PUBLIC NEWS DROID: A local news app

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Abstract: This result paper introduces Public News Droid, an advanced system designed for users to stay informed about the latest local news and events. The framework differentiates between user and administrator functionalities, allowing users to contribute city-specific news while the administrator monitors and rectifies any misuse or fake news. Employing Android Studio for the front end and SQLite Server for the back end, the system mandates user registration for personalized usage, facilitating not only news consumption but also profile updates. The news feed, organized chronologically with a 450-word limit per entry and the option to include images, ensures a dynamic and engaging experience. User-friendly features, such as swipe navigation and appealing visuals, enhance the overall news-reading experience. The administrator's role includes content moderation to maintain platform integrity. This system amalgamates effective content curation with a visually stimulating interface, providing a reliable and enjoyable platform for staying updated on local news.

Keywords: Android Studio, SQLite server, news feed, chronological.

I.INTRODUCTION:

Our news application stands as a explorer in developing technology to improve the news consumption experience, catering to the changing needs of today's users. The Android Studio-driven front-end not only ensures a visually appealing interface but also prioritizes user-friendly functionalities. With features like swipe navigation, the platform encourages an intuitive exploration of news content, creating an engaging and interactive space. The SQLite Server-backed back-end not only ensures the reliability and scalability of the system but also facilitates seamless data management, allowing for a vast repository of localized news and events. This robust infrastructure forms the backbone of a dynamic ecosystem where users not only passively consume information but actively help to the narrative, fostering a sense of community and shared responsibility for news accuracy. User registration, a pivotal component, not only grants access to personalized news but also opens avenues for social interactions. Users can connect with like-minded individuals, discuss news topics, and build a network centered around shared interests. This social dimension transforms this app from a mere news platform to a dynamic community hub. The platform's commitment to inclusivity is reflected in its news feed organization, which chronicles events in a clear and concise manner. The 450-word limit encourages succinct yet informative storytelling, while the option to include images adds a visual layer to the narrative. This multi-dimensional approach ensures that users receive not just news updates but a comprehensive understanding of the events shaping their local landscape. Administrators play a pivotal role in maintaining the platform's credibility through rigorous content moderation. This approach not only safeguards against misinformation but also establishes Public News Droid as a trusted source for reliable and up-to-date information. By combining cutting-edge technology, user-centric design, and a commitment to community engagement, Public News Droid emerges as a transformative force in the realm of news dissemination, redefining how individuals interact with and contribute to their local news ecosystem.

II. LITERATURE REVIEW

"Places for News" is a qualitative study on how contextual factors influence mobile news consumption. It identifies triggers, positive/negative factors, and barriers, revealing that news consumption is opportunistic and context-driven. The research on papers suggests practical implications for context-aware news apps but acknowledges methodological limitations [7]. There is a unified solution for mobile news apps, combining temporal, locational, and preferential data to recommend personalized news articles. They find that existing recommendation techniques are insufficient individually.

Future plans include event and entity news views, online/offline evaluations, addressing information overload, and enhancing user engagement [2]. "Habits and Smartphone Use" studies how smartphones shape daily routines, focusing on frequent checking behaviors triggered by external cues. These habits, rewarding users with social networking and news, can lead to increased phone usage and potential addictive tendencies [4]. This paper recognizes news reading patterns and tested three adaptive interface designs for different reader types. This analysis identified three distinct reader categories, each requiring specific interface designs and there is a method to monitor user behavior and determine their reader type [1]. Another study on how contextual factors influence news consumption on mobile devices. Participants recorded their news activities using a diary and interviews. The study identified various circumstantial factors that current news delivery technologies do not consider, categorizing them into triggers, positive/negative factors, and barriers. These findings could improve future context-aware news technologies .

III. IMPLEMENTATION

3.1 Requirements

To effectively run the required software such as Windows XP or Windows 7 (Ultimate, Enterprise editions) along with Android Studio for development purposes, the hardware components should meet certain specifications, including at least an Intel i3 processor for smooth performance, a minimum of 5 GB of available hard disk space to accommodate the software installations and related files, 1 GB of RAM to ensure efficient multitasking and operation of the development environment, and an Android phone running KitKat or a newer version to facilitate testing and deployment of Android applications developed using Android Studio.

3.2 Workflow

The system features a comprehensive user registration process where it asks individuals to provide their registration details, including their name, email address, username, and password, in order to create an account within the application. This registration step serves as a gateway for users to access the system's functionalities. Upon successfully registering, users can then log in to the system using their unique credentials, namely their username and password. Once logged in, the system maintains the user's session, ensuring that they remain logged in until they actively choose to log out. This seamless login experience saves users valuable time and eliminates the need for repetitive login attempts during a single browsing session. One of the main features available to user’s post-login is the method to add news content to the system. This process mainly involves creating new news entries, in which users can specify the city or locality relevant to the news being added.

Additionally, users have the option to enhance their news entries by uploading related pictures, providing a visual context to the news articles they contribute. The main application of this system is user can contribute to the application which is users can also leverage the system to stay informed by accessing and viewing news articles related to specific city or locality they have selected, ensuring that they receive relevant and localized news updates. Furthermore, the system includes a feature that lets users to review a list of news articles they have added, providing them with access into their contributions to the platform. This list may also display any actions taken by the system administrator, such as approvals, rejections, or edits, regarding the news articles submitted by the user. Additionally, users are empowered to report any news articles that they perceive as false, misleading, or offensive to the system's administrator for review and action. Upon receiving a report, the administrator thoroughly evaluates the reported news article and takes appropriate actions, which include removing the article, issuing warnings, or engaging with the user for further clarification. This reporting mechanism plays a crucial role in maintaining the accuracy and integrity of the news content hosted within the system, ensuring a trustworthy and reliable user experience. The login functionality designed for administrators serves as a pivotal access point to the system's backend, enabling them to effectively monitor and manage news articles and reports submitted by users. Upon logging into the system using their authorized credentials, administrators gain access to a range of features crucial for maintaining the integrity and quality of the news content hosted on the platform. Admin login is essential for overseeing and taking appropriate actions based on the user-generated content within the system. The "View News" feature empowers administrators to comprehensively survey all news articles across various cities or localities. This panoramic view allows admins to stay informed about the breadth and diversity of news content being published on the platform, facilitating a nuanced understanding of the information landscape and potential areas that may require attention or moderation. Similarly, the "Report" functionality equips administrators with the tools necessary to monitor any news articles that have been flagged or reported by users. Admins are entrusted with the responsibility of cross-checking reported news items to verify their accuracy, relevance, and adherence to the platform's guidelines and standards. This feature serves as a safeguard against misinformation, ensuring that contentious or questionable news content is promptly addressed and addressed accordingly. In instances where news articles contain offensive, abusive, or inappropriate language, and if it is

valid and contains proof then administrators have the authority to take decisive action through the "Approved post" feature. This includes the ability to either delete the news article entirely from the platform or modify its content to match the platform's policies and community guidelines. By exercising these actions, administrators play an important role in upholding the platform's standards of ethics, professionalism, and user safety, thereby fostering a conducive environment for meaningful and responsible news sharing. In essence, the login, view news, view reports, and action taken functionalities collectively empower administrators to actively engage in the oversight, moderation, and maintenance of news content within the system, contributing to a trustworthy and reputable platform for both users and stakeholders alike.

3.3 Use Case Diagram

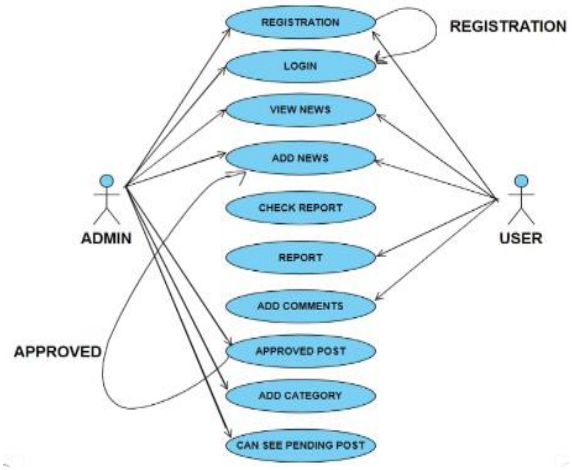

Fig 3.1 Use case diagram

The above use-case diagram shows how our app functions, this allows users to register, log in, and access news articles related to their chosen city or locality. Users can view and repost on articles and also contribute their own news content. Admins monitor and moderate user contributions for quality control. The app offers search and personalization features, sends notifications, and allows users to customize settings and profiles. Periodic updates keep the app fresh and engaging. [5] discussed that using wireless technologies like Wi-Fi or WiMAX, a VANET enables communication between and among moving vehicles as well as Road Side Units. As VANETs develop, their potential uses will increase. As well as safety apps, it is expected that automobiles will be able to run entertainment apps like those that allow passengers to share media or connect to the internet while on the go. Most of the time, this is what causes your mobile data plan to go over. [6] discussed about a project, In this paper the Nymble system add a layer of accountability to any publicly known anonymizing network is proposed. Servers can blacklist misbehaving users while maintaining their privacy, and this system shows that how these properties can be attained in a way that is practical, efficient, and sensitive to the needs of both users and services.

IV. RESULTS

Fig 4.1 user register/Login page

Fig 4.2 admin login

Figures 4.1 and 4.2 demonstrate the separate apps and both apps has its own login page developed for user and admin.

Fig 4.3 user home page

Fig 4.4 admin home page

Figures 4.3 and 4.4 shows the home page of user and admin, where the home page of user consists of the news he posted and all news. Meanwhile the admin's home page has all news and reported news.

Fig 4.5 news display

Figure 4.5 shows the news display which is posted by the user or admin and at the right top there is button to report the news if it fake or violating society norms.

V. FUTURE WORK

The idea of a "Public News Droid" envisions a time when robotics and artificial intelligence will be major factors in the public's access to news and information. Although this idea may still be purely theoretical, there are a few possible paths we can see for the creation and application of Public News Droids:

1. News Reporting: Press releases, social media sites, and internet news websites are just a few of the places Public News Droids can be configured to obtain news from. By compiling and condensing this data into succinct news reports, they could do away with the necessity for human journalists to handle repetitive duties like data collection and preliminary drafting.

2. Real-time Reporting: Public News Droids, outfitted with cutting-edge cameras and sensors, could be sent to the scene of breaking news events to deliver coverage in real time. They could send news organizations live video feeds and updates directly, enabling them to cover events as they happen without endangering human reporters.

3. Multimedia Content Creation: Using the data they collect, Public News Droids could produce multimedia content like articles, videos, and infographics.

4. Localization and Personalization: News content on Public News Droids could be customized based on user interests and preferences. Through the examination of users' browsing history, social media interactions, and demographic data, they could provide tailored news

5. Fact-Checking and Verification: By automatically fact-checking news stories and social media posts, Public News Droids can be used to fight false information and fake news. They could check material against reliable sources and highlight any differences or inconsistencies using machine learning methods.

6. Language Translation: Public News Droids could make it easier for news organizations to efficiently reach a worldwide audience by translating their information into numerous languages. They could generate precise translations instantly by utilizing machine translation and natural language processing techniques.

7. Accessibility Features: To improve news material accessibility for people with disabilities, Public News Droids could be built with accessibility features. For visually challenged users, they could provide audio descriptions of visual content; for hearing-impaired users, they could produce text-to-speech versions of news stories.

8. Community Involvement: Public News Droids may function as a forum for community involvement, enabling users to participate with news articles via surveys, polls, and comments. They might also encourage user community by facilitating talks and debates about current affairs.

All things considered, Public News Droids' future work has the potential to completely transform the way that news is obtained, reported, and consumed by making it more dependable, individualized, and accessible for audiences everywhere.

To make sure that these technologies are used properly and in the public interest, it is crucial to address ethical and regulatory issues.

VI. CONCLUSION

To sum up, the idea of Public News Droids is an intriguing fusion of robotics, artificial intelligence, and journalism that has the potential to completely transform how news is obtained, disseminated, and enjoyed. With the potential to automate everything from data collection and content generation to fact-checking and distribution, these smart machines might improve accessibility and provide real-time reporting as well as personalized news delivery. Nonetheless, there are significant ethical, social, and legal issues that are brought up by the creation and application of Public News Droids. To preserve the public's confidence and the integrity of journalism, it is crucial that they uphold accountability, transparency, and accuracy in their operations. To reduce any possible harm to society, it is also essential to address issues with employment displacement, privacy, bias, and the consolidation of media dominance. As with any new technology, the Public News Droid project's success will hinge on how well technologists, journalists, legislators, and the general public work together to appropriately address these issues. We can work towards a future where news distribution is more effective, inclusive, and reliable by utilizing Public News Droids' potential while resolving these issues, which would eventually benefit society as a whole.

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