

NEWS TRACKER APPLICATION

USING CLOUD

A Project report submitted in partial fulfilment of 7th semester in degree Of

BACHELOR OF ENGINEERING
IN

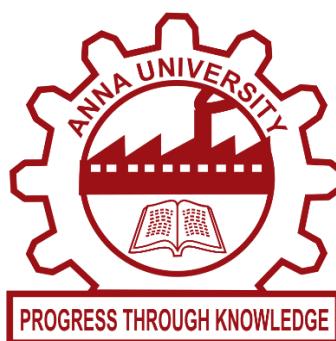
COMPUTER SCIENCE AND ENGINEERING

Submitted By

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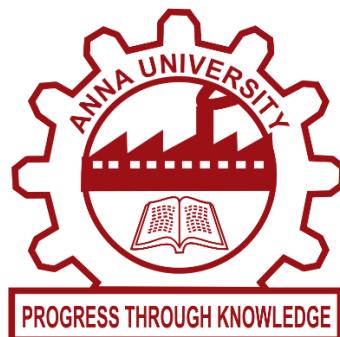
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(Approved by AICTE & Affiliated by Anna University, Chennai)



BONAFIDE CERTIFICATE

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ABSTRACT

This paper adds to the overall understanding of new media adoption in general and the promotion of the e-newspaper in particular by empirically studying the preferences and demands of the potential users. The e-newspaper is a newspaper published on e-paper technology. The findings in this paper is based on the results from two studies, i.e. an online questionnaire with 3626 respondents and an evaluation in real life settings with 10 families over a two week period. Our initial hypothesis was that: users confronted with a vision of new technology and services are more positive to adopt than users with actual use experience of technology and services in an early stage of development with inherent technology problems. The research question of the paper is: How does use experience influence perceptions of preferences and demands for the e-newspaper? The findings showed that the hypothesis proved to be false, the test persons that have an actual use experience of the e-newspaper, despite the shortcomings in the device and service, were more positive to adopt than the respondents that have experienced concept movies and prototypes with more advanced functionality and interface.

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NEWS TRACKER APPLICATION

1. INTRODUCTION:

A news application is a big interactive database that tells a news story. Think of it like you would any other piece of journalism. It just uses software instead of words and pictures. Once a user has opted-in to receive push notifications, they can receive updates for breaking news and essential stories immediately, operating as a 24-hour news service directly to a user's device. Push notifications can also be personalized to ensure that users are only alerted to stories relevant to their interest. News hub is an android application developed to keep in mind the preference the particular news is displayed by taking the priority. This application makes available news in one place and user doesn't have to search the news of his preference again and again. News and other informatics articles published

periodically are the contents of a newspaper. Publishing newspaper online as well as in print is the most common trend these days. Online newspapers or the news sites are the online version.

1.1 PROJECT OVERVIEW:

In our project we are going to explain about the news apps. Our goal is to provide good source of environment while using our application. News sources can provide insights that scholarly sources may not or that will take a long time to get into scholarly sources. For instance, news sources are excellent for finding out people's reactions, opinions, and prevailing attitudes around the time of an event. News is a strange term, because even when the information is old, it's still news. Some sources are great for breaking news, some are great for aggregated (or compiled) news, and others are great for historical news. While news was transmitted for centuries only in newspapers, news is now transmitted in all formats: via radio, television, and the Internet, in

addition to print. Even most newspapers have Internet sites today.

1.2 PURPOSE

The purpose of our project are:

- Our application provides the easy offline access. When a user is not online due to some reason he/she should have to access to the internet.

Whenever the user is online the news content is downloaded in the cache memory of the app, this is how a user can access to the content offline.

- A news application is a big interactive database that tells a news story. Think of it like you would any other piece of journalism. It just uses software instead of words and pictures.

2.LITERATURE SURVEY

2.1 EXISTING PROBLEM

There are multiple news-sharing apps used by a single user and are often spammed with notifications. There is also a lot of fake

news which gets shared. A news-sharing app wants to help users find relevant and important news easily every day and also understand explicitly that the news is not fake but from proper sources.

2.2 REFERENCES

1. Sarfo, Anthony Kwabena, and Shankar Karuppannan. "Application of geospatial technologies in the COVID-19 fight of Ghana." *Transactions of the Indian National Academy of Engineering* 5.2 (2020): 193-204.
2. Ghenai, Amira, and Yelena Mejova. "Catching Zika fever: Application of crowdsourcing and machine learning for tracking health misinformation on Twitter." *arXiv preprint arXiv:1707.03778* (2017).
3. Phuvipadawat, Swit, and Tsuyoshi Murata. "Breaking news detection and tracking in Twitter." In *2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology*, vol. 3, pp. 120-123. IEEE, 2010.
4. Berendt, B., & Subasic, I. (2009, September). STORIES in time: a graph- based interface for news tracking and discovery. In

2009 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (Vol. 3, pp. 531-534). IEEE.

5. Aksoy, C., Can, F., & Kocberber, S. (2012). Novelty detection for topic tracking. Journal of the american society for information science and technology, 63(4), 777-795.

2.3 PROBLEM STATEMENT DEFINITION

- 1.The user needs a way to organize the news on daily basis so that he can cope up with daily events in his tight schedule.
- 2.The user wants to read news only about particular topics so that he can be informed about his interest.
- 3.The user wants to get informed from only certified news outlets.
- 4.The user needs a way to search about the news on topics he wants to.
- 5.The user wants to know the news about his surrounding using GPS location

3. IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS



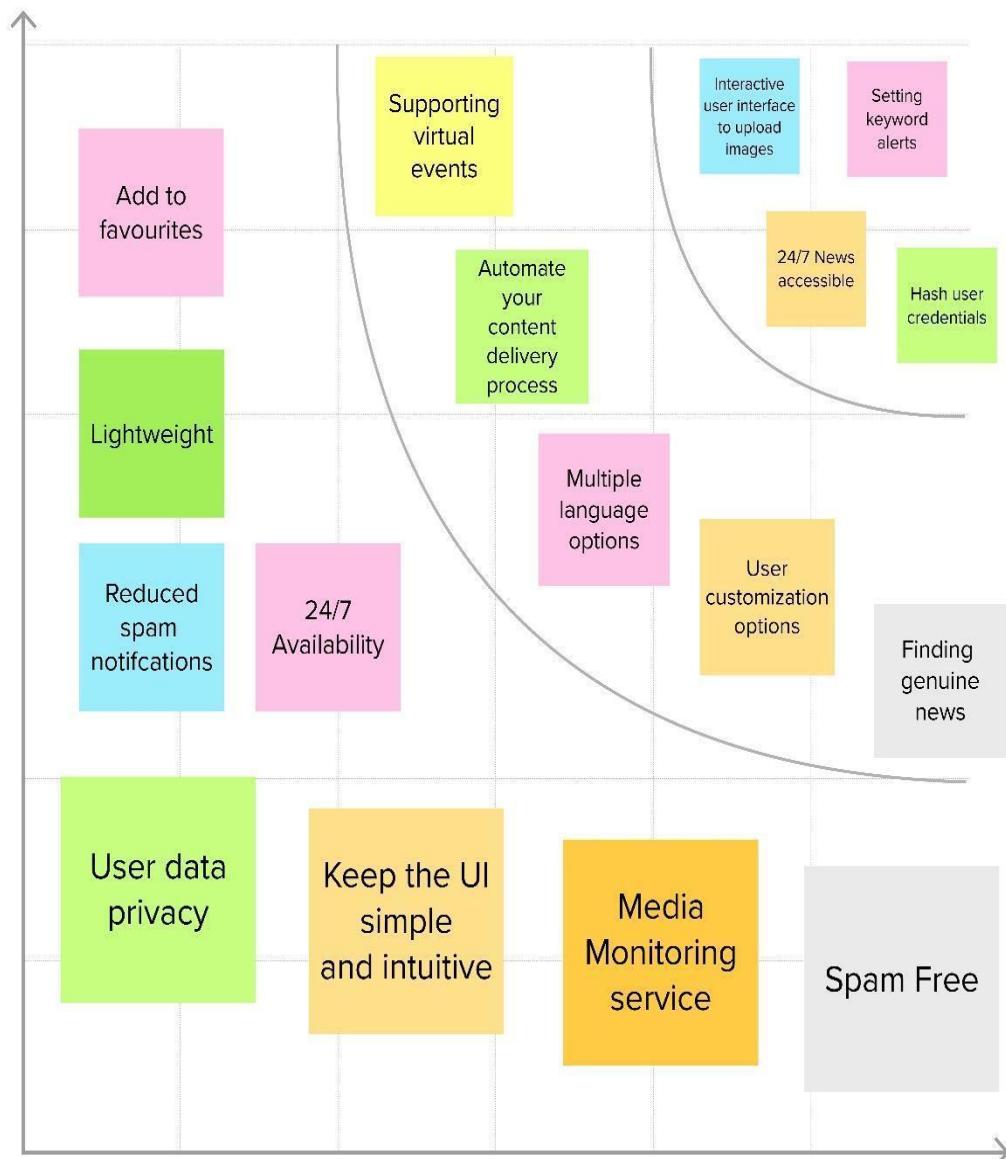
3.2 IDEATION & BRAINSTROMING



4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.



3.3 PROPOSED SOLUTION

Proposed solution for news tracker application determines the Problem statement, solution description, uniqueness, Social impact, customer satisfaction, etc,..

1. Display the most relevant story first.
2. Keep your user's attention with list views.
3. Increase subscriptions by allowing registrations.
4. Help users find content with categories.
5. Get more users by encouraging social sharing.

| S.No. | Parameter | Description |
|-------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Problem Statement (Problem to be solved) | News organizations whose mobile apps only provide users with their articles or videos are missing a big opportunity. An application, by definition, should be applied to perform a task, to solve a problem. Most news doesn't do that. Rather than just feed readers recent stories you wrote <i>about</i> their problems, apps can provide tools and data that enable users to actually <i>solve</i> their problems. When you solve problems, you get more loyal users and a chance to make more money. |

| | | |
|----|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. | Idea/Solution description | <p>Start with an audience-first focus. Instead of thinking about what your organization produces (news articles) and how to fit that into an app, start from scratch and consider your audience. Who are they, and what problems do they face?</p> <p>Use your imagination, do some role playing with colleagues, and actually talk to some real people.</p> |
| 3. | Novelty/ Uniqueness | <p>Building mobile tools with data isn't as easy as importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes advertisers take notice.</p> |

| | | |
|----|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. | Social Impact/ Customer Satisfaction | <p>These apps are all about solving problems and enabling the user to take an action — go to this bar, shop at that boutique, rent this apartment. These are the apps that build loyal audiences because they help people get things done instead of just presenting another thing they feel obligated to do (keep up with news stories).</p> <p>That is valuable not only for users, but for advertisers as well.</p> |
| 5. | Business Model (Revenue Model) | <p>Building mobile tools with data isn't as easy as importing an XML feed of your latest headlines. But if you're going to spend thousands of dollars developing a mobile app anyway, you might as well spend a little more to build a real application that helps solve problems and makes advertisers take notice.</p> |

| | | |
|----|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. | <h3>Scalability of the Solution</h3> | <p>News tracker application can handle data across machines and data that will not fit into memory. It supports clusters and can handle machine failures, rebuilding machines easily.</p> |
|----|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

3.4 PROBLEM SOLUTION FIT:

| Problem-Solution fit | | | |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Define CS, fit into CC | 1. CUSTOMER SEGMENT(S) CS Youngsters, Understudies, Old Matured People | 6. CUSTOMER CONSTRAINTS CC Time Utilization, Saves Time, Need of Web, Need of Cell phone or PC, Simple to Utilize, Effectively Justifiable by Everybody. | 5. AVAILABLE SOLUTIONS AS Cell Phones Can Be Accessed of Less Current Instead of TVs and Radios, Helpful to Utilize and Can be Effectively Conveyed to All over. |
| Focus on J&P, tap into BE, understand RC | 2. JOBS-TO-BE-DONE / PROBLEMS J&P Different Perspective on the Client And Their Fulfillment. | 9. PROBLEM ROOT CAUSE RC Client Can Introduce This Application To Save Their Time and Simple to Utilize. They No Need of TVs or Radios to Convey Any place They Need. Just They Need a Cell phone with Web Office. | 7. BEHAVIOUR BE User Needs to Install This Application from A Verified Server. Needs Internet Facility Throughout This Application and to Read News. |
| Identify strong TR & EM | 3. TRIGGERS TR My Environmental elements Has Been Introduced this Application and I Cherished It to Utilize In light of the fact that, It Saves My Time | 10. YOUR SOLUTION SL In This News Following Application, A portion of The News Were Phony and A portion of The News Was Genuine and Clients Might Get Irritated Due to This Application and They Could Tell to His Environmental factors So the Impression of The Application Could Get Down. To Determine This one An Administrator Bot Is Made and At whatever point News Gets Refreshed in This Application, This Bot Will Actually look at Through Web and Assuming that it is Phony the Bot Naturally Eliminates the Report from The Application. | 8. CHANNELS OF BEHAVIOUR CH 8.1 Online : Client Can Do Everything in This Application Utilizing On the web (Web) 8.2 Offline: Client Can Download Significant News When the Client Has Web and When the Client Is Disconnected. They Can View the Downloaded |
| | | | Extract online & offline CH of BE |

4.REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENTS

Following are the functional requirements of the proposed solution.

Solution Requirements: It contains both the functional and non functional requirements.

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| FR-1 | User Registration | <ul style="list-style-type: none">➤ Registration through Form➤ Registration through Gmail |
| FR-2 | User Confirmation | <ul style="list-style-type: none">➤ Confirmation via Email➤ Confirmation via OTP |

| | | |
|------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FR-3 | Searching | <ul style="list-style-type: none"> ➤ User can look for new items based on their interests. ➤ The user can extract a certain domain by using the favourites option. ➤ The user can read it later on by utilising the save option. |
| FR-4 | Real time News | <ul style="list-style-type: none"> Ø Client can see the certifiable news with steady update. Ø By counting the comments, we can examine the sincere criticism. |
| FR-5 | Location based | <ul style="list-style-type: none"> ➤ User can see the news close to their area User can track the news by choosing preferred location ➤ The user can view local news in their area and follow it by selecting a preferred place. |
| FR-6 | User friendly | <ul style="list-style-type: none"> ➤ Chatbots allow users to quickly and simply address. ➤ Each user's own articles can be published. |

4.2 NON – FUNCTIONAL REQUIREMENTS

Following are the non-functional requirements of the proposed solution.

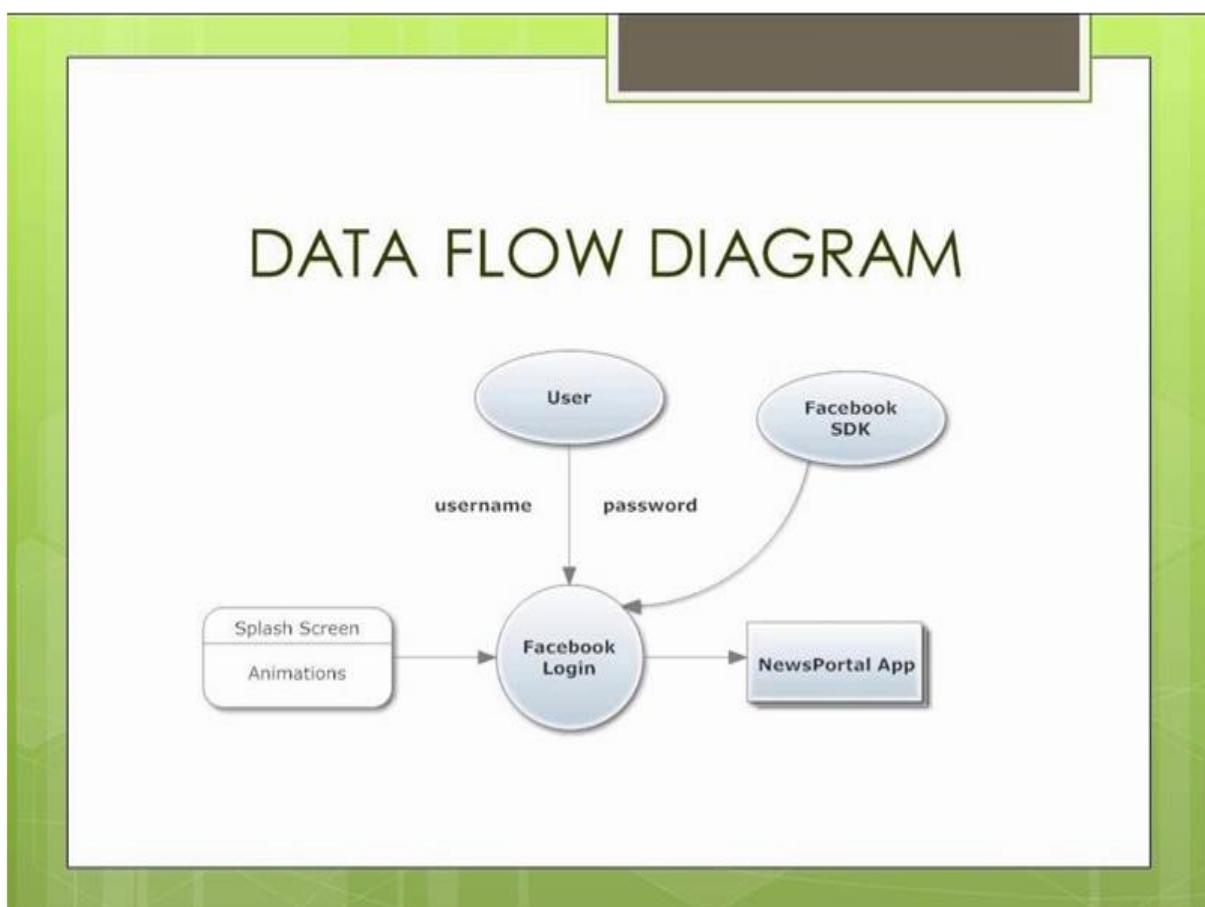
| FR No. | Non-Functional Requirement | Description |
|-------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NFR-1 | Usability | <ul style="list-style-type: none"> ➤ The user should always be able to examine exactly the information that interests him or her at the time because the news is changed virtually every minute. ➤ Users will have the option to look for information of interest based on particular criteria and parameters thanks to the Search and Filtering tool. |
| NFR-2 | Security | <ul style="list-style-type: none"> ➤ Authentication and password management ➤ During the comment process, many users may be impolite or cruel, thus it is important to consider algorithms that will let you block harsh remarks and spam.. |

| | | |
|--------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NFR-3 | Reliability | <ul style="list-style-type: none"> ➤ Steer clear of fake news . ➤ Instant news in real time and news location tracking. |
| NFR-4 | Performance | <ul style="list-style-type: none"> ➤ Users are kept in-app longer with related posts. ➤ Show the most pertinent stories to users first. ➤ Keep your user's attention with list views. |
| NFR-5 | Availability | <ul style="list-style-type: none"> ➤ Continuous operation, such as nonstop operation with little downtime . ➤ A history of recently-occurred news prior to discussing the most recent news. |
| NFR-6 | Scalability | <ul style="list-style-type: none"> ➤ Increase user numbers by promoting social sharing ➤ Users are kept in-app longer with related posts. |

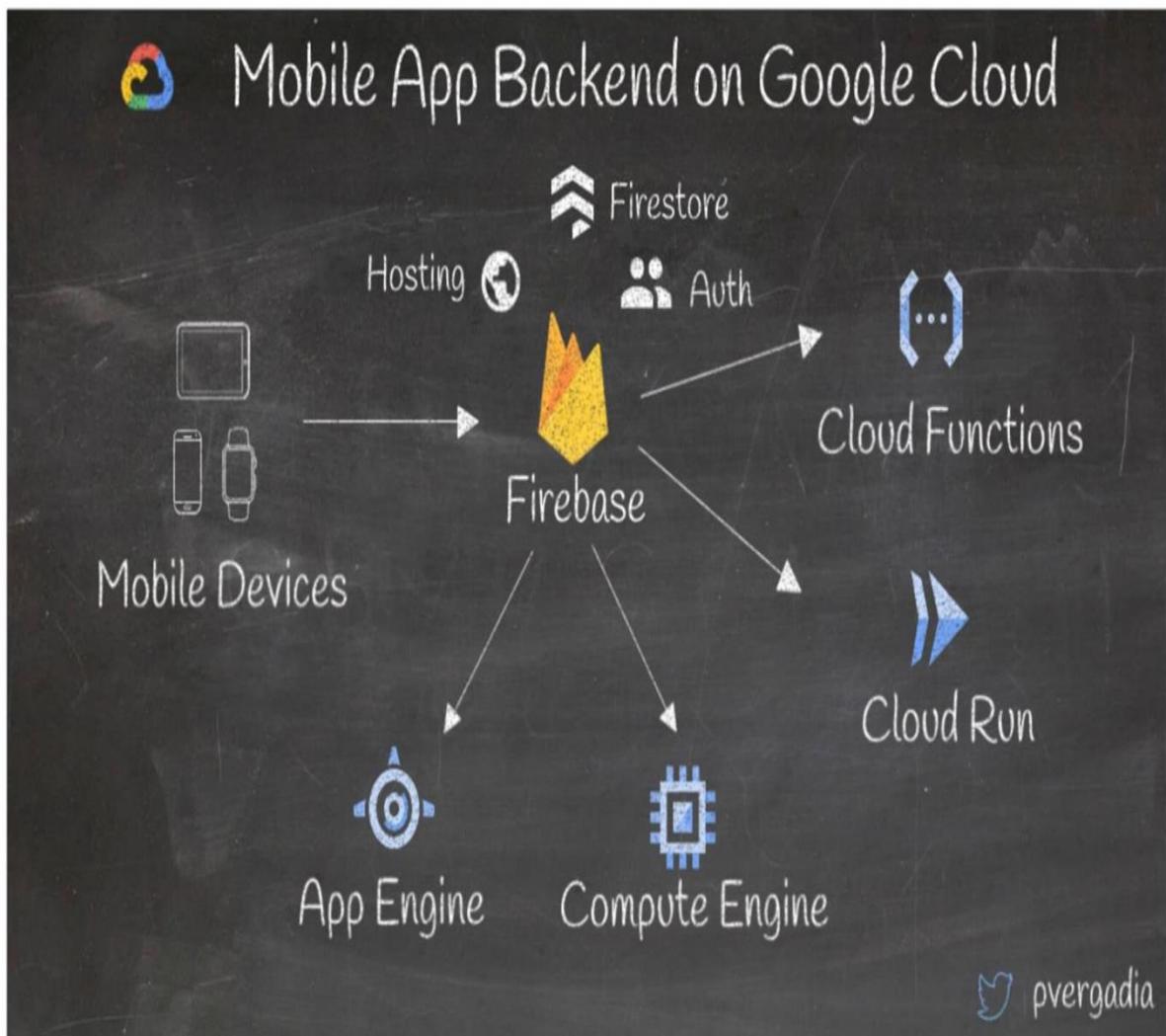
5.PROJECT DESIGN

5.1 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



Flow Diagram



Mobile application backend diagram in google cloud

User Stories

| User Type | Functional Requirement(Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Release |
|---------------------------|------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------|----------|
| Customer (Mobile user) | Registration | USN_1 | As a client, I can enlist for the application by entering my email, secret word, and affirming my secret word. | I can get to my record/dashboard | High | Sprint-1 |
| | | USN-2 | As a client, I will get affirmation email whenever I have enlisted for the application | I can get affirmation email and snap affirm | High | Sprint-1 |
| | | USN -3 | As a client, I can enroll for the application through Facebook | I can enroll and get to the dashboard with Facebook Login | Low | Sprint-2 |
| | | USN -4 | As a client, I can enlist for the application through Gmail | I can enlist and access the dashboard with Gmail Login | Medium | Sprint-1 |
| | Login | USN -5 | As a client, I can sign into the application by entering email and secret word | I can login and access the dashboard with Facebook Login | High | Sprint-1 |

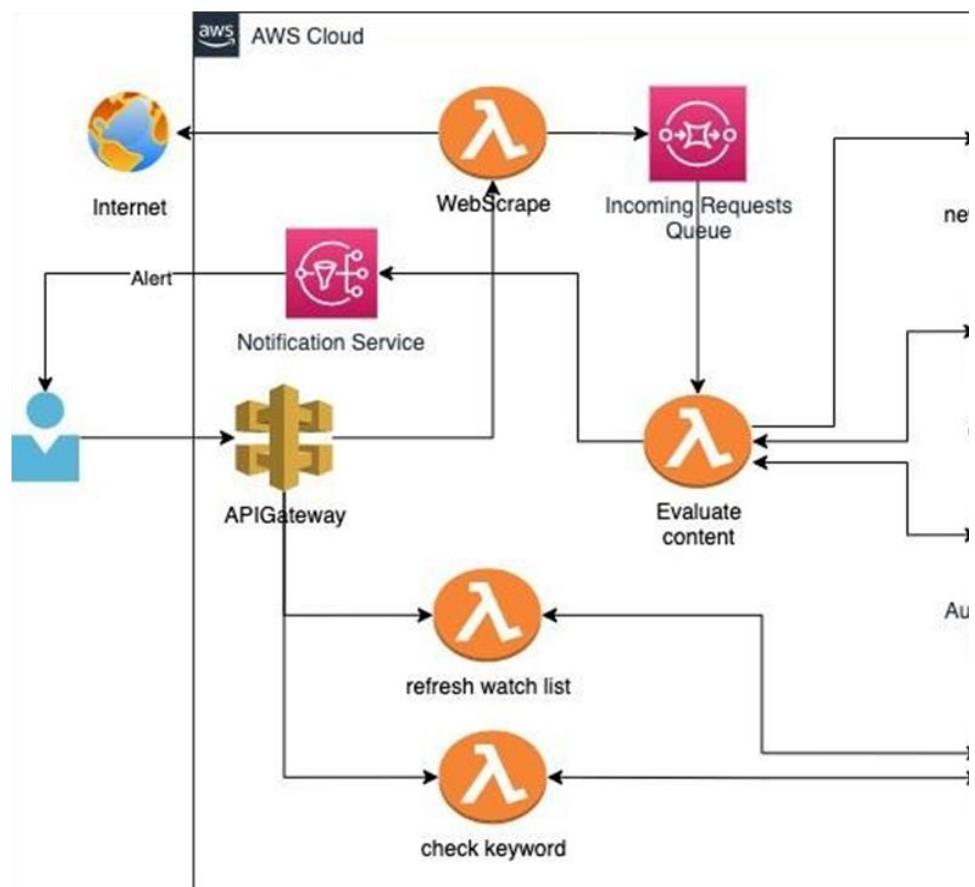
News Tracker Application PNT2022TMID33309

| | | | | | | |
|---------------------|-------------------|-------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------|----------|
| Customer (Web user) | Login | USN-1 | As an enrolled client, I can sign in to the web application | I can get to my record utilizing my login qualifications through web application | High | Sprint-1 |
| | Logout | USN-2 | As a client, I can log out in to the web application | I can exit from my web application | High | Sprint-1 |
| | Reset my password | USN-3 | As a signed in client, On the off chance that I fail to remember my secret key I can reset my secret phrase | I get reset secret key connection through my email | Medium | Sprint-1 |
| | Comment | USN-4 | As a logged client, I can post a remark about an application | I access the comment segment choice through my web application | Low | Sprint-2 |

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | Release |
|-------------------------|-------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------|----------|----------|
| Customer Care Executive | Managing team | USN-1 | Managing a team of representatives offering customer support. It can provide the user requirement specification | I can manage the team of work done | Medium | Sprint-1 |

| | | | | | | |
|---------------|---------------|-------|-----------------------------------------|------------------------------------------------------|------|----------|
| Administrator | Tracking news | USN-1 | Track the tasks to satisfy the customer | Tracking the news for what the customer want to know | High | Sprint-1 |
|---------------|---------------|-------|-----------------------------------------|------------------------------------------------------|------|----------|

5.2 SOLUTION & TECHNICAL ARCHITECTURE:



Solution Architecture

Table-1 : Components & Technologies:

The components used in news tracker applications are as follows:

The components of the news tracker applications are:

- User Interface
- Application logic
- Database
- Cloud database
- File storage
- Infrastructure

| S. No | Component | Description | Technology |
|----------|---------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1. | User Interface | Client cooperates effortlessly of purpose and most helpful climate with least exertion on client to get greatest exertion. | HTML, CSS, JavaScript |
| 2. | Application Logic-1 | This application begins with login page where client join or sign in web application. | Java / Python |

| | | | |
|----|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 3. | Application Logic-2 | Client enters individual information to refresh their Record profile where IBM watson stt administration used to switch sound over completely to message that is client can fill their detail by voice help. | IBM Watson STT service |
| 4. | Application Logic-3 | Client can see news content in light of dates and where chatbot is utilized there to channel content. | IBM Watson Assistant |
| 5. | Database | Client information gets put away in data set for parallel purposes. | MySQL |
| 6. | Cloud Database | Here Data set Help are utilized in IBM DB2 .Utilizing this clients can get to every one of the information put away in cloud through network from any available gadget. | IBM DB2, IBM Cloudant |

| | | | |
|----|------------------------|------------------------------------------------------------------------------------------------------------|-------------------|
| 7. | File Storage | Clients individual information and last visited news content are get put away in IBM block capacity. | IBM Block Storage |
| 8. | External API-1 | Application utilized IBM Climate to get accurate climate report as it is one of the required news content. | IBM Weather API |
| 9. | Infrastructure (Cloud) | Application Sending on Cloud for quicker and adaptable execution over the web. | Kubernetes |

Table-2: Application Characteristics:

| S. No | Characteristics | Description | Technology |
|-------|------------------------|------------------------------------------------------------------------------------------------------|---------------|
| 1. | Open-Source Frameworks | Here this application is light weight application utilizing flagon (python) as a backend improvement | Flask(Python) |

| | | | |
|----|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 2. | Security Implementations | <p>Application contains client individual data, login credentials, transaction subtleties are safeguarded what's more, kept secret involving information assurance in IBM cloud</p> | IAM in IBM cloud |
| 3. | Scalable Architecture | <p>Here application runs day in and day out as it is versatile where size is everything. So cup is utilized to perform web application rapidly</p> | Flask(Python) |
| 4. | Availability | <p>Application works appropriately and will justify prerequisites. It very well may be available whenever</p> | Docker, Kubernetes cluster |
| 5. | Performance | <p>Application trace every request and building blocks efficiently for better performance</p> | Instana |

6. PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

| Title | Description | Date | Completed / In Progress |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------|
| Literature Survey | Literature survey on the selected project & gathering information by referring the, technical papers, research publications etc. | 2 nd September 2022 | Completed |
| Prepare Empathy Map | Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements | 7 th September 2022 | Completed |
| Ideation Brain Storming | List the by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance. | 15 th September 2022 | Completed |

| | | | |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------|
| Proposed Solution | Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, social impact, scalability of solution, etc. | 23 rd September 2022 | Completed |
| Problem Solution Fit | Prepare solution architecture document. | 27 th September 2022 | Completed |
| Solution Architecture | Prepare solution architecture document. | 30 th September 2022 | Completed |
| Customer Journey | Prepare the customer journey maps to understand the user interactions & experiences with the application (entry to exit). | 5 th October 2022 | Completed |
| Solution Requirement | Prepare the functional requirement document | 12 th October 2022 | Completed |

| | | | |
|------------------------------------------------------|--------------------------------------------------------|-------------------------------|-----------|
| Data Flow Diagrams | Draw the data flow diagrams and submit for review. | 15 th October 2022 | Completed |
| Technology Architecture | Prepare the technology architecture diagram. | 16 th October 2022 | Completed |
| Prepare Milestone & Activity List | Prepare the milestones & activity list of the project. | 21 st October 2022 | Completed |
| Project Development - Delivery of Sprint-1, 2, 3 & 4 | Develop & submit the developed code by testing it. | - | Completed |

6.2 SPRINT DELIVERY SCHEDULE:

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---------------------------------------------------|--------------|----------|-------------------|
| Sprint-1 | Registration | USN-1 | Creating Login page Creating Registration page | 10 | High | R.Deiva dharshini |

| | | | | | | |
|-----------|-----------------------------|-------|---------------------------------------------------------------------------------|----|--------|-------------------|
| Sprint-1 | Database Connectivity | USN-2 | To Store details of the customer Connecting UI with Database | 10 | Medium | M.Durka |
| Sprint-2 | News Tracker UI | USN-3 | Building UI News Tracker Application | 10 | High | K.V Ilan Thendral |
| Sprint-2 | API | USN-4 | Connecting UI with News API, Google News API | 10 | High | M.Indhu mathi |
| Sprint-3 | SendGrid Integration | USN-5 | SendGrid Integration With Python Code | 10 | Low | M.Durka |
| Sprint-3 | News Reader (Voice) | USN-6 | Building Voice Assistant to read the news | 10 | Medium | K.V Ilan Thendral |
| Sprint-4 | Containerization | USN-7 | Containerizing the app | 10 | High | M.Indhu mathi |
| Sprint -4 | Upload image and deployment | USN-8 | Upload Docker image to the IBM Registry and deploy it in the Kubernetes Cluster | 10 | High | R.Deiva dharshini |

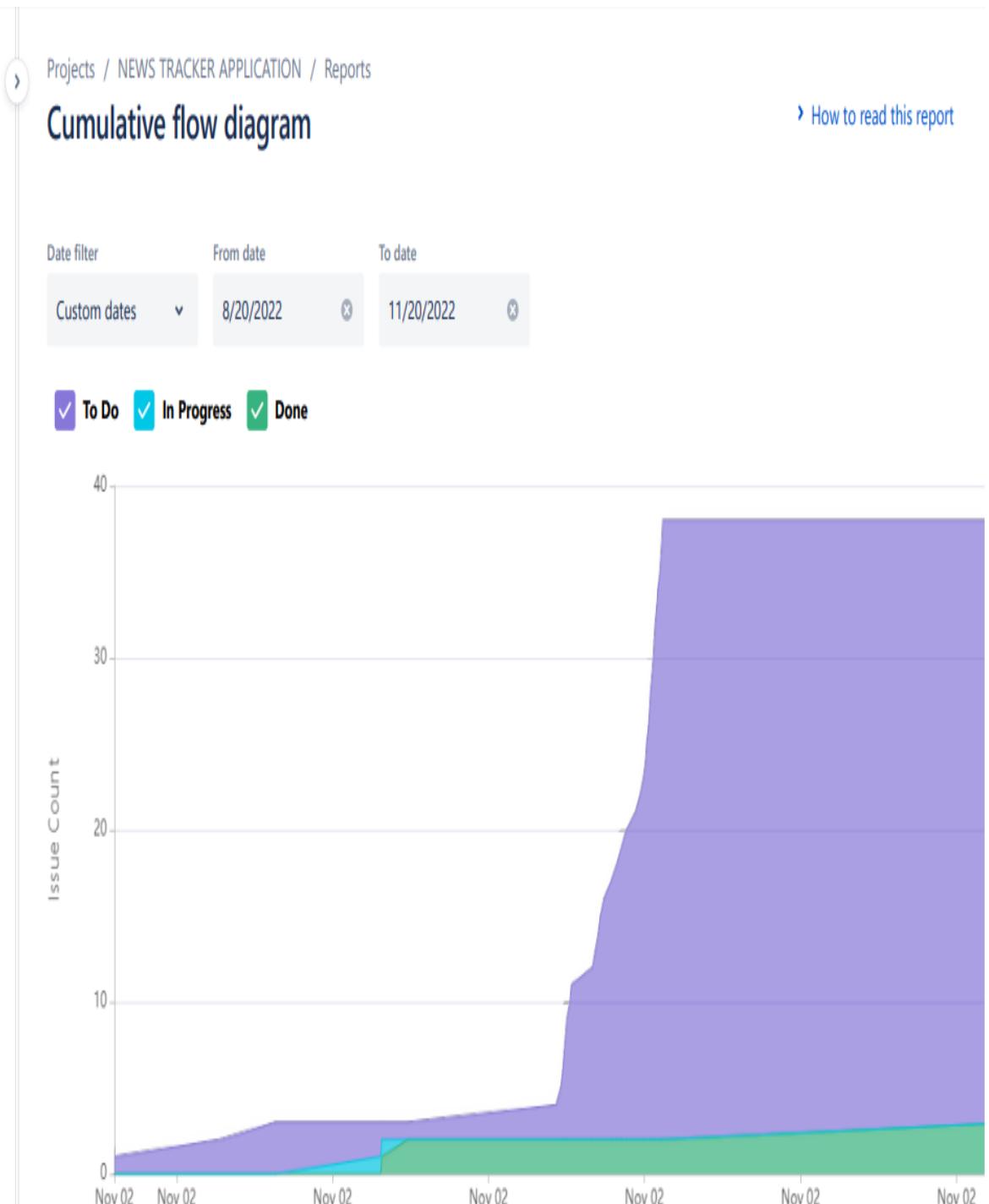
6.3 REPORTS FROM JIRA:

The reports created by using jira application are as follows:

The screenshot shows a Jira Software interface with a central modal window titled "Story workflow". The window displays a workflow diagram with the following states and transitions:

- Start State:** START → Create → TO DO
- TO DO State:** ANY STATUS → Registration
- Registration State:** Registration → IN PROGRESS
- IN PROGRESS State:** ANY STATUS
- Done States:** DONE, IN REVIEW, and another unnamed green state (likely a placeholder or specific to the project).
- Transitions from IN PROGRESS:** ANY STATUS → DONE, ANY STATUS → IN REVIEW

Below the diagram, there are buttons for "Edit workflow" and "Close". The Jira header includes tabs for "Project Templates - Nalaya T", "IBM", "[NTA-9] Flow diagram - Jira", "[NTA-9] Flow diagram - Jira", "Murray Your Team Has Succ", and a search bar. The bottom navigation bar includes links for "Dashboard", "VSB ENGINEERIN...", "Welcome to Project!", "IBM", "Axis RTA", "Candidate", "Pega Tech 2", "PEGA PDF", "Senior System Archi...", "Rule Resolution Steps", and a "Create" button.



The screenshot shows a web browser window with the following details:

- Address Bar:** pnt2022tmid33309.atlassian.net/jira/software/projects/NTA/boards/1
- Tab Bar:** Fwd - devadharshini16112002@..., IBM, NTA board - Agile board - Jira
- Toolbar:** Back, Forward, Stop, Refresh, Home, Search, and other browser icons.
- Header:** Jira Software, Your work, Projects, Filters, Dashboards, People, Apps, Create, Search, and user profile.
- Project Information:** News Tracker Application (Software project), NTA Sprint 1 (Create news tracker application), 3 days remaining, Complete sprint, ...
- Board View:** Shows columns IN PROGRESS, TO DO, and DONE 8 ISSUES. One issue is visible in the DONE column: "Upload Docker image to the IBM Registry and deploy it in the Kubernetes Cluster" (Status: REGISTERED, NTA-8).
- Bottom Navigation:** Flow diagram.png, Install IBM Cloud...pdf, IBM Account Creat...pdf, Flask project.pdf, Docker CLI install...pdf, Show all, and a search bar.
- System Tray:** Weather (22°C Cloudy), Language (ENG), Date (11-11-2022), and a clock icon.

News Tracker Application PNT2022TMID33309

The screenshot shows a Jira Software interface for the 'News Tracker Application' project. The left sidebar includes links for 'Roadmap', 'Backlog', 'Board', 'Code', 'Project pages', and 'Add shortcut'. The main area displays a 'Roadmap' for November and December. A green bar represents the 'NTA-9 Registration' sprint, which is currently in progress. An orange vertical line marks the end of the sprint. The roadmap also shows an 'NTA Spri...' sprint starting in December. At the bottom, there is a taskbar with several PDF files and a search bar.

The screenshot shows a Jira Software interface for the "News Tracker Application" project. The left sidebar includes links for "News Tracker Application" (Software project), "Roadmap", "Backlog" (selected), and "Board". The main area displays the "Backlog" for "NTA Sprint 1" (Nov 9 - Nov 16). The backlog contains seven items, all marked as "DONE" with status indicators:

- NTA-0 Upload Docker image to the IBM Registry and deploy it in the Kubernetes Cluster (REGISTRATION)
- NTA-7 Containerizing the app (REGISTRATION)
- NTA-6 Building Voice Assistant to read the news (REGISTRATION)
- NTA-5 SendGrid Integration With Python Code (REGISTRATION)
- NTA-4 Connecting UI with News API, Google News API (REGISTRATION)
- NTA-1 Creating Login page (REGISTRATION)

At the bottom, there are file tabs for "Flow diagram.png", "Install IBM Cloud....pdf", "IBM Account Creat....pdf", "Flask project.pdf", and "Docker CLI installa....pdf". The system tray at the bottom right shows the date as 11-11-2022.

7.CODING & SOLUTIONS:

Login.html

```
img{  
    width: 100%;  
}  
.login {  
    height: 1000px;  
    width: 100%  
    background-image:url("newsr.jpeg");  
    position: relative;  
}  
.login_box {  
    width: 1050px;  
    height: 600px;  
    position: absolute;  
    top: 50%;  
    left: 50%;  
    transform: translate(-50%,-50%);  
    background: #fff1;  
    border-radius: 10px;  
    box-shadow: 1px 4px 22px -8px #0004;  
    display: flex;  
    overflow: hidden;  
}  
.login_box .left{  
    width: 41%;  
    height: 100%;  
    padding: 25px 25px;  
}  
.login_box .right{  
    width: 59%;  
    height: 100%  
}  
.left .top_link a {  
    color: #452A5A;  
    font-weight: 400;  
}  
.left .top_link{  
    height: 20px  
}  
.left .contact{  
    display: flex;  
    align-items: center;  
    justify-content: center;
```

```
align-self: center;
height: 100%;
width: 73%;
margin: auto;
}
.left h3{
text-align: center;
margin-bottom: 40px;
font-family: Georgia, serif;
font-size: 250%;
}
.left input {
border: none;
width: 80%;
margin: 15px 0px;
border-bottom: 1px solid #4f30677d;
padding: 7px 9px;
width: 100%;
overflow: hidden;
background: transparent;
font-weight: 600;
font-size: 110%;
}
.left{
background: linear-gradient(-45deg, #dcd7e0, #fff);
}
.submit {
border: none;
padding: 15px 70px;
border-radius: 8px;
display: block;
margin: auto;
cursor: pointer;
margin-top: 120px;
background: #583672;
color: #fff;
font-weight: bold;
-webkit-box-shadow: 0px 9px 15px -11px rgba(88,54,114,1);
-moz-box-shadow: 0px 9px 15px -11px rgba(88,54,114,1);
box-shadow: 0px 9px 15px -11px rgba(88,54,114,1);
}
```

```
.right {  
    background: linear-gradient(212.38deg, rgb(255 0 96 / 92%) 0%,  
    rgba(27, 124, 237, 1) 100%),url(https://img.republicworld.com/republic-prod/stories/promolarge/xhdpi/6yhtbp5s6npfw8td\_1589275289.jpeg) no-repeat;  
    background-size: cover;  
    color: #fff;  
    position: relative;  
}
```

News.css

```
@import  
url("https://fonts.googleapis.com/css2?family=Roboto&display=swap");  
* {  
    box-sizing: border-box;  
}  
body {  
    display: absolute;  
    justify-content: center;  
    align-items: center;  
    margin: 0;  
    background-color: #f7f8fc;  
    font-family: "Roboto", sans-serif bold;  
    color: #10182f;  
}  
img {  
    border-radius: 4px;  
    padding: 5px;  
    width: 100px;  
}  
nav{  
    display: flex;  
    align-items: center;  
    justify-content: space-between;  
}  
ul{  
    display: flex;  
}  
li{  
    list-style: none;  
    margin: 1rem;
```

```
margin-right: 25px;
margin-left: 25px ;
}

a{
    text-decoration: none;
    color: rgb(49, 49, 47);
}
a:hover {
    text-decoration: none;
    color: #daa800;
    opacity: 0.8;
    transition: 1s;
}
.container {
    display: flex;
    width: 1040px;
    justify-content: space-evenly;
    flex-wrap: wrap;
}
.card {
    margin: 10px;
    background-color: #fee2ff;
    border-radius: 10px;
    box-shadow: 0 2px 20px rgba(0, 0, 0, 0.2);
    overflow: hidden;
    width: 300px;
    height: 460px;
}
.card-header img {
    width: 100%;
    height: 200px;
    object-fit: cover;
}
.card-body {
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: flex-start;
    padding: 20px;
    min-height: 250px;
}
```

```
.tag {  
background: #cccccc;  
border-radius: 50px;  
font-size: 12px;  
margin: 0;  
color: #fff;  
padding: 2px 10px;  
text-transform: uppercase;  
cursor: pointer;  
}  
.tag-teal {  
background-color: #15bfc2;  
}  
.tag-purple {  
background-color: #e8570e;  
}  
.tag-purple1 {  
background-color: #139427;  
}  
.tag-pink {  
background-color: #cf0ec8;  
}  
.tag-cyan{  
background-color: #e30b16;  
}  
.tag-aas{  
background-color: #1d2bc4;  
}  
  
.card-body p {  
font-size: 13px;  
margin: 0 0 40px;  
}  
.user {  
display: flex;  
margin-top: auto;  
margin-right: 20px;  
margin-top: 5px;  
}  
  
.user img {  
border-radius: 500%;  
width: 40px;
```

```
height: 40px;
margin-right: 10px;
}
.user-info h5 {
margin: 1;
margin-top: 5px;
}
.user-info small {
color: black;
}
```

Register.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Form Styling</title>
  <link
    href=<link
      href="https://fonts.googleapis.com/css2?family=Raleway:wght@300&display=
      swap"
      rel="stylesheet"
    />

  <style>
    *{
      box-sizing: border-box;
      margin: 0;
      padding: 0;
    }

  body {
    font-family: 'Raleway', sans-serif ;
    background-color: #344a72;
    color: white;
    line-height: 1.8;
  }
  a {
```

```
text-decoration:none;
}

#container{
    margin: 30px auto;
    max-width: 400px;
    padding: x;
}

.form-wrap {
    background: #fff;
    padding:15px 20px;
    color:black;
}
.form-wrap h1,
.form-wrap p{
    text-align: center;
}

.form-wrap .form-group {
    margin-top: 15px;
}

.form-wrap .form-gropu label{
    display:block;
    color:#666;
}
.form-wrap .form-group input {
    width:100%;
    padding: 10px;
    border:#ddd 1px solid;
    border-radius:5px;
}

.form-wrap button{
    display:block;
    background:#49c1a2;
    width:100%;
    padding:10px;
    margin-top:20px;
    color:#fff;
    cursor:pointer;
```

```
}

.form-wrap button:hover {
    background: green
}

}

.form-wrap .button text {
    font-size:13px;
    margin-top:20px;
}

footer {
    text-align:center;
    margin-top:10px;
}

footer a{
    color:#49c1a2
}
</style>
</head>
<body>
<div id="container">
<div class="form-wrap">
    <h1>Sign Up</h1>
    <p>It's free and only takes a minute</p>
    <form>
        <div class="form-group">
            <lable for="first-name">First Name</lable>
            <input type="text" name="firstname" id="first-name"/>
        </div>
        <div class="form-group">
            <lable for="last-name">Last Name</lable>
            <input type="text" name="lastname" id="last-name"/>
        </div>
        <div class="form-group">
            <lable for="email">Email</lable>
            <input type="email" name="email" id="email" placeholder="Enter an email address"/>
        </div>
        <div class="form-group">
```

```
<label for="password">Password</label>
<input type="password" name="password" id="password"/>
</div>
<div class="form-group">
    <label for="password2">Confirm Password</label>
    <input type="password" name="password2" id="password2"/>
</div>
<button type="submit" class="btn">Sign Up</button>
<p class="bottom-text">
    <a href="login1.html">Sign Up</a>
    By clicking the Sign Up button, you agree to our
    <a href="#">Terms and Conditions</a> and
    <a href="#">Privacy Policy</a>
</p>
</form>
</div>
<footer>
    <p>
        Already have an account?
        <a href="login.html">Login Here</a>
    </p>
</footer>
</div>**-++
```

```
</body>
</html>
```

Style.css

```
@import
url('https://fonts.googleapis.com/css2?family=Poppins:wght@400;500;600&display=swap')
*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
```

```
font-family: "Poppins", sans-serif;
}
body{
  width: 100%;
  height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
  background: #3853bf;
}
::selection{
  color: #fff;
  background: #3853bf;
}
.wrapper{
  width: 380px;
  padding: 40px 30px 50px 30px;
  background: #fff;
  border-radius: 5px;
  text-align: center;
  box-shadow: 10px 10px 15px rgba(0,0,0,0.1);
}
.wrapper header{
  font-size: 35px;
  font-weight: 600;
}
.wrapper form{
  margin: 40px 0;
}
form .field{
  width: 100%;
  margin-bottom: 20px;
}
form .field.shake{
  animation: shake 0.3s ease-in-out;
}
@keyframes shake {
  0%, 100% {
    margin-left: 0px;
  }
  20%, 80% {
    margin-left: -12px;
  }
}
```

```
40%, 60% {
  margin-left: 12px;
}
}
form .field .input-area{
  height: 50px;
  width: 100%;
  position: relative;
}
form input{
  width: 100%;
  height: 100%;
  outline: none;
  padding: 0 45px;
  font-size: 18px;
  background: none;
  caret-color: #5372F0;
  border-radius: 5px;
  border: 1px solid #bfbfbf;
  border-bottom-width: 2px;
  transition: all 0.2s ease;
}
form .field input:focus,
form .field.valid input{
  border-color: #5372F0;
}
form .field.shake input,
form .field.error input{
  border-color: #dc3545;
}
.field .input-area i{
  position: absolute;
  top: 50%;
  font-size: 18px;
  pointer-events: none;
  transform: translateY(-50%);
}
.input-area .icon{
  left: 15px;
  color: #bfbfbf;
  transition: color 0.2s ease;
}
.input-area .error-icon{
```

```
right: 15px;
color: #dc3545;
}
form input:focus ~ .icon,
form .field.valid .icon{
  color: #5372F0;
}
form .field.shake input:focus ~ .icon,
form .field.error input:focus ~ .icon{
  color: #bfbfbf;
}
form input::placeholder{
  color: #bfbfbf;
  font-size: 17px;
}
form .field .error-txt{
  color: #dc3545;
  text-align: left;
  margin-top: 5px;
}
form .field .error{
  display: none;
}
form .field.shake .error,
form .field.error .error{
  display: block;
}
form .pass-txt{
  text-align: left;
  margin-top: -10px;
}
.wrapper a{
  color: #5372F0;
  text-decoration: none;
}
.wrapper a:hover{
  text-decoration: underline;
}
form input[type="submit"]{
  height: 50px;
  margin-top: 30px;
  color: #fff;
  padding: 0;
```

```
border: none;
background: #5372F0;
cursor: pointer;
border-bottom: 2px solid rgba(0,0,0,0.1);
transition: all 0.3s ease;
}
form input[type="submit"]:hover{
  background: #2c52ed;
};
```

VERIFY.css

```
@import
url('https://fonts.googleapis.com/css2?family=Roboto:wght@100;300&display=
swap');

*, *::before, *::after{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Roboto', sans-serif;
}
body{
  background-color: aliceblue;
  min-height: 100vh;
}
nav {
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  align-items: center;
  margin: auto;
  min-width: 100%;
  box-shadow: 0 0 5px rgba(35, 35, 35, 0.584);
  background-color: #d9d9d9be;
  padding: 1rem;
}
```

```
.status-cont{
    display: flex;
    min-height: 70vh;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    font-weight: medium;
    text-align: center;
    padding: 1rem;
}

.welcome-text{
    font-size: 2.5rem;
}

.sub-text{
    font-size: 1.5rem;
}
```

8. TESTING:

8.1 Test Cases:

Test Cases: News Tracker Application

| Test Case | Feature | Components | Test Scenario | Expected Result | Actual Result | Status | Comments | Bug | Executed by |
|-----------|------------|------------|-------------------------------------------|-----------------|---------------|--------|----------|-----|-------------------|
| Sign in | Functional | Login Page | Confirm Client Can See the Sign in Choice | Can Visible | Yes Visible | Pass | Success | No | Deiva dharshini R |
| Signup | Functional | Login Page | Confirm Client Can See the Sign-Up Choice | Can Visible | Yes Visible | Pass | Success | No | Durka M |

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| | | | | | | | | | |
|------------------------|------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|------|---------|----|-------------------|
| Forgot Password | Functional | Login Page | Verify User has forgot password | Yes, The Option Is Available | Option is Available | Pass | Success | No | Indhumathi M |
| Home Page | Functional | Home Page | Verify that the User Can See the Home page | Yes, The Option Is Available | Option is Available | Pass | Success | No | Ilan thendral K V |
| Login | Functional | Login Page | Verify that the User Can See the Login Page | Yes, The Option Is Available | Option is Available | Pass | Success | No | Deiva dharshini R |
| Register | Functional | Login Page | Client can ready to make a new account on the off chance that they are new to application | Yes, The Option Is Available | Option is Available | Pass | Success | No | Durka M |
| Error | Functional | Error Page | Client Figure out a mistake message assuming that the application's server was occupied or on the other hand the qualifications was off-base | Can Visible | Yes Visible | Pass | Success | No | Ilan thendral K V |
| Help | Functional | Help Page | To clear the doubts of the user | Can Visible | Yes Visible | Pass | Success | No | Indhumathi M |

| | | | | | | | | | |
|------------------------|------------|----------------------|---------------------------------------------------------------------------------------------|------------------------------|---------------------|------|---------|----|-------------------|
| Change password | Functional | Password Change Page | User can able to change the password if they have forgotten or the user's wish to reset it. | Yes, The Option Is Available | Option is Available | Pass | Success | No | Deiva dharshini R |
|------------------------|------------|----------------------|---------------------------------------------------------------------------------------------|------------------------------|---------------------|------|---------|----|-------------------|

| | | | | | | | | | |
|-------------------|------------|----------------------|-------------------------------------------|-------------|-------------|------|---------|----|-------------------|
| About | Functional | About page | Shows the details of application page | Can Visible | Yes Visible | Pass | Success | No | Durka M |
| Base | Functional | Similar to home page | Able to access anywhere through this page | Can Visible | Yes Visible | Pass | Success | No | Ilan thendral K V |
| Categories | Functional | News Page | Display News For User Recommendation | Can Visible | Yes Visible | Pass | Success | No | Indhumathi M |

8.2: 8.2 User Acceptance Testing:

1. Purpose of Document

A news application is a big interactive database that **tells a news story**. Think of it like you would any other piece of journalism. It just uses software instead of words and pictures. Once a user has opted-in to receive push notifications, they can receive updates for breaking news and essential stories immediately, operating as a 24-hour news service directly to a user's device. Push notifications can also be personalized to ensure that users are only alerted to stories relevant to their interest.

2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

| Resolution | Severity1 | Severity2 | Severity3 | Severity4 | Subt otal |
|----------------|-----------|-----------|-----------|-----------|-----------|
| By Design | 9 | 4 | 2 | 3 | 18 |
| Duplicate | 1 | 0 | 2 | 0 | 3 |
| External | 2 | 3 | 0 | 1 | 6 |
| Fixed | 10 | 2 | 3 | 19 | 33 |
| Not Reproduced | 0 | 0 | 1 | 0 | 1 |
| Skipped | 0 | 0 | 1 | 1 | 2 |
| Won'tFix | 0 | 5 | 2 | 1 | 8 |
| Totals | 21 | 12 | 10 | 23 | 73 |

3. TestCaseAnalysis

This report shows the number of test cases that have passed, failed, and untested.

| Section | Total Cases | Not Tested | Fail | Pass |
|--------------------|-------------|------------|------|------|
| PrintEngine | 5 | 0 | 0 | 5 |
| ClientApplication | 45 | 0 | 0 | 45 |
| Security | 2 | 0 | 0 | 2 |
| OutsourceShipping | 2 | 0 | 0 | 2 |
| ExceptionReporting | 6 | 0 | 0 | 6 |
| FinalReportOutput | 4 | 0 | 0 | 4 |
| VersionControl | 2 | 0 | 0 | 2 |

PERFORMANCE TESTING:

NFT - Risk Assessment

| S.No | Project Name | Scope/feature | Functional Changes | Hardware Changes | Software Changes | Impact of Downtime | Load/Volumen Changes | Risk Score |
|------|----------------------|---------------|--------------------|------------------|------------------|--------------------|----------------------|------------|
| 1 | News tracker applica | Existing | Low | No Changes | Moderate | >5 to 10% | | GREEN |
| 2 | News tracker applica | New | Low | No Changes | High | >5 to 10% | | ORANGE |
| 3 | News tracker applica | Existing | Low | No Changes | Moderate | >5 to 10% | | ORANGE |
| 4 | News tracker applica | New | Low | No Changes | Moderate | >5 to 10% | | GREEN |
| 5 | News tracker applica | New | Low | No Changes | High | >5 to 10% | | ORANGE |

NFT - Detailed Test Plan

| S.No | Project Overview | NFT Test approach | Umpoints/Dependencies/R | Approvals/SignOff |
|------|------------------|-------------------|------------------------------------------|-------------------|
| 1 | LOGINPAGE | LOAD | Page slow down. It may not be accessible | DEIVA DHARSHINI R |
| 2 | TASKASSIGN | STRESS | Might allot all tickets to one agent | DURKA M |

End Of Test Report

| S.No | Project Overview | NFT Test approach | NFR - Met | Test Outcome | GO/NO-GO decision | Recommendations | Identified Defects (Detected/Closed/Open) | Approvals/SignOff |
|------|------------------|-------------------|-------------------------------------------------|--------------|-------------------|-----------------|-------------------------------------------|-------------------|
| 1 | CCPLOGINPAGE | LOAD | Not met because of login the user | PASS | NO-GO | | CLOSED | DEIVA DHARSHINI R |
| 2 | CCTASKASSIGN | STRESS | Not met because of task assign is done by admin | PASS | NO-GO | | CLOSED | INDHUMATHI M |

ADVANTAGES:

- Maintaining positive news increases positive credibility. News mention is more powerful than an advertisement.
- It creates better user experience
- Managing brand image by media tracking is an essential part of a successful business.
- It is used to keep update of world news everyday
- News application promote social consciousness
- It improves the knowledge of the children
- It bring ideas and current events to life
- It create the critical thinking
- It combines both the television and radio news
- Viewers can get their news straight off their smartphone or tablet computer

DISADVANTAGES:

- Continuous use can make people addict on the application
- The battery get drained while using the application continuously.
- It may produce virus
- Ads may be displayed at some time

11. CONCLUSION:

News applications are windows into the data behind a story. They might be searchable databases, sleek visualizations or something else altogether. But no matter what form they take, news apps encourage readers to interact with data in a context that is meaningful to them: looking up crime trends in their area, checking the safety records of their local doctor, or searching political contributions to their candidate of choice. Finally news tracker application was developed successfully.

12. FUTURE SCOPE:

A mobile news app has simple goals: Capture and retain reader attention, and repeat the process, several times a day. Pretty straightforward. But not that simple in the real world. For a news provider, the smartphone screen is the the most challenging environment ever seen. There, chances are that a legacy media or a pure-player will find itself in direct competition, not only with the usual players in its field, but also with Facebook, Snapchat, Instagram and scores of gaming applications. Distraction is just one icon away;

any weakness in functional or graphic design can be lethal. It becomes very useful to the very age group of peoples.

14. APPENDIX:

Source code:

```
from dotenv import dotenv_values
from apiFetch import *
from flask import Flask
from flask_cors import CORS
from routes.register import Register
from routes.checkEmail import CheckEmail
from routes.verify import Verify
from routes.getnews import *
from routes.islogin import IsLogin
from routes.login import Login
from flask_restful import Api
from utils.apiFetch import apiRunner

app = Flask(__name__)
api = Api(app)

data = dotenv_values(".env")
app.config['SECRET_KEY'] = data["secret_key"]
app.config['SECURITY_PASSWORD_SALT'] = data["secured_password_salt"]

apiRunner()

CORS(app, supports_credentials=True)

api.add_resource(Login, '/login')
api.add_resource(IsLogin, '/islogin')
api.add_resource(CheckEmail, '/register/check')
api.add_resource(Register, '/register')
api.add_resource(Verify, '/register/verify')
api.add_resource(Personal, '/news/recommended')
api.add_resource(News, '/news/<topic>')
```