NAAN MUDHALVAN

PROJECT REPORT ON

Android Application for Keeping Up with the Latest Headlines

SUBMITTED BY

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INTRODUCTION

The Android Application for Keeping Up with the Latest Headlines project is a mobile application designed to keep users up-to-date with the latest news and headlines from various sources around the world. The app provides a simple and intuitive interface that allows users to browse news articles, filter by category and source, and save articles to read later.

The application utilizes various technologies to gather and display news articles, including RSS feeds, APIs, and web scraping. It also includes features such as push notifications, bookmarking, and sharing functionality to enhance the user experience.

The project involves the use of programming languages such as Java or Kotlin for Android development, as well as APIs from various news sources, and integrating them into a unified newsfeed. The project also requires creating a user-friendly interface and implementing features such as filtering, bookmarking, and sharing.

Overall, the Android Application for Keeping Up with the Latest Headlines project aims to provide a convenient and efficient way for users to stay informed about current events and breaking news on their mobile devices

ABOUT THE PROJECT

The Android Application for Keeping Up with the Latest Headlines is a mobile application that helps users keep up-to-date with the latest news and headlines from different sources around the world. The app has a user-friendly interface that allows users to browse news articles, filter by category and source, and save articles to read later. It uses various technologies such as RSS feeds, APIs, and web scraping to gather and display news articles.

The application includes features such as push notifications, bookmarking, and sharing functionality to enhance the user experience. The project involves using programming languages such as Java or Kotlin for Android development, integrating APIs from different news sources, and creating a user-friendly interface with filtering, bookmarking, and sharing features. The ultimate goal of the project is to provide a convenient and efficient way for users to stay informed about current events and breaking news on their mobile devices.

PROBLEM DEFINITION AND DESIGN THINKING

PROBLEM DEFINITION:

The problem that the Android Application for Keeping Up with the Latest Headlines project aims to solve is the difficulty that people face in keeping up with the latest news and headlines from various sources. With so many news sources available, it can be challenging for individuals to find reliable and up-to-date information on the topics that interest them. Additionally, many people have busy schedules and do not have the time to search for news articles manually.

DESIGN THINKING:

Design thinking is a problem-solving approach that focuses on understanding the needs of users and creating solutions that meet those needs. In the case of the Android Application for Keeping Up with the Latest Headlines project, the design thinking process would involve the following steps:

Empathize: This step involves understanding the needs of users who want to keep up with the latest news and headlines. It would involve conducting user research to identify the pain points and challenges that users face when trying to stay informed.

Define: Based on the insights gained from user research, the next step would be to define the problem and identify the specific needs that the application should meet. For example, the application would need to provide a simple and convenient way for users to browse news articles, filter by category and source, and save articles for later reading.

Ideate: This step involves generating ideas for how the application could meet the needs of users. This could involve brainstorming sessions, creating user personas, and developing user scenarios to explore different ways of addressing the problem.

Prototype: Once a set of ideas has been generated, the next step would be to create prototypes of the application to test with users. This could involve creating wireframes, mockups, or interactive prototypes to get feedback on the design and functionality of the application.

Test: Finally, the application would be tested with users to gather feedback and refine the design. This could involve usability testing, surveys, or other methods to gather feedback on the user experience and identify areas for improvement. The design thinking process would be iterative, with the application being refined and improved based on user feedback until it meets the needs of users

GOOGLE DEVELOPER PUBLIC PROFILE URL

Team Lead- https://g.dev/Ganesanv

Team Member 1-https://g.dev/Veenaj

Team Member 2-

Team Member3-

SYSTEM CONFIGURATION

HARDWARE REQUIRED

Development computer: A computer running Windows, macOS, or Linux with a minimum of 4GB RAM and a multi-core processor. A solid-state drive (SSD) is recommended for faster build times.

Mobile device: An Android smartphone or tablet for testing and debugging the application. The device should have a recent version of the Android operating system and meet the minimum requirements for running the application.

Internet connectivity: An internet connection is required to download the necessary tools and libraries for Android development, as well as to access news sources and APIs.

Optional: A physical Android device for testing the application on different screen sizes, resolutions, and hardware configurations. Additionally, a stylus or digital pen may be useful for designing the user interface and creating mockups.

SOFTWARE REQUIRED

Java Development Kit (JDK): The JDK is required to develop Android applications using Java programming language. Version 8 or later is recommended.

Android Studio: Android Studio is the primary development environment for Android applications. It includes an Android emulator for testing applications on virtual devices, as well as tools for debugging, testing, and deploying applications.

Android SDK: The Android SDK includes libraries, tools, and APIs for developing Android applications. Android Studio includes a version of the SDK, but it may be necessary to download additional components depending on the specific needs of the project.

APIs for news sources: APIs from various news sources will be required to retrieve the latest news articles and headlines. Popular APIs for news include NewsAPI, New York Times API, and Google News API.

Optional: Integrated Development Environment (IDE) other than Android Studio, such as IntelliJ IDEA or Eclipse, can also be used for Android development.

ADVANTAGE AND DISADVANTAGE

ADVANTAGES:

Convenience: The Android Application for Keeping Up with the Latest Headlines provides a convenient way for users to access news articles and headlines from various sources in one place. Users no longer have to manually search for news articles or visit multiple websites or applications.

Customization: The application allows users to customize their news feed based on their interests and preferences. They can choose the news sources they want to follow, filter articles by topic, and save articles for later reading.

Up-to-date information: The application is designed to provide users with the latest news articles and headlines from reliable sources. Users can stay informed about current events and breaking news in real-time.

Accessibility: The application is accessible to anyone with an Android device and an internet connection. This means that users can access news articles and headlines from anywhere at any time.

DISADVANTAGES:

Limited scope: The Android Application for Keeping Up with the Latest Headlines is designed to provide news articles and headlines only. It does not provide in-depth analysis or commentary on the news. Users may need to visit other sources for additional information.

Dependence on news sources: The accuracy and reliability of the news articles and headlines provided by the application depend on the accuracy and reliability of the news sources used. If the news sources are not trustworthy, the information provided by the application may be inaccurate or biased.

Information overload: The application may provide users with a lot of information at once, which can be overwhelming. Users may need to spend time filtering articles and headlines to find the ones that are relevant to their interests.

Privacy concerns: The application may collect user data, such as browsing history and search queries, to provide personalized news recommendations. Users may have concerns about the privacy of their data and how it is being used.

APPLICATIONS

1. Providing users with up-to-date news articles and headlines from various sources in one place.

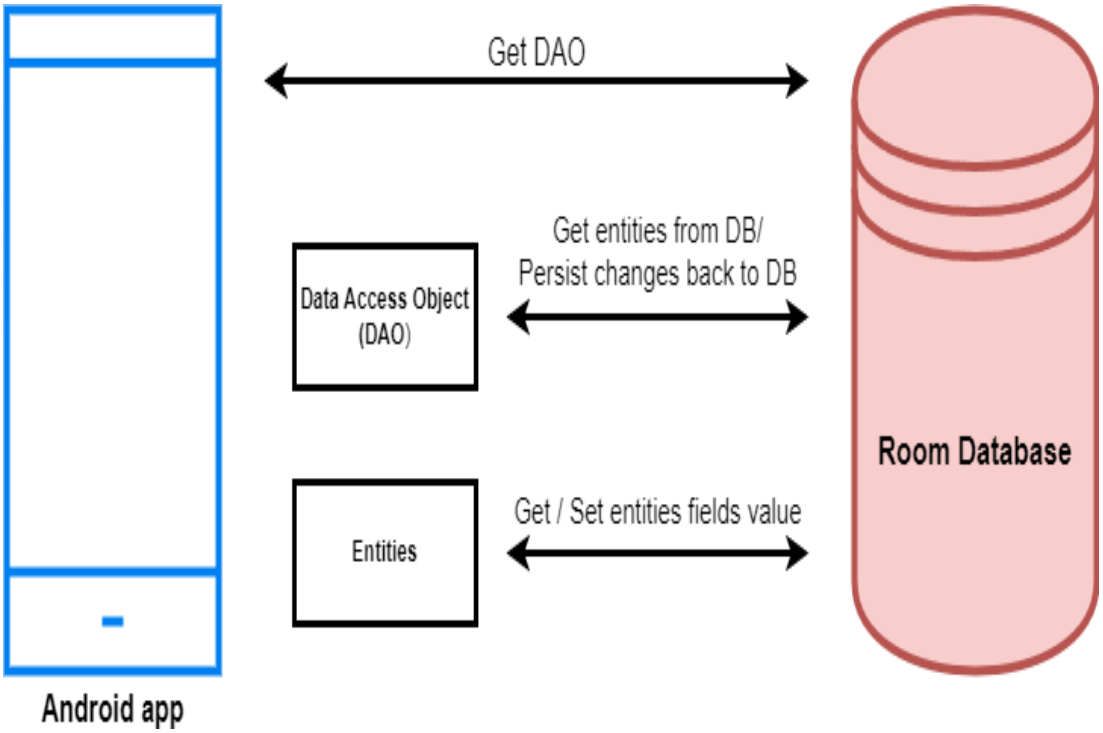
2. Allowing users to customize their news feed based on their interests and preferences.

3. Enabling users to filter news articles by topic and save articles for later reading.

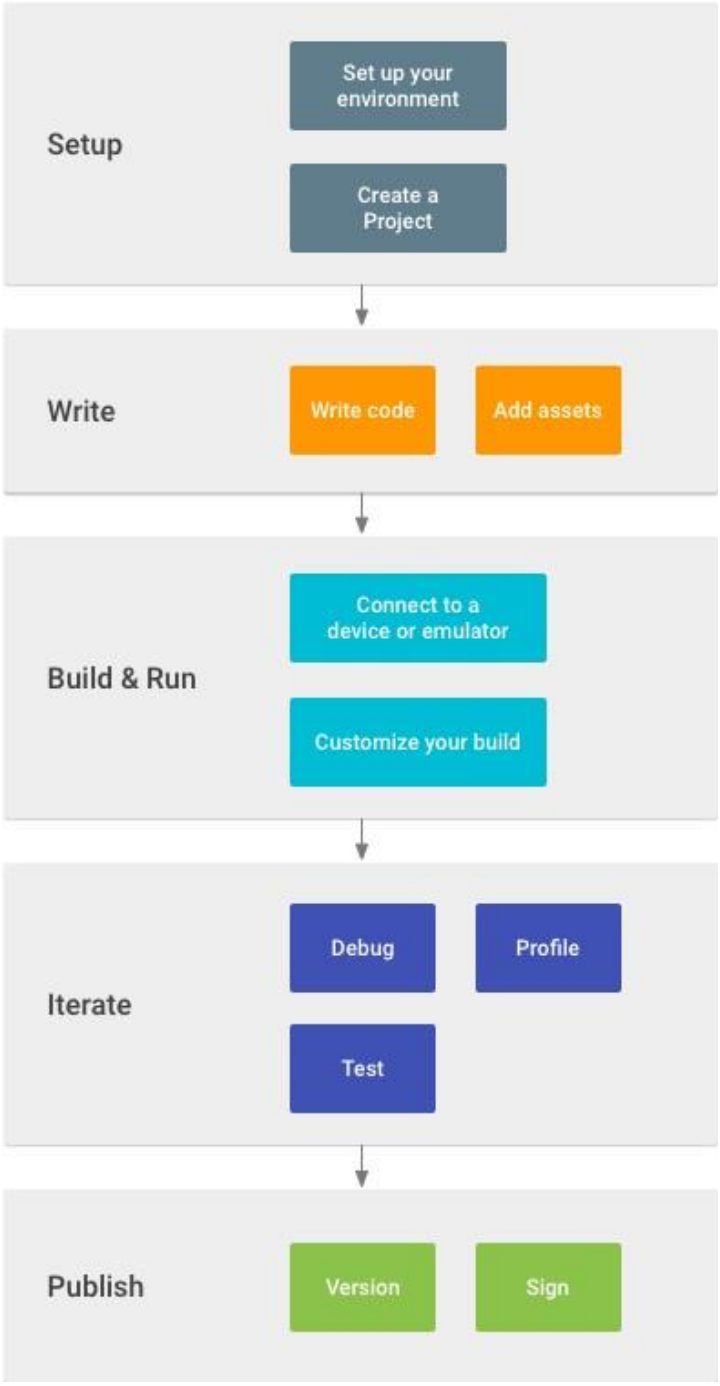
4. Helping users stay informed about current events and breaking news in real-time.

5. Providing a convenient and accessible way for users to access news articles and headlines from anywhere at any time.

ARCHITECTURE



RESULT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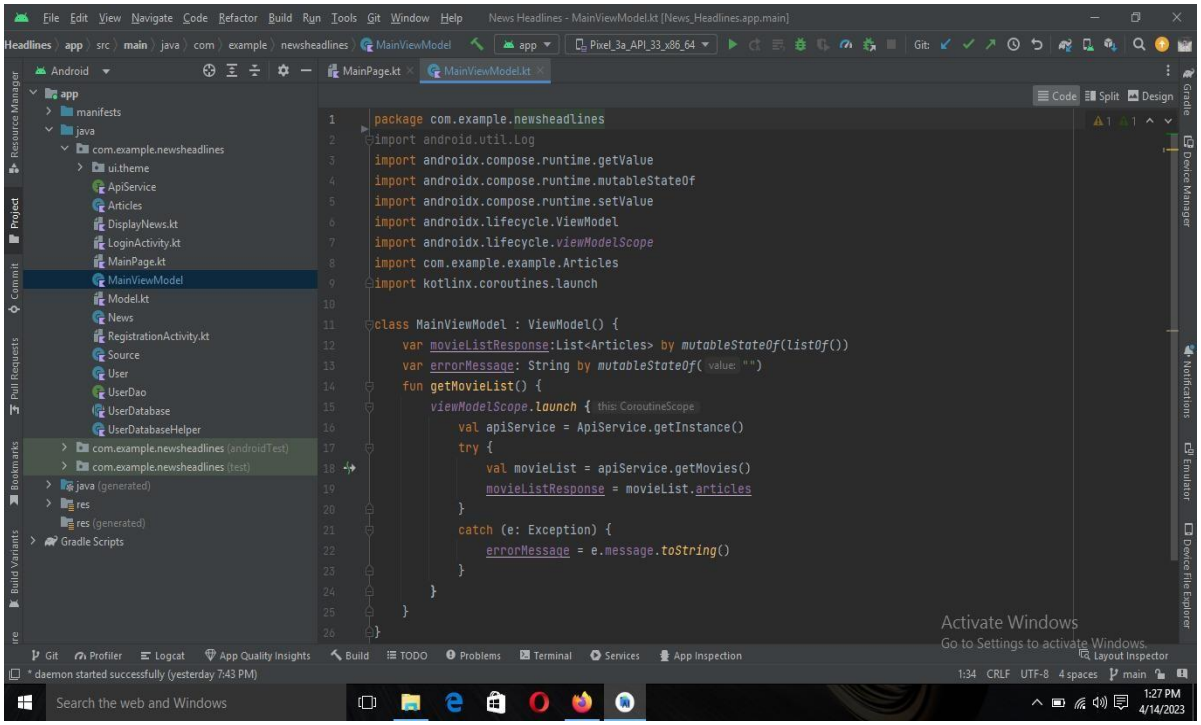
Set up your environment
Create a Project
Write
Write code
Add assets
Build & Run
Connect to a device or emulator
Customize your build
Iterate
Debug
Profile
Test
Publish
Version
Sign

DATA MODEL


File Edit View Navigate Code Refactor Build Run Tools Git Window Help
News Headlines - MainViewModel.kt [News_Headlines.app.main]
MainPage.kt
MainViewModel.kt
package com.example.newsheadlines
import android.util.Log
import androidx.compose.runtime.getValue
import androidx.compose.runtime.mutableStateOf
import androidx.compose.runtime.setValue
import androidx.lifecycle.ViewModel
import androidx.lifecycle.viewModelScope
import com.example.example.Articles
import kotlinx.coroutines.launch
class MainViewModel : ViewModel() {
var movieListResponse:List<Articles> by mutableStateOf(listOf())
var errorMessage: String by mutableStateOf(value: "")
fun getMovieList() {
viewModelScope.launch { this: CoroutineScope
val apiService = ApiService.getInstance()
try {
val movieList = apiService.getMovies()
movieListResponse = movieList.articles
}
catch (e: Exception) {
errorMessage = e.message.toString()
}
}
}
}
Activate Windows
Go to Settings to activate Windows.
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1:27 PM
4/14/2023

OUTPUT OF THE APPLICATION

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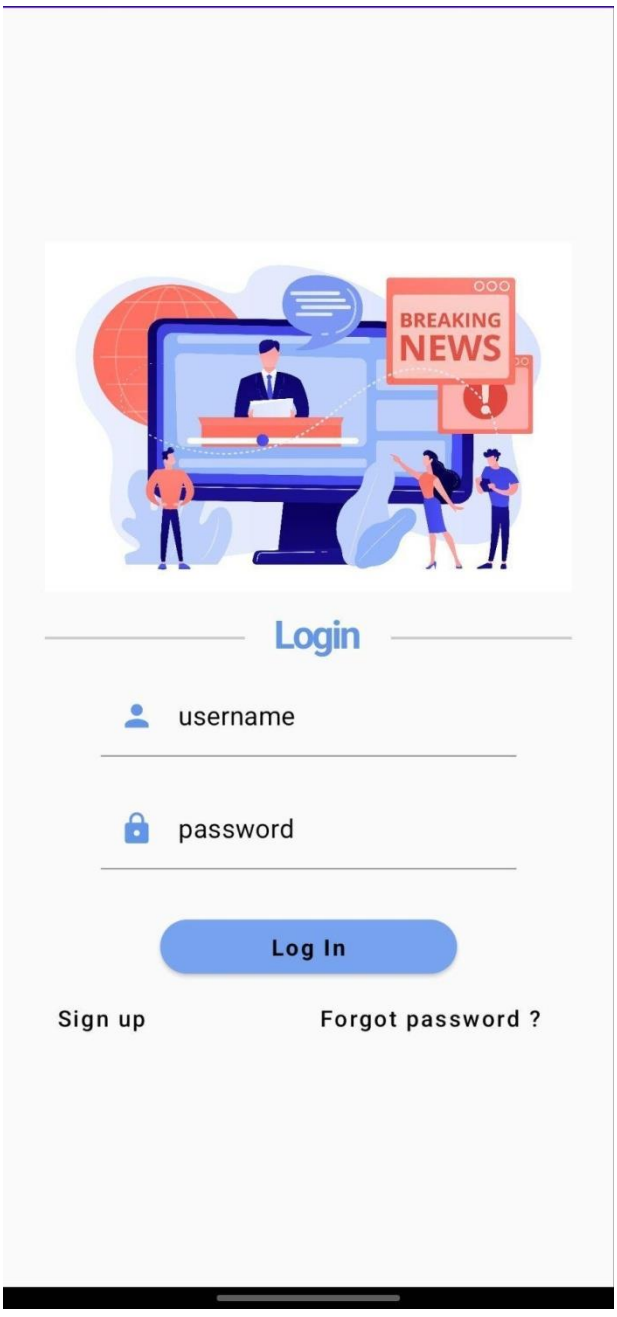
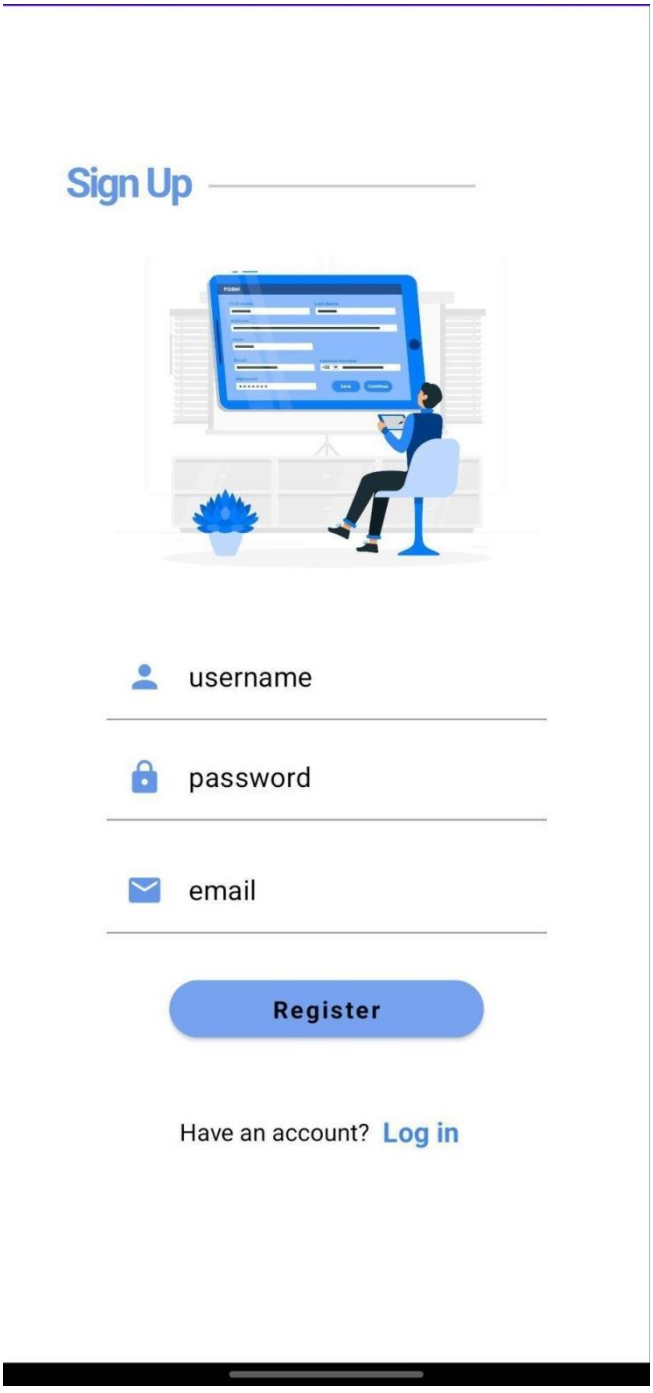
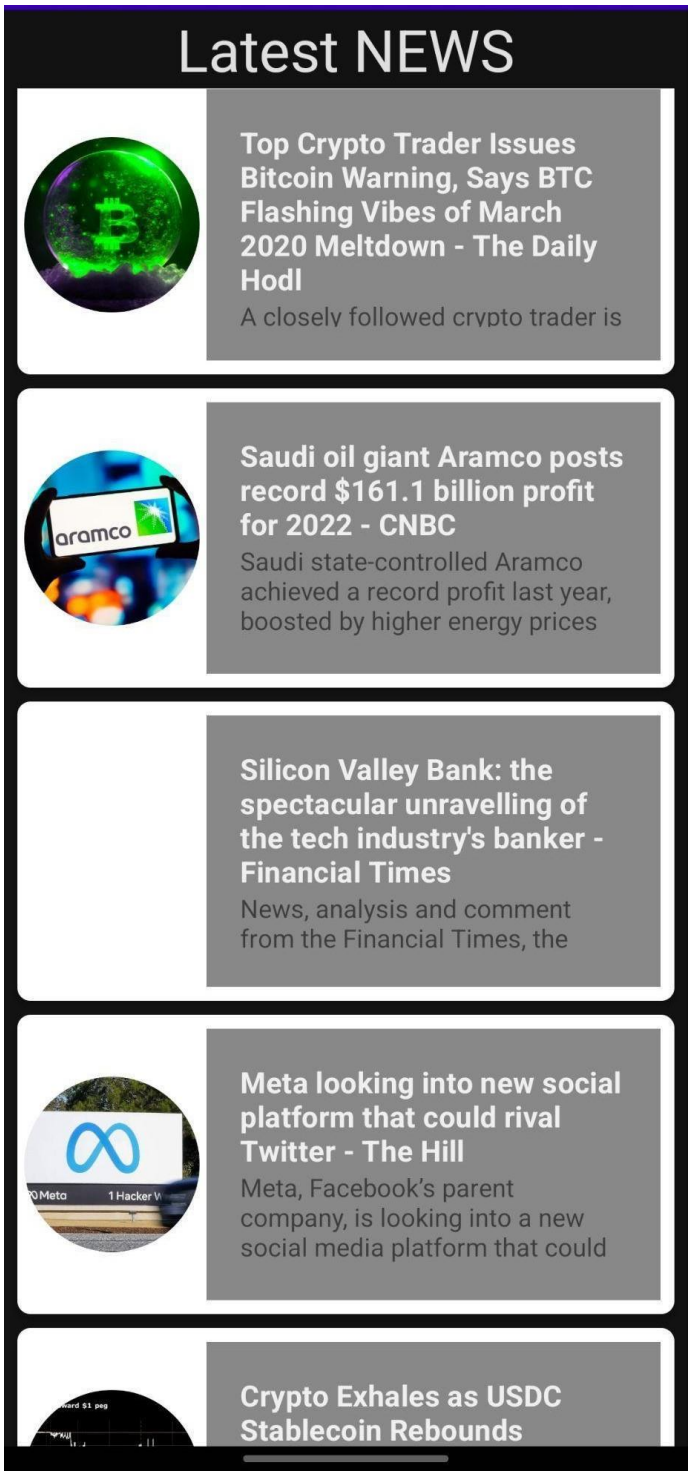


REGISTER PAGE:



MAIN PAGE: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Meta, Facebook's parent company, is looking into a new social media platform that could
Crypto Exhales as USDC Stablecoin Rebounds

DISPLAY NEWS PAGE :

CONCLUSION

In conclusion, the Android Application for Keeping Up with the Latest Headlines is a useful tool that provides a convenient way for users to access news articles and headlines from various sources. The application is designed to be user-friendly and customizable, allowing users to filter articles by topic and save articles for later reading. The application provides up-to-date information, keeping users informed about current events and breaking news in real-time. However, the application is not without its drawbacks, including a limited scope, dependence on news sources, potential for information overload, and privacy concerns. Despite these challenges, the Android Application for Keeping Up with the Latest Headlines remains a valuable resource for individuals looking to stay informed about the latest news and events.

FUTURE SCOPE

1. Integration with artificial intelligence (AI) and machine learning (ML) algorithms to provide personalized news feeds based on users' reading history and preferences.

2. Integration with social media platforms to enable users to share news articles and headlines with their friends and followers.

3. Integration with voice assistants and smart speakers, allowing users to access news articles and headlines hands-free.

4. Integration with augmented reality (AR) and virtual reality (VR) technologies, providing users with immersive news experiences.

5. Expansion of the application to include news articles and headlines from a wider range of sources, including local and regional news outlets.