****

SYNOPSIS

**ON**

**Jinx**

Submitted By: Submitted To:

Ananya Saxena E 2115000146 Akash Kumar Chaudhary

Bhagyodaya Varshney E 2115000284 Technical Trainer

Ishan Srivastava J 2115000479 Training and Development Department

Isthiti Mishra E 2115000484

**Title of the Project:**

JINX, A social media application

**Objective:**

A social media application connects people worldwide, allows to share new ideas and information, including text and visuals, through virtual networks and communities.

**Scope:**

1. Social Networking: Scope includes building and maintaining connections with friends, family, and acquaintances all over the world. Users can follow each other, like and comment on each other's posts, and send direct messages.
2. Explore and Discovery: A feature to discover new content and users. The scope includes the explore page and friend account.
3. Messaging and Communication: A direct messaging feature for one-on-one or group conversations with privacy feature to hide chats, expanding its scope beyond just public posts.
4. Privacy and Security: The scope involves privacy settings, allowing users to control who can see their content, as well as download and schedule feeds.

**Limitations:**

1. Video Content: Introduction to IGTV (Instagram TV) for longer-form video content, and Reels for short video clips.
2. Feature for capturing and editing photos and videos, applying filters, and adding captions and hashtags.
3. Features like Stories, temporary photos and videos that disappear after 24 hours.

**Methodology:**

Technology:

1. Flutter: Flutter is an open-source toolkit by Google for building apps on iOS, Android, web, and desktop using a single codebase. It's known for its fast development with features like hot reload, a rich set of customizable widgets, and near-native performance. It's a popular choice for cross-platform development and offers deep customization and community support.
2. Google Firebase: Firebase is a Google platform for building apps. It offers features like databases, user authentication, cloud storage, notifications, and analytics to help developers create and manage mobile and web applications more easily.

Software and Hardware:

Operating Systems- Windows11

OS-Windows

RAM- 8 to 16 GB

Hard Disk-80 GB

IDE used: Android Studio, Visual Studio Code

**Proposed System:**

1. **Module 1(Splash and authentication)**

* Design and Branding: Creates splash screen that represents brand. It can include logo, app name, and a brief animation or image related to application's theme.
* Transitions: After the splash screen, smoothly transition to the authentication page or screen. This transition should be fast and responsive, providing a sense of continuity.
* User Credentials: Users should provide their credentials (a combination of a username/email and a password) to log in.
* Account Recovery: Implement a password reset feature to allow users to recover their accounts if they forget their credentials.
* User Profiles: Allow users to create and customize their profiles with profile pictures, personal information, and preferences.
* Terms and Conditions: Ensure that users agree to the application's terms and conditions, privacy policy, and user agreements before proceeding.
* Multi-Platform Support: Ensure that authentication works seamlessly across various platforms (iOS, Android, web) if your application is available on multiple platforms.

1. **Module 2(Feeds, add post, search)**

* Users can create posts with text, images, videos, or other supported content types.
* Allow users to like, comment, share, or save posts directly from the feed.
* Users follow other users, groups, or topics. The system compiles posts from these followed entities to create a personalized feed for each user.
* Implement a user search feature, allowing users to find and connect with other users by name, username, or other relevant criteria.

1. **Module 3(User Profile)**

* Basic profile information to collect includes:
  + Profile picture/avatar
  + Bio or About Me section
  + Contact information (email, phone, social links)
  + Date of birth
* Provide a space for users to create and share content, such as text posts, images and links.
* Display user activity metrics, such as the number of posts, followers, and following.
* Show engagement metrics like likes, comments, shares, and user interactions.

1. **Module 4(DMs and Messages)**

* User-friendly chat interface with text, multimedia, and emoji support.
* Real-time message delivery with indicators for message read and sent.
* Allow users to create and participate in group chats.
* Push notifications for incoming messages.

1. **Module 5(Extra features)**

* End-to-end encryption and password to hide and ensure message privacy.
* Allows user to Schedule post at what time it should display.

**Features:**

1. User Profiles: Users can create personal profiles with information, photos, and other details.
2. News Feed: A feed where users can see updates from people they follow or are friends with.
3. Data Security and Privacy: Ensuring user data is kept secure and private.
4. Likes and Comments: The ability to like or react to posts, as well as leave comments.
5. Messaging: In-app messaging for one-on-one or group conversations.
6. Friend Requests and Connections: Users can send and accept friend requests to connect with others.
7. Notifications: Users receive alerts for new activity, messages, and friend requests.
8. Privacy Settings: Users can control who can see their content and profile information.
9. Dark Mode: An optional dark theme for the app.
10. User Authentication: Secure login and account management.

**Implementation Plan:**

Step 1: Project Planning and Design

* Define the project scope and objectives.
* Create wireframes and design the user interface (UI).
* Plan the database structure and user authentication.
* Identify key features and functionalities.

Step 2: Setting Up Firebase

* Create a Firebase project on the Firebase Console.
* Set up authentication methods (email/password, social logins).
* Configure Firebase Realtime Database or Firestore for data storage.

Step 3: Flutter App Development

* Develop the user interface using Flutter, incorporating the design.
* Implement user authentication using Firebase Authentication.
* Create screens for user profiles, news feed, posting content, and messaging.
* Implement features like likes, comments, notifications, and privacy settings.
* Set up the news feed and real-time data synchronization with Firebase.
* Add features like search.
* Develop in-app messaging and notifications.
* Test the app on various devices and screen sizes.

Step 4: Testing and Quality Assurance

* Conduct thorough testing to identify and fix bugs.
* Perform usability testing and gather user feedback.
* Optimize the app's performance and responsiveness.
* Ensure data security and privacy measures are in place.
* Test for compatibility on different platforms (iOS, Android).

**Team Members:**

Bhagyodaya Varshney: Frontend Developer

Ishan Srivastava: Backend Developer

Isthiti Mishra: Backend Developer

Ananya Saxena: Frontend Developer

**Resources Required:**

Windows 11, MacOS

IDE-- Android Studio, Visual Studio Code

RAM- 8 to 16 GB

Hard Disk-80 GB

Graphic Card for Emulator

**References:**

1. <https://docs.flutter.dev/>
2. <https://youtu.be/mEPm9w5QlJM?si=JsjVRKa42jDh2jpt>
3. <https://pub.dev/packages?q=flutter>

**Expected Outcomes:**

The expected outcomes from a social media application project can vary depending on the project's goals and the nature of the platform. Common expected outcomes and benefits that a social media application project can aim to achieve:

* Increased user engagement through likes, comments, shares, and other interactions on the platform.
* Positive impact on users' lives, such as increased knowledge, or enhanced social connections, depending on the platform's core idea.
* A platform that users feel safe and comfortable using.
* Build and maintain trust among users by ensuring data privacy, transparency, and ethical practices.

**Project Supervisor:**

Mr. Akash Kumar Chaudhary

**Conclusion:**

In conclusion, our social media application project aims to create a unique and meaningful platform for users to connect, share, and find support. We are committed to user privacy, community building, and positive impact. We look forward to bringing this project to life and making a difference in users' lives.