

App Title: NewsApp

This Flutter News App is a project designed to showcase best practices in Flutter development. The app fetches real-time news data from a public API, providing users with a seamless and responsive news browsing experience.

Problem Statement:

In today's age there is a growing need for platforms that provide unbiased news. However certain apps may lack certain features or have the perfect UI but provide biased news or do not provide news on time. This app aims to provide real time news data to its users, taking Inshorts app as an main app.

Software Requirements:

Platform Requirements:

1. Flutter SDK: Required for cross-platform app development.
2. Dart Programming Language: Utilized for coding the application logic.
3. Integrated Development Environment (IDE): Preferred IDEs such as Visual Studio Code or IntelliJ IDEA for coding and debugging.
4. Version Control System: Utilize Git for version control to manage codebase changes effectively.

Flutter Packages:

- provider: For state management within the application.
- firebase_core: For initializing Firebase services.
- cloud_firestore: For interacting with Firebase Firestore database for storing and retrieving user-generated content such as stories, comments, and reviews.
- firebase_auth: For user authentication and authorization functionalities.
- firebase_messaging: For cloud messaging services to notify users about new updates, comments, or notifications.
- flutter_local_notifications: For displaying local notifications to users.
- charts_flutter: For visualizing data such as trending stories or user engagement metrics.
- shared_preferences: For storing user preferences and settings persistently.
- intl: For internationalization and localization support to cater to users from different regions.
- http: For making HTTP requests to fetch data from remote servers, if additional APIs are integrated for fetching content or user data.

Firestore Integration:

- Firestore Account: Set up a Firestore account to utilize Firestore services for various functionalities like real-time database, authentication, cloud messaging, etc.

Hardware Requirements:

1. Android or iOS device for testing and deployment
2. Minimum of 2GB RAM for development purposes
3. Internet connection for accessing backend services and testing online features
4. Sufficient storage space for installing development tools and storing project files