Flipr Hackathon 22

Fullstack Web Development Task

Theme: Social Media App

General Instructions :

1. All candidates are expected to submit the code on or before **04:00 PM, 4th March 2024.**

2. Upload the code in any version control like Git, Bitbucket, etc (do not mention Flipr in the repo name or inside the code. This is to avoid code duplicacy.)

3. Please provide GitHub, GitLab, or bitbucket repo URL for your assignment.

4. Add the instructions in your readme.md file to build and run the app.

5. Share all the files and links and also make sure to make these files publicly available, any file that fails to open due to not being shared via a public link will not be considered as part of submission

6. You can refer to the Internet and Books but whatever you code you must understand because if you are going to be shortlisted for an interview then you must be able to explain to the company officials about your code.

7. For any queries regarding the project, you can mail at devops@flipr.ai

Problem Statement:

Objective:

Description: Develop a social media website called "Socialify" that allows users to connect with friends, share posts, and interact with each other.

The website should provide users with a platform to explore database relationships, user authentication, and the creation of an attractive social media interface. You can take a reference from instagram.

Reference Link - https://www.instagram.com/

Features:

User Authentication:

- Users should be able to sign up and log in using their username and password.
- Extra Points: Integrate Google OAuth for seamless login/signup.

User Profile:

- Users can create and customize their profiles, adding personal information and a display picture.

Post Creation:

- Users can create posts consisting of captions and photos.
- They should be able to upload multiple photos for a single post.
- Users can add captions or descriptions to their photos.

Post Interaction:

- Users can edit and delete their own posts.
- Users can like and comment on other users' posts.
- Users receive notifications for likes and comments on their posts.

Friend System:

- Users can add other users as friends.
- Users can view a list of their friends and their activities.
- Users can chat with their friends via messaging.

Search Functionality:

- Users can search for other users by username or name.

Additional Features (Bonus Points):

- Explore and implement additional features such as:
    - Group creation and interaction.
    - Advanced post filtering and sorting options.
    - Integration with other social media platforms.
    - Explore and implement a recommendation system for users to discover new content.
    - Any other innovative features to enhance the user experience.

Submission Requirements:

Participants are required to submit the following components as part of their hackathon entry:

Source Code:

- The complete source code of the chat application should be submitted. Ensure it is well-documented and organized.

Documentation:

- A brief document outlining the architecture, design choices, and the process of implementing each feature.
- Clearly document any third-party libraries or APIs used.

Deployment Instructions:

- Provide clear instructions on how to deploy and run the chat application.
- Specify system requirements or dependencies for successful deployment.

Evaluation Criteria:

Submissions will be evaluated based on the following criteria:

Design UI/UX:

- **Creativity:** Assess the originality and innovative aspects of the user interface (UI) and user experience (UX) design.
- **Usability:** Evaluate how intuitive and user-friendly the design is for participants and end-users.
- **Aesthetics:** Consider the visual appeal, color schemes, and overall design aesthetics.

Code Structure:

- **Organization:** Evaluate how well the code is structured, including the use of appropriate files, folders, and modules.
- **Consistency:** Evaluate the consistency in coding conventions and style throughout the project.

Code Modularity:

- **Module Independence:** Assess the degree to which each module or component is self-contained and can function independently.
- **Inter-Module Communication:** Evaluate how well modules interact and communicate with each other, ensuring a cohesive and integrated system.
- **Scalability:** Consider the scalability of the codebase, especially the ease with which new features or modules can be added.

Code Readability:

- **Naming Conventions:** Assess the clarity and appropriateness of variable and function names.
- **Comments and Documentation:** Evaluate the presence of comments and documentation to explain complex logic, algorithms, and important code sections.
- **Indentation and Formatting:** Consider the overall readability through consistent indentation, formatting, and structure.

Use of Data Structures and Algorithm:

- **Algorithm Efficiency:** Assess the efficiency and optimization of algorithms used in the solution.
- **Data Structure Selection:** Evaluate the appropriateness of chosen data structures for the given problem.
- **Algorithmic Innovation:** Consider any creative or innovative use of algorithms to solve challenges.

Use of Frameworks:

- **Framework Integration:** Assess how well the team has integrated and utilized relevant frameworks to enhance development speed and functionality.
- **Framework Best Practices:** Evaluate adherence to best practices and conventions recommended by the chosen frameworks.
- **Use of latest framework/libraries**: Participants using the latest industry framework will be given preference over those using older frameworks.

Presentation and Demonstration:

- **Clarity:** Evaluate the team's ability to clearly articulate their project, including the problem it solves, the technology used, and its impact.
- **Demo Quality:** Assess the quality and effectiveness of the live demonstration, ensuring that all features are showcased.
- **Q&A Handling:** Consider the team's responsiveness and ability to answer questions regarding their project.

Important Dates:

- Hackathon Start: 1st March 2024, 4:00 PM
- Hackathon End: 4th March 2024, 4:00 PM
- Submission Deadline: 4th March 2024, 4:00 PM

Tech Stack:

Front-End: HTML, CSS, JavaScript, React.js (or any other preferred front-end framework)
Back-End: Node.js with Express.js (or any other preferred back-end framework)
Database: MongoDB (or any other preferred database)
User Authentication: JSON Web Tokens (JWT) for user authentication and authorization

Deployment :

1) Upload the code on any version control like **Github, Gitlab, Bitbucket**

2) Deploy the frontend and backend code on any cloud platform like **AWS, Microsoft Azure, Google Cloud, Heroku or any other platform.**

3) For databases,you can use anything. However, we'll prefer the use of **free tier sandboxes on MongoDB Atlas.**

Note:Participants are encouraged to use technologies/frameworks of their choice and focus on delivering a functional and visually appealing application within the given timeframe.Good luck and happy coding!