PROJECT DOCUMENTATION

PROJECT REPORT ON AN ANDROID APPLICATION FOR KEEPING UP WITH THE LATEST HEADLINES

SUBMITTED BY:

TEAM ID: NM2023TMID13880

TEAM LEADER: ROHIT ROSHAN.S

TEAM MEMBERS:

NEELESH SAI NATH.G.S

SANTHOSH.K

KISHOR KUMAR.S

INTRODUCTION

Headlines are brief summaries or titles that are used to capture the essence of a news article, story, or event. They are typically found at the top of a news story and are designed to attract the reader's attention and provide a quick overview of the content that follows. Headlines often use bold or larger font sizes and may include images or graphics to add visual interest. They are a crucial element of journalism, as they help readers quickly identify and understand the most important news and events of the day.

The main objective of headlines is to grab the reader's attention and encourage them to read the full article or story. Headlines are often the first thing a reader sees, and therefore play a crucial role in determining whether a reader will engage with the content. To be effective, headlines must be informative, accurate, and compelling. They should convey the key message of the story or article in a concise and engaging manner and use language that is clear and easy to understand.

The role of headlines is to serve as a quick summary of the news story or article, and to attract the reader's attention. They play a crucial role in capturing the reader's interest and encouraging them to engage with the content. Effective headlines should be informative, accurate, and engaging, and should provide a clear idea of what the article or story is about.

In addition, headlines often help to set the tone or mood of the story, by using language that is emotive, descriptive, or provocative. They may also be used to create a sense of urgency or importance, by emphasizing the timeliness or relevance of the news.

Overall, the role of headlines is to serve as a key tool in journalism, helping to inform, educate, and entertain readers, and to draw attention to the most important stories and events of the day.

ABOUT THE PROJECT

An Android app for displaying news headlines using Android Studio can be a great way to keep users informed and engaged with current events. The app can be designed with a user-friendly interface and features that make it easy for users to browse and read headlines, as well as to access related content and media.

The app can fetch the latest news headlines from an API or database using HTTP client or another method and can parse the response to extract the relevant data. The app can then display the headlines in a ListView or RecyclerView using an adapter to populate the data.

The app can also include click listeners on the headlines, allowing users to navigate to a detail page or website when clicked. This can be done using intent filters, which can open the relevant app or website depending on the user's preferences.

The goal of a news headlines app created using Android Studio is to provide users with a convenient and engaging way to stay up to date with the latest news and events.

The primary goal of the app is to provide users with a user-friendly interface that makes it easy for them to browse and read the news. Another goal of the app is to provide users with accurate and up-to-date news content. Ultimately, the goal of a news headlines app created using Android Studio is to provide users with a convenient, personalized, and engaging way to stay informed about the world around them, and to help them make informed decisions based on the latest news and events.

The project is hosted on GitHub, which is a popular platform for hosting open-source projects. This allows developers to contribute to the project by submitting bug reports, feature requests, and code contributions.

PROBLEM DEFINITION AND DESIGN THINKING

Problem Definition:

The problem of creating a news headlines app in Android Studio can be broken down into several sub-problems which includes designing a user-friendly interface, fetching the latest news headlines from reputable sources, parsing the response and extracting relevant data, displaying the headlines in a user-friendly manner, personalizing the news content to the user's preferences and interests including features such as search, bookmarking, sharing, and notifications

Overall, creating a news headlines app in Android Studio requires a solid understanding of both design and development principles, as well as careful attention to detail and a willingness to iterate and improve the app over time.

Design Thinking:

Design thinking is a problem-solving approach that prioritizes empathy with users, creative brainstorming, and rapid prototyping to develop innovative solutions. However, designing headlines in Android Studio is more of a technical task that involves using the appropriate UI elements and programming logic.

In summary, designing headlines in Android Studio is a technical task that involves using appropriate UI elements and programming logic, rather than a design thinking problem-solving approach.

Empathize:

When designing headlines in Android Studio, it is important to put oneself in the shoes of their users and think about their needs and preferences. Empathy is a key aspect of design thinking that can help you create headlines that are not only visually appealing but also meaningful and impactful.

Once a developer has a clear understanding of their user’s needs and preferences, he/she can start designing headlines that resonate with them. Use typography, colors, and other design elements to create a visually appealing headline that draws attention and communicates the intended message.

Define:

Headlines in Android Studio are typically defined using the TextView component, which is a UI element that displays text on the screen. The TextView component can be customized to display text in a variety of font styles, sizes, and colors, and can be positioned and sized within the layout to suit your design needs.

Ideate:

Ideating headlines in Android Studio involves brainstorming and generating creative ideas for headlines that are relevant, engaging, and visually appealing.

When ideating headlines in Android Studio, it's important to keep the user's needs and preferences at the forefront of your design process. By generating creative ideas that resonate with your users, you can create headlines that not only capture their attention but also effectively communicate your message.

Prototype:

Prototyping headlines in Android Studio involves creating a visual representation of the headline design, including layout, typography, and color scheme. Try prototyping headlines in Android Studio, you can create a visual representation of your design that can be shared with stakeholders or tested with users.

This can help you refine your design and ensure that it effectively communicates your message while also meeting the needs and preferences of your target audience.

SYSTEM CONFIGURATION

HARDWARE REQUIREMENTS

PROCESSOR:11th Gen Intel(R) Core (TM) i5-1155G7 @2.50GHz

OPERATING SYSTEM: Windows 11 Home Single Language

RAM: 8.00GB

DISK SPACE: 2.00GB

GRAPHICS CARD: OpenGL 2.0

SOFTWARE REQUIREMENTS

Android Studio:

Android Studio is the official integrated development environment (IDE) for Android app development. It provides a comprehensive set of tools for designing, developing, testing, and deploying Android apps.

Java Development Kit (JDK):

Android apps are primarily written in Java programming language, so JDK is required to develop Android apps. Android Studio comes with a bundled version of JDK, but you can also install it separately.

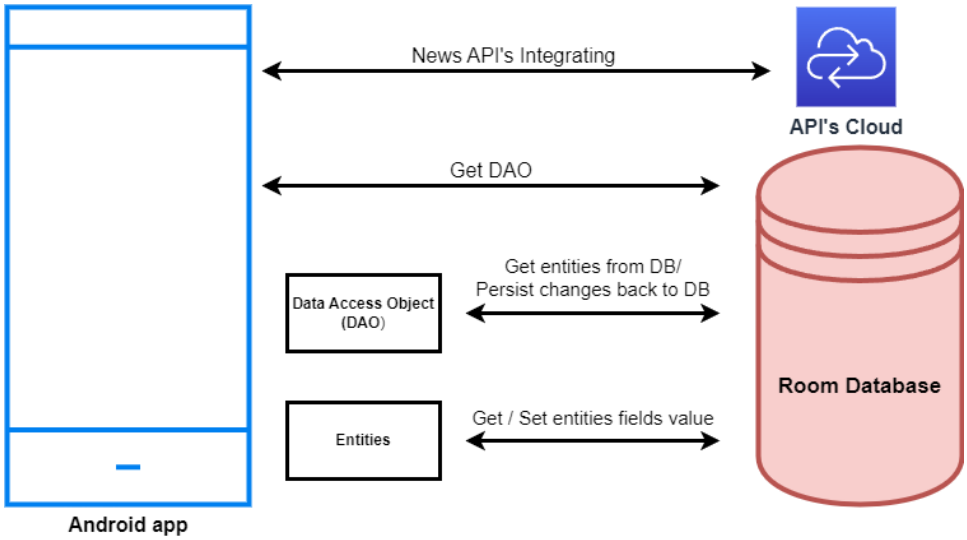
Android SDK:

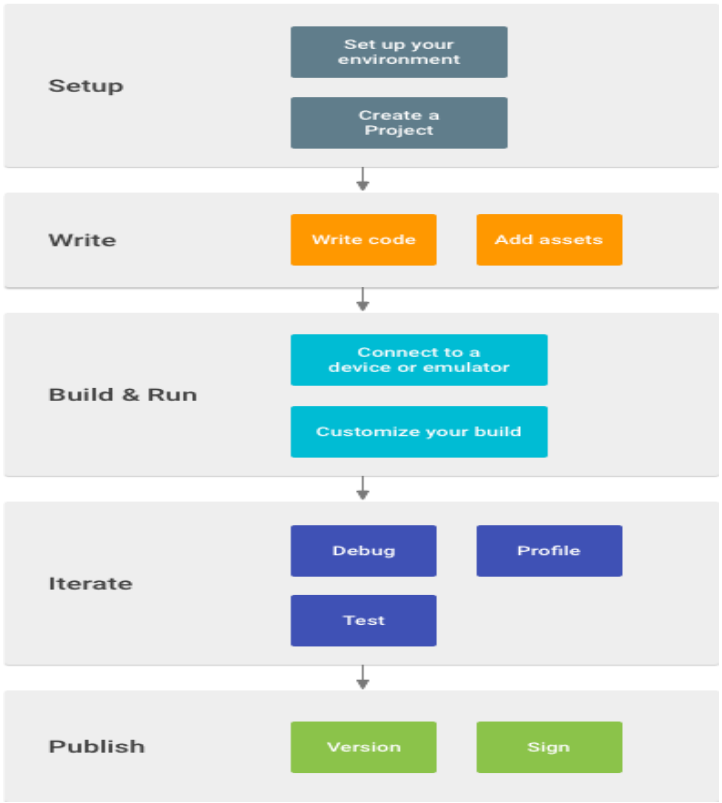
Android Software Development Kit (SDK) provides the necessary tools, APIs, and libraries required for Android app development. Android Studio comes with a bundled version of the SDK, but you can also download it separately.

Gradle:

Gradle is a build automation tool used for building, testing, and deploying Android apps. It is integrated with Android Studio and helps to manage. the app's dependencies, build configurations, and packaging.

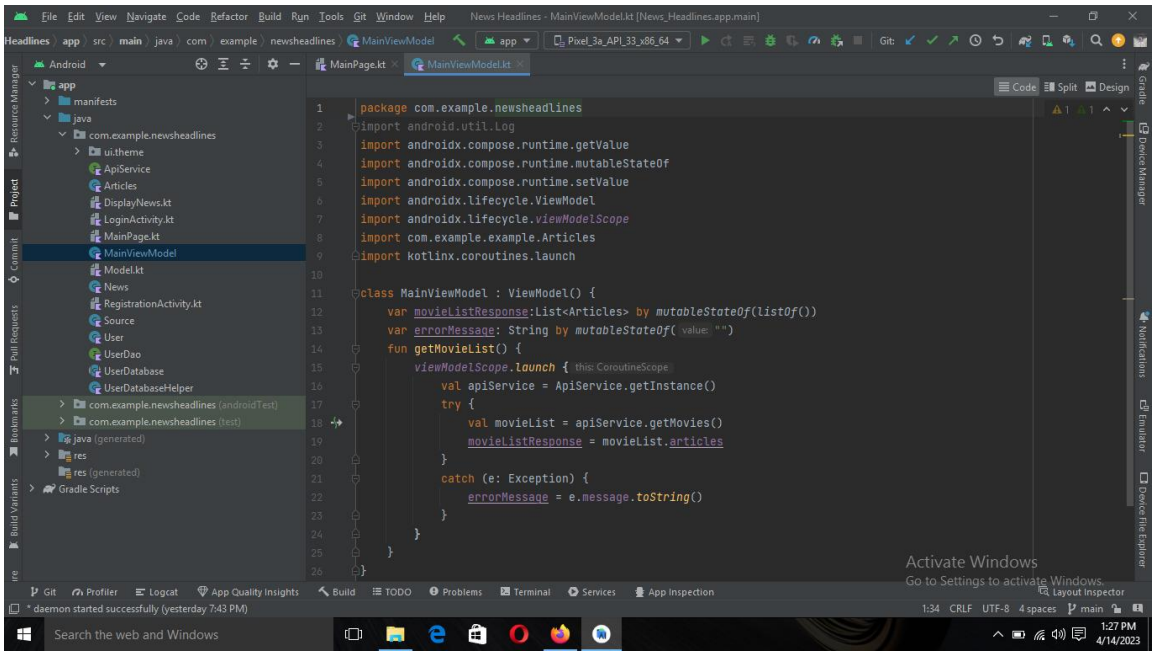
APPLICATION ARCHITECTURE





RESULT

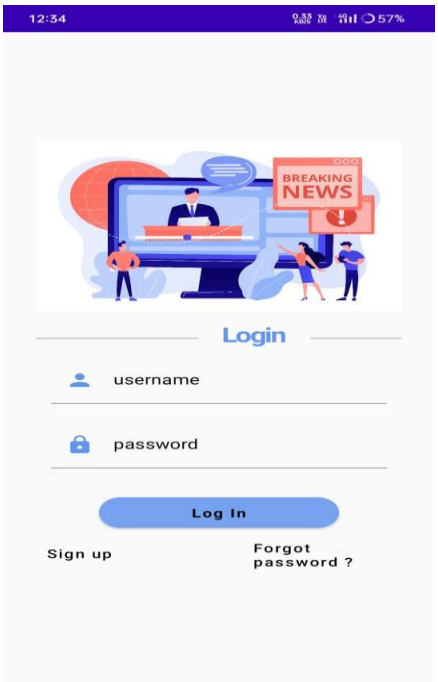
DATA MODEL:

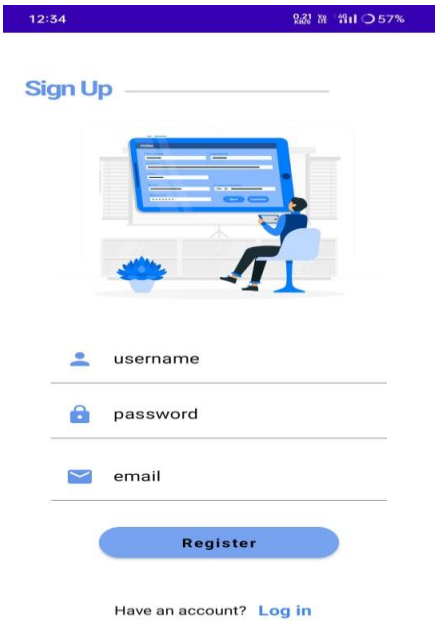


```
package com.example.newsheadlines
import android.util.Log
import androidx.compose.runtime.getValue
import androidx.compose.runtime.mutableStateOf
import androidx.compose.runtime.setValue
import androidx.lifecycle.ViewModel
import androidx.lifecycle.viewModelScope
import com.example.example.Articles
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()
            }
        }
    }
}
```

OUTPUT ACTIVITY:

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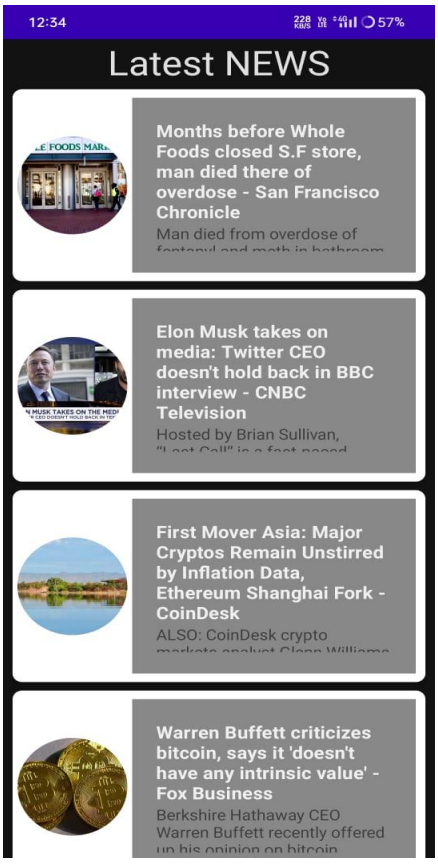
Sign Up
username
password
email
Register
Have an account? Log in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TEAM LEADER- URL

TEAM MEMBER 1- URL

TEAM MEMBER 2- URL

TEAM MEMBER 3- URL

ADVANTAGES OF HEADLINES

Headlines in Android Studio can provide several advantages for developers, including:

Improved Code Readability:

Headlines make it easier to understand the purpose of a block of code, function, or class. They help to separate different parts of code and provide a clear visual cue for developers to understand the context of the code.

Navigation:

Headlines can help developers navigate through large code files more quickly. They provide an outline of the file's structure, and clicking on a headline takes the developer to the corresponding code section.

Documentation:

Headlines can serve as documentation for the code. They can explain the functionality of the code and provide examples of how it can be used. This can be helpful for other developers who may be unfamiliar with the code.

Collaboration:

Headlines can be useful for collaborating with other developers. They can provide a way to communicate the intent of the code and make it easier for other developers to understand.

Overall, using headlines in Android Studio can help make code more readable, maintainable, and easier to collaborate on.

DISADVANTAGES OF HEADLINES

Here are some potential disadvantages of headlines application in Android Studio:

Headlines can quickly become outdated:

When developers write comments or headlines, they often describe what the code is doing at a specific point in time. However, as the code changes over time, the comments may no longer accurately describe what the code is doing, leading to confusion and potential errors.

Headlines can be misleading:

If the developer writing the comments or headlines doesn't fully understand the code, they may inadvertently write comments that are misleading or incorrect, leading to confusion for other developers who are working on the same code.

Headlines can be overused:

When developers use too many comments or headlines, it can make the code harder to read and understand, as the reader must constantly switch between reading the code and reading the comments.

Headlines can be underused:

On the other hand, if developers don't use comments or headlines at all, it can make the code harder to understand, especially for new developers who are not familiar with the codebase.

Headlines can distract from the code:

While headlines can be helpful in some cases, they can also be a distraction from the code itself, especially if the headlines are overly verbose or irrelevant.

In summary, while headlines can be useful in some cases, there are also potential disadvantages that developers should be aware of when deciding how and when to use them.

APPLICATIONS

Headlines can be used in various ways in an Android Studio project. Here are some possible applications:

Navigation:

Headlines can be used as clickable links that take the user to a specific section or activity within the app. This can improve the user experience by providing a clear and organized navigation structure.

List View:

Headlines can be used as headers in a list view to categorize and group items. For example, in a news app, headlines could be used to group articles by topic.

Notifications:

Headlines can be used in push notifications to grab the user's attention and provide a summary of the message. This can help increase user engagement and retention.

Splash Screen:

Headlines can be used in a splash screen to display the app's logo and name. This can help brand the app and make it more recognizable to users.

Search Results:

Headlines can be used in search results to highlight the most relevant results and provide a quick summary of the content. This can help users quickly find what they are looking for.

Overall, headlines can be a useful tool for organizing and presenting information in an Android app. By using headlines effectively, developers can improve the user experience and make their app more user-friendly.

CONCLUSION

In conclusion, headlines can play a crucial role in improving the user experience of an Android app developed using Android Studio. By using headlines in various parts of the app, such as navigation, list view, notifications, splash screen, and search results, developers can provide a clear and organized structure to the app's content. Headlines can also help to grab the user's attention and make the app more recognizable to users.

Overall, using headlines effectively can lead to increased user engagement, retention, and satisfaction. Therefore, it is important for developers to carefully consider the use of headlines in their Android Studio projects.

FUTURE SCOPE

The future scope of headlines in Android Studio is quite promising. As technology advances and user expectations increase, developers will continue to look for ways to improve the user experience of their apps. Headlines are a key tool in achieving this goal, and we can expect to see further developments in their use.

Here are some potential future applications of headlines in Android Studio:

Personalization:

As apps become more personalized, headlines can be tailored to individual users based on their preferences and behavior. This can provide a more personalized and relevant experience for users.

Voice Control:

With the increasing popularity of voice assistants, headlines can be used to provide a natural language interface to the app. This can make it easier for users to interact with the app and find the information they need.

Augmented Reality:

As augmented reality becomes more prevalent, headlines can be used to highlight and identify virtual objects in the real world. This can provide users with a more immersive and interactive experience.

Machine Learning:

With the help of machine learning algorithms, headlines can be used to predict user behavior and provide personalized recommendations. This can help to increase user engagement and satisfaction.

Overall, the future of headlines in Android Studio is bright, and we can expect to see further developments and innovations in their use in the years to come.