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APP REPORT

NEWSTORO

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**NEWSTORO**

**What is NEWSTORO?**

In today's fast-paced world, staying informed about the latest news and updates is more important than ever. Enter Newstoro, your go-to destination for curated, personalized news content delivered straight to your fingertips. With Newstoro, you can stay ahead of the curve, effortlessly accessing the stories that matter most to you, whenever and wherever you are.

Newstoro takes the hassle out of keeping up with the news by offering a seamless and intuitive user experience. Whether you're interested in global headlines, local events, or niche topics, Newstoro has you covered.

**Project Summary: Newstoro**

Newstoro is a cutting-edge news application designed to provide users with a personalized and seamless news consumption experience. In an era of information overload, Newstoro aims to simplify the process of staying informed by delivering curated news content tailored to each user's interests and preferences.

**Concepts in App:**

1. News Api
2. MVVM
3. Retrofit
4. Room
5. Nav Graph
6. Fragments
7. Coroutines
8. WebView

**News API:**

News API: <https://newsapi.org/>

* Serves as the backbone for the app, providing access to diverse news articles and headlines.
* Ensures app stays updated with the latest news.

**MVVM (Model-View-View Model):**

* Maintains separation of concerns with Model handling data retrieval, View Model managing UI-related logic, and View displaying news content.
* Promotes a scalable and maintainable code structure.

**Retrofit:**

* Simplifies network requests by connecting to the News API.
* Enables seamless integration of real-time news data.
* Enhances app's responsiveness and user experience.

**Room:**

* Facilitates local storage of news data.
* Ensures users can read previously accessed news content offline.

**Nav Graph:**

* Visually outlines navigation flow in the app.
* Simplifies navigation management and enhances user experience.

**Fragment:**

* Represents modular UI components.
* Enhances app's adaptability to various screen sizes and user interactions.

**Coroutines:**

* Manages asynchronous tasks efficiently.
* Ensures smooth and responsive interactions.

**WebView:**

* Allows seamless access to full articles or external links.

**Functionality in Newstoro App:**

1. **Trending Headlines**
2. **Search Functionality**
3. Favourite Headlines
4. Offline Reading

**Trending Headlines**

• Displays curated list of popular, widely discussed news articles.

• Provides quick overview of current hot topics.

• Helps stay informed about latest, relevant news.

**App Search Functionality**

• Allows users to find specific news articles, topics, or keywords.

• Inputs user interests for relevant articles retrieval.

• Enhances user engagement with personalized, efficient access.

**Favourite Headlines**

• Marks articles as favourites.

• Enhances user experience.

**Offline Reading**

* Users can save articles for offline reading
* Allowing them to access news content even when they don't have an internet connection.

**Technical Talks about Project**

1. To, display all these articles are using news API which I’ll show you later. So, with the help of that, it fetches the real-time data or news and displays it on the recycler view.
2. Then, with the help of web view – we, can open the article in the app itself without going to any browser.
3. Then, by clicking on add to fav – that, particular article gets saved in the room database so what you see here is all saved in the room database hence later whenever you open the app again – they, will be still here.
4. Lastly, search uses API only, and other topics like MVVM will help us to make the project organized and segregated in model view and View Model not, just that but also the navigation component will help us to navigate from one screen to another screen effortlessly.

**System Requirement**

The system requirements for the Newstoro app will depend on various factors. The complexity of features, and the technology stack used for development:

1. **Operating System Compatibility:**

* Compatible with Android devices running Android OS version X.X and above.

1. **Device Compatibility:**

* The app should be optimized to run on a wide range of devices, including smartphones, tablets, and possibly wearable devices.

1. **Storage Space:**

* The app itself will require a certain amount of storage space on the user's device for installation. Additionally, users may need extra storage space to download and store news articles for offline reading.

1. **Internet Connection:**

* The app requires an internet connection to fetch news content from various sources, update the news feed, and provide real-time notifications.

1. **Memory (RAM):**

* The app should be designed to operate efficiently and not consume excessive memory (RAM) on the user's device to ensure smooth performance, even on devices with limited RAM.

1. **Processor (CPU):**

* The app should be optimized to run smoothly on devices with different processor architectures, ensuring good performance across a wide range of devices.

1. **Permissions:**

* The app may require certain permissions from the user, such as access to location data (for localized news), storage (for offline reading), and notifications (for push notifications).

1. **Accessibility Considerations:**

* The app should adhere to accessibility guidelines to ensure that it is usable by people with disabilities. This may include support for screen readers, adjustable font sizes, and high contrast modes.

**System Analysis**

System analysis involves thoroughly examining the requirements, constraints, and objectives of a system to ensure its successful development and implementation. In the context of the system requirements for the Newstoro app, here's a breakdown of the system analysis:

1. **Requirement Gathering:**

Identify and gather requirements for the Newstoro app by including users, developers. This involves understanding the functionalities, features, and constraints of the app.

1. **User Requirements:**

Analyse user needs and preferences to determine the desired features and functionalities of the app. Consider factors such as personalization options, ease of use, and accessibility requirements to ensure a positive user experience.

1. **Technical Requirements:**

Identify the technical specifications and constraints of the app, including device specifications, storage space, internet connectivity, and performance requirements (memory, processor).

1. **Functional Requirements:**

Define the core functionalities of the Newstoro app, such as customization options, offline reading and trending topics. Specify how each feature should work and interact with other components of the app.

1. **Non-Functional Requirements:**

Consider non-functional requirements, such as usability, reliability, security, and scalability. Analyse factors like app responsiveness, error handling, data privacy, and the ability to handle increasing user loads over time.

By conducting a thorough system analysis, you can ensure that the requirements for the Newstoro app are clearly defined, feasible, and aligned with the needs and expectations of stakeholders. This lays the foundation for successful development and implementation of the app.