

News Android Application

Tejas Shah¹, Siddhi Shivale², Soham Katdare³, Omkar Bhoir⁴, Viraj Yadav⁵

¹Lecturer, Department of Computer Engineering, Vivekanand Education Society's Polytechnic Sindhi Society, Chembur, Mumbai - 400 071, India.

^{2,4,5,6}Student, Department of Computer Engineering, Vivekanand Education Society's Polytechnic Sindhi Society, Chembur, Mumbai - 400 071, India.

Abstract - As world's technology is rapidly growing, we've got fast connection and network to instantly hook up with another person. Day to day use in mobile, tablets and laptop is increasing, most of the people have already got these facilities. during this fast and data-oriented world we want to remain updated with every incident and news too. This News app is android mobile application where user has access to latest. the most focus of this application is to attach news articles from all round the world and deliver it to user as fast as possible in best visualize way. "Newsapi" provides API that returns JSON (JavaScript Object Notation) metadata for headlines and articles live all round the world at any time. during this app we are going to be using this API for our better experience. A module will be implemented where user will have different local news supported his location. there's no harm in using online news app as they supply better readability feature and film quality furthermore as faster update. All news is in hand of user and ofcourse convenient and simply accessible for them at anywhere they are going. This app allows users to flick thru news headlines for various categories like Top Stories, General, Business, Technology, Entertainment, and so on. Furthermore, the app lets users surf the news conditions.

Key Words: NewsHunt, Android app, API, Java, Firebase.

1. INTRODUCTION

Newspaper is one in every of the foremost popular and required assets of our daily lives. Today, magazines and newspapers aren't only sources of stories but social media is additionally in race. People spend most of the time on their mobile also having a glance into pandemic situation following safety measures rather than buying and manually reading newspapers they like to be updated digitally through news apps. News apps are among the foremost popular app categories. in keeping with Statista, 41% of mobile user's digital time is devoted to news apps. News websites often blast users with information overload like stories, images, videos, ads, pop-ups. this is often a frustrating experience for website visitors. News apps, by their nature, push you to be very savvy with the small manoeuvring space you have got. Hence there must be a platform through which each and every individual gets to grasp about this thing happening around. News Apps are the simplest platform for this. This easily helps the users to share news on various platforms like Twitter, WhatsApp and Face book. NewsHunt App is one such

app. This app provides the highest news from the complete world from 120+ newspapers like Times of India, Hindustan times, additionally because the information about the local magazines. during this app we are going to be using API (Application Program Interface). An API may be a connection between computers or between computer programs. An ADP system that meets this standard is alleged to implement or expose an API. The term API may refer either to the specification or to the implementation. it's a kind of software interface, offering a service to other pieces of software for our better experience. there's no harm during this as online apps provide better readability feature and movie quality further as faster update. All news is in hand of user and ofcourse convenient and simply accessible for them at anywhere they're going. Even after using this API, it's possible that we will's reach maximum output of resources for that we can use Admin panel where admin or writers can add news of their own, manage and delete it.

2. Literature Survey

NEWSHUNT may be a news application which provides the data about news everywhere the planet. The news about Health, Sports, International news, Political, Business, Science, Technology, forecast, etc. The fundamental concept of this App is to produce relevant news from everywhere the planet in an efficient using digital technology thanks to people. Undoubtedly Newspaper have always been a vital source from the past to supply worldwide information to people. The India gazette, The Calcutta times, The Indian mirror various News App have already been developed within the past for like Daily Hunt, InShorts, AajTak, etc. to present the simplest of knowledge using the digital platform.

Online Videos at Newspaper Websites: A Literature Review – N Hallgren, M Nylund - The journal of media innovations, 2018. the aim of this text is to produce an outline of research in online video on newspapers' websites. The article identifies variety of relevant issues in production and business models and presents research results concerning the assembly and consumption. Electronic newspaper and its adopters: examining the factors influencing the adoption of electronic newspapers in Taiwan This study used Rogers' diffusion of innovation model to look at the factors that influence the adoption of electronic newspapers in Taiwan. Four factors were identified from the literature review as having significant effects on the adoption of electronic newspapers, and therefore the four factors are technology ownership, innovativeness, demographic composition, and mass media use.

A telephone survey with a probability sampling was conducted to gather data for this study. This study obtained 1006 valid respondents. Many new news apps and websites like daily hunt, inshort, google news etc. were developed. Our app is somewhat kind of like these apps. The issues that folks have like ongoing news, illiteracy, barrier, no platform to extend knowledge, no platform to urge information about other country's economy will get overcome. Our app will have a user-friendly interface and features like 24/7 daily headline updates, browse news categories, social integration for sharing news, online access for news, etc. The scope of our app won't be limited to India but its scope is of the full world. All types of people like business man, reporter and native people are ready to use the app, just like the news and also share the news.

3. Experimental Setup

For this project Java programming language is going to be used and can be built using Android Studio. For the database we are going to be using Firebase to store user details and item information. And for outsource we are going to be using API. Their short information is noted below:

- **Application Programming Interface (API):** An application programming interface (API) may be a connection between computers or between computer programs. It's a sort of software interface, offering a service to other pieces of software. A document or standard that describes a way to build or use such a connection or interface is named an API specification. An ADPS that meets this standard is alleged to implement or expose an API. The term API may refer either to the specification or to the implementation. In contrast to a computer program, which connects a computer to someone, an application programming interface connects computers or pieces of software to every other.

- **Android Studio:** Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains IntelliJ IDEA software and designed specifically for Android development. It's available for download on Windows, macOS and Linux based operating systems or as a subscription-based service in 2020. It's a replacement for the Eclipse Android Development Tools (E-ADT) because the primary IDE for native Android application development.

- **Java programming language:** Java artificial language is employed to create this application. The aim of this study is to introduce the characteristics of procedure-based and object-oriented language. It also shows the performance between these two programming languages. It tests only basic operations over the opposite concepts and not contains complex operations. They calculate runtime performance of various OOP and procedure-based operations using C++. The goal of this research is to make a business application for comparisons of programming languages.

- **Firebase database:** The Firebase Realtime Database could be a cloud-hosted database. Data is stored as JSON and synchronized in Realtime to each connected client. After we build cross-platform apps with our Apple platforms, Android, and JavaScript SDKs, all of your clients share one Realtime Database instance and automatically receive updates with the most recent data. The Realtime Database provides a versatile,

expression-based rules language, called Firebase Realtime Database Security Rules, to define how your data should be structured and when data are often read from or written to. When integrated with Firebase Authentication, developers can define who has access to what data, and the way they will access it.

TABLE 1

Hardware requirements.

Sr No.	Name of equipment	Specification
1	Computer system	8GB ram or above, 8GB of available disk space, Processor i5 or above, Any Operating System.
2	Keyboard	-
3	Mouse	-

TABLE 2

Software Requirements.

Sr No.	Name of equipment	Specification
1	Windows	Windows 8 or above
2	Android Studio	-

4. Modeling and Analysis

- Data flow diagram

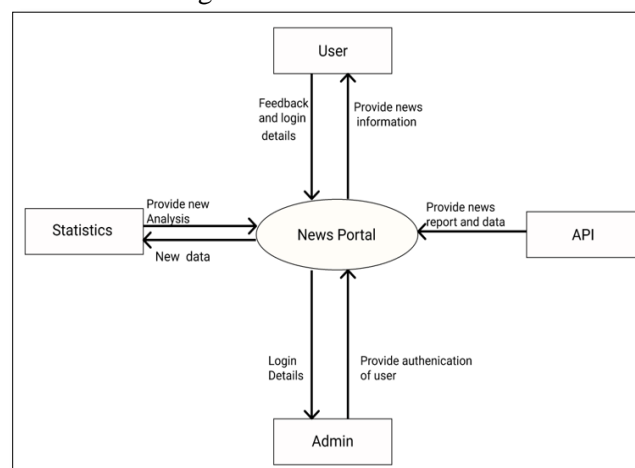


Fig. 1 DFD Level 0

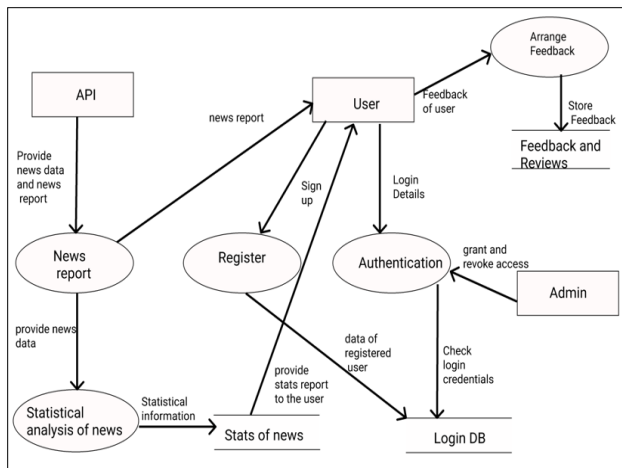


Fig. 2 DFD level 1

• Use case diagram

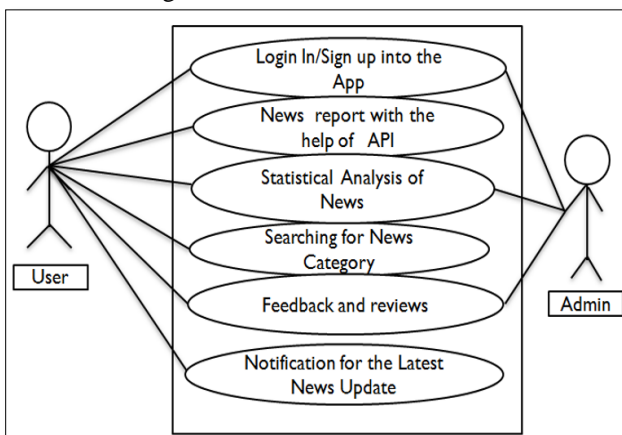


Fig. 3 Use case diagram

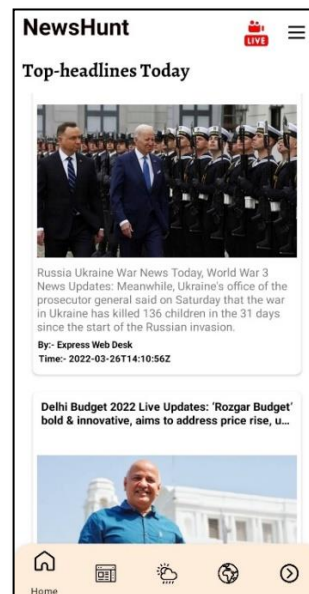
• The algorithm for main page: -

- Start i.e. open the app.
- Now at first home page will appear in which news will be displayed and there will be bottom and top menu bar
- In bottom menu bar options will be weather, word news, category wise news, top news, etc. and at top option will be live shows, login/ sign up and rate us and share app, etc.
- In the option of category wise news categories will be sports, health, science, entertainment, politics, business and technology.

• The algorithm for login/signup page

- Click on login/signup button
- If user already having account, he or she can login by entering email or mobile no and password otherwise he or she needs to sign up by entering email id mobile no and password then user will successfully sign in.
- While logging in if user enters valid id and password then he/ she will able to navigate to the home page otherwise it will through error that please enter correct credentials.

5. User Interface



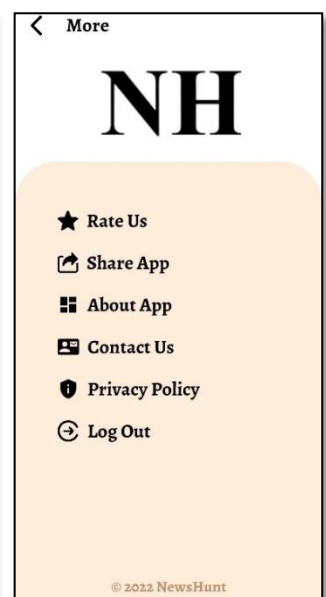
Home page



Live News Page



Category wise News Page



Settings

6. Future Scope

This app will have a lot of scope in present as well as in future as news applications are something that can never get outdated and work upon the business. Whether it be a common person or a wealthy person, everyone needs to start their day by reading news in a convenient way and these apps may help for the same as well as faster access too. In the future, further updates, we would add some more features for managing your account.

- **Scope:** All Current News across the World.
- All Category (sports, business, politics, health, etc) wise news
- Country wise news
- Top trending news

7. Conclusion

- From the research we understood that, people are moving more towards reading news via application, as it saves time of going and buying the newspapers physically and much faster than searching from the different websites. This application can be used by: -
- Used by Journalist and Columnist to write Articles.
- Used by Economist.
- A businessman can learn about the trends of the market and a job seeker can find a suitable job from job advertisements.
- It provides valuable and essential information to the public such as the weather forecasts, criticism and reviews of literature, films, fine arts and local restaurants, obituaries and birth notices.
- Many news apps also help in awakening health and environmental awareness among the people.
- It also serves as a source of entertainment with its features such as crosswords, fun facts, horoscope, comic strips, advice columns, food columns, celebrity gossip and more.
- Apart from this, newspapers have great educative value. They keep us updated about various happenings around the world and thus improve our general knowledge.

[6] Reviewed peoples problem <https://www.quora.com/What-problems-does-a-user-face-when-reading-news-online>

[7] Referred news apps: Dailyhunt, inshorts.etc

ACKNOWLEDGEMENT

We would like to thank and express our gratitude to all those who contributed and supported us to plan our project smoothly and successfully.

Firstly, we would like to thank Mr. Sanjay Wankhade I/C. Head of Department, Computer Engineering of V.E.S. Polytechnic, for their guidance. We are whole-heartedly thankful to them for giving us their valuable time and

knowledge to make us understand the planning process and hence providing a systemic planning of our project in time.

We would like to our project guide Mr. Tejas Shah under whose guidance, we could learn many things. Not just this, they motivated us and strengthened our confidence in the entire planning process. We express our immense gratitude for their constant guidance and valuables suggestions which

made us complete the planning of our project successfully. Their guidance and pattern of teaching made us capable enough to plan the project systematically and efficiently.

We would also want to extend our gratitude to all the faculty members who have not just been a constant source of support, but also encourages us for timely completion of assigned planning activity.

Lastly, we would like to acknowledge our classmates, who have also provided us with every possible support and learning to plan our project efficiently.

REFERENCES

1. [1] J. F. Di-Marzio, Beginning Android Programming with Android Studio, 2015.

Accessed on: 6 October 2016

[2] Herbert Schildt, Java: The Complete Reference, Eleventh Edition. Accessed on: 21 November 2018

[3] Gerard Blokdyk, Application Programmin Interface: Implement, Administer,

Manage Paperback Accessed on : 21 November 2017

[4] <https://indianexpress.com>

[5] <https://m.dailyhunt.in/new>