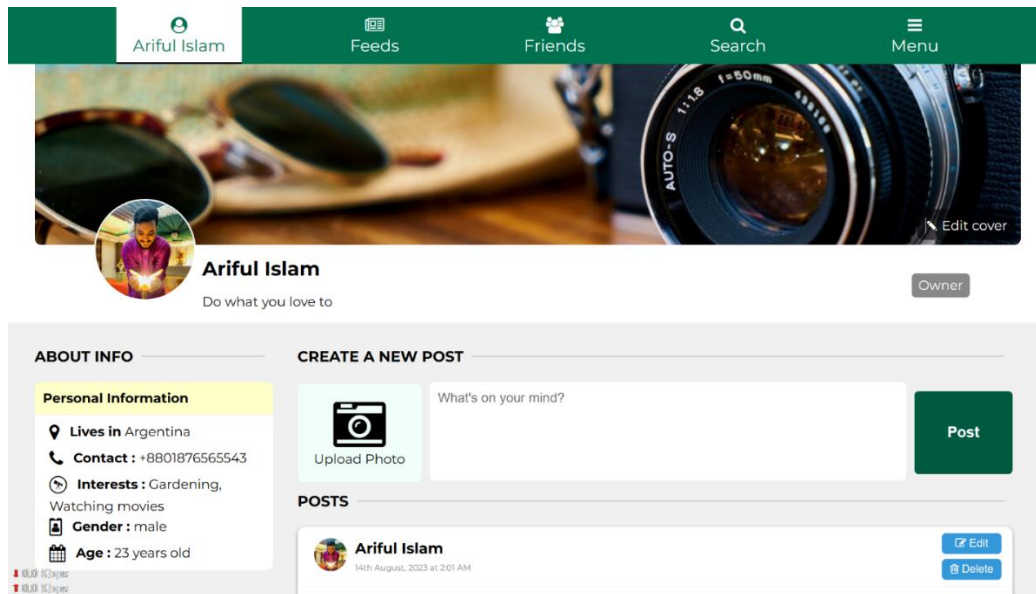

Figure 4: Friends Page

Description: This figure illustrates the friend request page, where users can send and receive friend requests to connect with others. Moreover they can search for specific users by their name and filter search by users location.
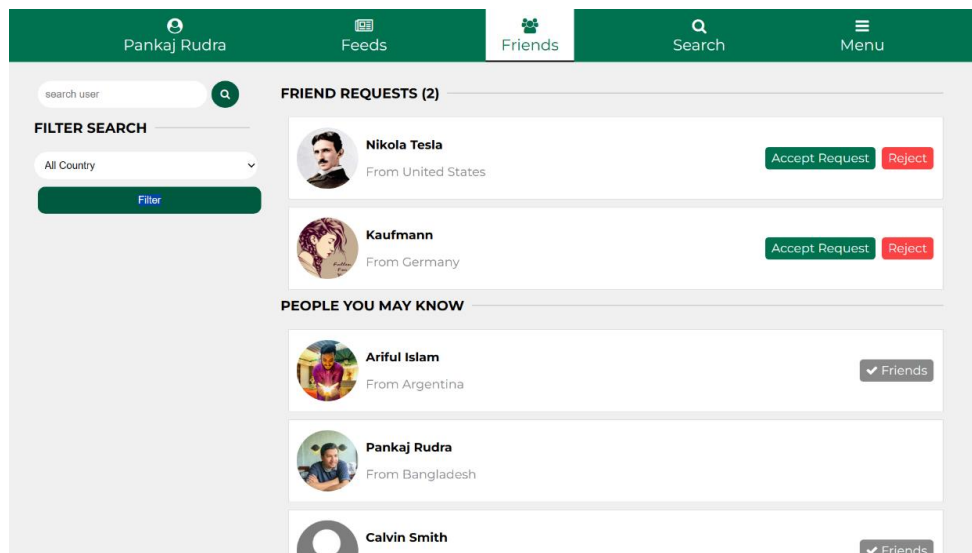

Figure 5: Profile Edit Page

Description: This figure depicts the user profile information editing. User can update their profile information by entering their new information here.

Figure 6: Profile Picture Update Page

Description: This figure showcases the Profile Picture update option for logged users. User can change their old picture and upload a new one here.

Conclusion:

In conclusion, this project has successfully implemented a basic social blog application with user and admin panels. Users can register, create profiles, connect with others, post content, and interact within the community. Admins have the capability to manage users, moderate content, and maintain system functionality. The project benefits users by providing a platform for social interaction and content sharing while offering administrators control and oversight to ensure a safe and engaging user experience.