Literature Survey

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Team ID	PNT2022TMID27972
Project Name	Project – News Tracker App
Maximum Marks	4 Marks

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Domain Name: Cloud Application Development

Use case Name: News Tracker Application

Fig. Our BBC-mimic mobile news app

ABSTRACT:

As news is increasingly accessed on smartphones and tablets, the need for personalizing news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviors; analysis revealed three primary types of reader. We then implemented and deployed an Android news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognize a user according to their reader type. Finally, we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps.

INTRODUCTION:

Mobile app ecosystems are transforming patterns of news consumption. Until quite recently, reading the news was a niche use for smartphones, mostly for when users were 'on the go' now however, two in every three users of mobile devices in the US regularly access news and as many as one in five read in-depth news articles daily a similar picture is found in the UK. This growth in mobile news access continues the migration of news consumers to the Internet. Mobile news access perfectly complements the continuously updating, 24-hour nature of digital news services. But if users are now never out of range of the news, they need more than ever for that access to be adaptive and personalized.

Personalized news services are already able to help people find news that is relevant to them, to recommend the right news to the right users, and to help users keep abreast of news by aggregation over multiple sources. This adaptivity is achieved through several methods [5] including: news content personalization by pushing filtered articles predicted to match the user's interests; adaptive news browsing by changing the order of news categories; contextual news access by offering users access to additional information related to the news they are reading; and news aggregation, by automatically identifying main news topics emerging from multiple sources.

LITERATURE SURVEY:

According to our recent research we found out that there are various news web applications that are restricted for single language and also, they all provide news from a single source. Examples are BBC, CNN or other local news channels like AajTak, TV9 Telugu etc. provide news in their regional languages or by default English language. These articles cannot be read by users of other countries. As per InternetWorldStats, there is a huge ratio of people accessing the internet in other languages which increases the need for content to be available in different languages.

The presence of new media is a challenge to conventional media, especially the printed newspaper. As per the research US newspaper industry is through what could be its worst crisis since the great depression due to new media. Print media seem to be losing young readers simply because they want news on demand, and to control and customize content, time and the medium itself. In India print media are flourishing. Reading behavior of online news readers from print media: Reading a newspaper is something they do with pleasure and sometime during breakfast, in a break Dier lunch, on the train or in the subway. In contrast, reading an online newspaper is something you do in much shorter breaks, perhaps between two emails, usually in the early morning, or during lunch. Online readers make brief visits to the news sites several times a day with the expectation of obtaining a quick overview over the latest events.

As per the study Westlund and Fardigh online news has acquired a stronger position among users over time, gender has the strongest complementing as men are distinguished users of both print and online news. In some research, researchers discussed the newspaper and the online news site being complementing and displacing when they serve needs. One research shows that youths feel, news sites serve the same needs as newspapers. A study suggests that old patterns of news still prevail and that the best predictors of frequency and sophisticated use of the Internet are young age, high income, and high level of education. In a recent study, "Is Print Really Dying. The State of Print Media Use in Europe" finds that print media is still an important media in the new communications environment among European audiences. His research attempts to investigate the online newspapers popularity, frequency of the Internet usage for online news and what kind of news readers prefer. He gap is a considerable issue for the betterment of the online media. Why do online news readers are growing. His is the main purpose of this research project.

As per the previous studies online news readers are growing rapidly. Questionnaires were distributed through the internet, using erecourses (e-mail, Facebook, Twitter, and blog) without knowing the gender of respondents. He Table 1 shows the displacement of online newspapers is very low in India. Only 10 percent of the respondents have stopped reading the traditional media (newspapers). While majority (90 percent) of online news consumers is using traditional media for the news, interestingly women respondents are reading both the medium higher (4 percent) than men respondent.

EXISTING SYSTEM:

Most of the people get the information about the world news through the internet, which is fast accessible and reliable. People have no time to be updated through Newspaper or watching news in the television, so different web applications have introduced to provide news across theworld. English is a global language the most commonlyspoken language in the world – used in every sector from business to social media, from sciences to the arts, from sports to international trades. So, most of the news applications from all over the world serve the live news to the users in English language only. Few applications serve the news from single source & websites are restricted to provide news in local language.

- These applications Fetch the news from single source
- Few applications publish articles only from one particular country & the language supported is only English.
- Foreigners who have difficulty reading English or who cannot understand English will not be aware of the current situations in the local country or around the world.
- It is difficult for the users to find required news updates in different languages from different sources in a single web application

RELATED WORK

Native news apps are expensive and difficult to maintain.Native Publishers like BBC News or NY Times uses their ownwriters to manage articles and manage it. Many native newspapers are divided because of this which causes in lack of resources from one side. Android structure provides great capability with frameworks, libraries and APIs, with the help of it we can provide better user experience and combine these sources at one place while maintaining integrity of its owner. “Newsapi” provides API that returns JSON (JavaScript Object Notation) metadata for headlines and articles live all around theworld at any time. In this app we will be using this API forour better experience. Even after using this API, it is possible that we can’t 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

USECASE DIAGRAM:

Use Case Diagrams referred as behavior diagram which describes the commutation between actors or participations andset of actions. This is set of actions or use cases will be enclosed by system boundary and can also have relation with each other.Division among tupelos will based on the information gain computed for each attribute.

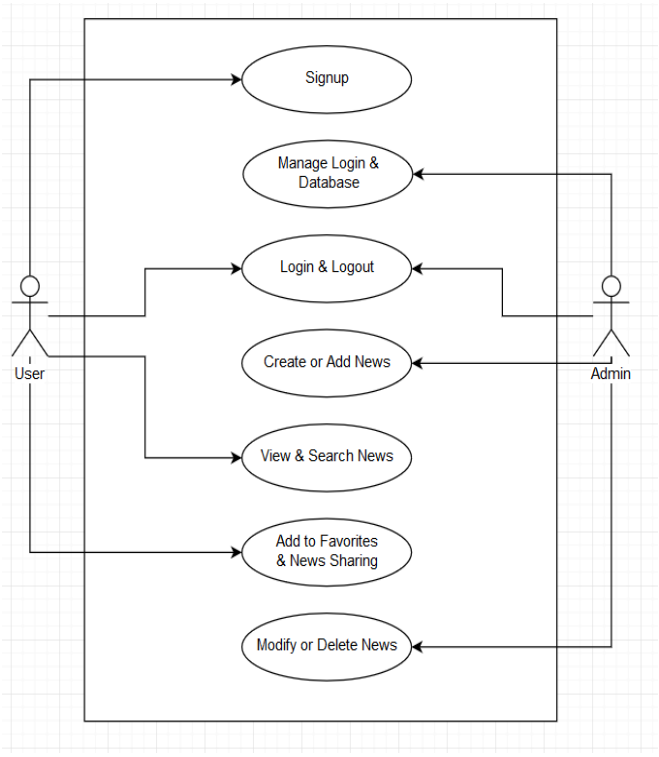


Figure 1: Use Case Diagram

MODULES:

USER INTERFACE:

One of the factors in successful news app development is visualization of news and its feature with user. For the development of an android app material design is very useful and provides smooth experience with custom layout, views and animations. For this news app user should be able to select from different categories, countries and newspaper. Short News as list view with header, little description and image before showing full article can be helpful to user to determine what type of news they are looking for. View Holder can be used for this list view for better and fast experience. Library like Picasso can be used for better image handling.

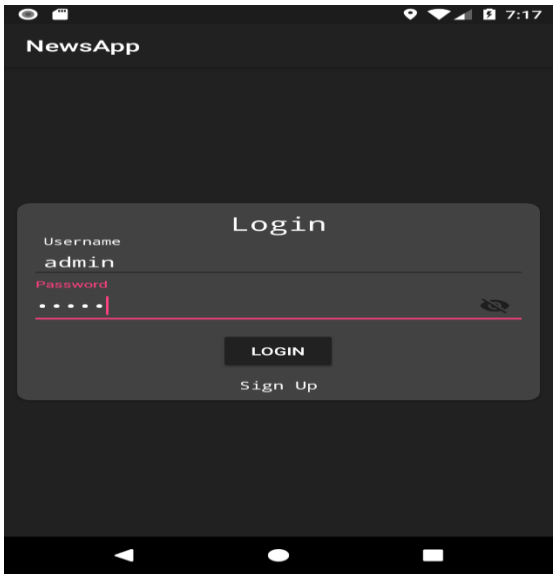
This User interface will be connected to API and Admin Panel database which will give full article in form of web view of that article. Because of this structure the integrity of writer of that article will not be in harm.

API:

News API has been used for collecting different news sources at one spot. On sending request it will give response in JSON format which contains source id, title, description, image URL, article URL, author, time etc. We need to handle and parse this JSON into string format which is our required format.

ADMIN PANEL:

This module of app controls the User and Writers logins from database. Writers can add news, update and delete from its database as per required. Writers will only has access to admin panel while Main Admin will has access to database as well.



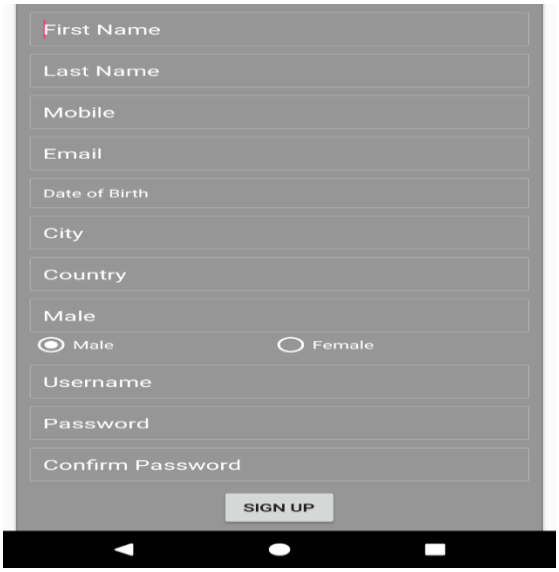


Figure 2: Main Login page & Sign Up

First User needto Sign Up in order to access the application which provides security for this application. Also predicted user error handling with pop-up messaging was done before this experiment like entering invalid data in fields, not selecting a field before clicking on action button etc. The result will be shown in formof screen shots below.

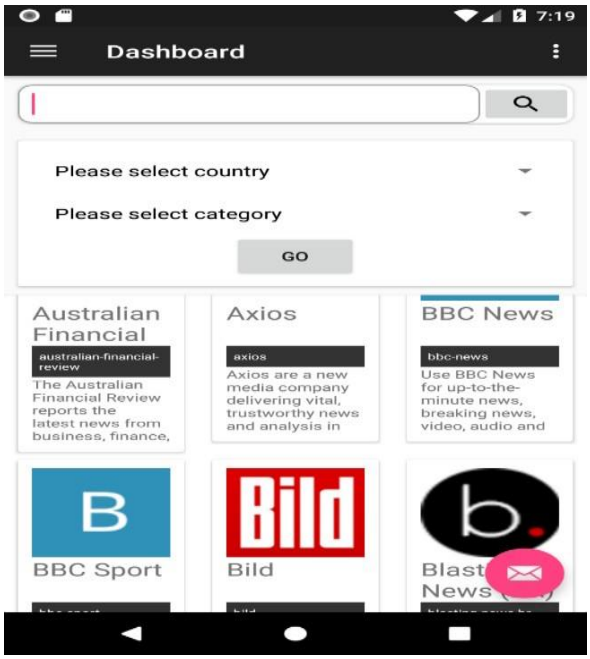


Figure 3: Main Dashboard page

Figure 4: News Display as in List and Web View

AVAILABLE FEATURES:

Global Support: Different type of newspaper will be available from all around the world in different languages with this userwill be able to get news from all around the world.

Short News: News will be displayed in short format with title,image and little description in list view. It will help user to access required news faster.

Search Option: User will be able to search from not only one source but many different sources available within API.

Favourites / Offline Reading: News can be added as favoriteswhich will automatically will be saved for offline reading.

Sharing: User will be able to share news easily on social media.

EXPERIMENTAL STUDY AND RESULT

User was allowed to use this application in his smartphone andscreenshots were taken as a result for this study. First User needto Sign Up in order to access the application which provides security for this application. Also predicted user error handlingwith pop-up messaging was done before this experiment like entering invalid data in fields, not selecting a field before clicking on action button etc. The result will be shown in formof screen shots below.

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