# 1. INTRODUCTION

As world’s technology is rapidly growing we has fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have this facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is android mobile application where user have access to latest news from 120+ newspapers from 50+ countries. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way.

# PROJECT OVERVIEW

To develop an news application which provides the quality news based on the user interest. Here thereare many sections and those section’s news are tracked from the news sources and the user could select their required section and they could read the news that are given as a snippet and that will be enough for a user togain an knowledge about that particular news.It is a cloud based application that it is mainly used for the users who hasn't have their enough time for their daily updation. It gives the quality news which will be provided by the best news sources and also the news will be displayed according to the users interests ‚so that they could read easily.

# PURPOSE

It is a cloud based application that it is mainly used for the users who hasn't have their enough time for their daily updation. It gives the quality news which will be provided by the best news sources and also the news will be displayed according to the users interests ‚so that they could read easily.

# LITERATURE SURVEY

* 1. **EXISTING PROBLEM**

THE GENDER GAP TRACKER: Using Language Processing to Gender Bias in media.This study provided an opportunity to determine the type of information that can be provided by analysis of Students' on-line interactions.Usage patterns of the WIER website and resources in terms of frequency of access and time spent at the site provided a rich picture of student learning behaviour.

# REFERENCES

* + 1. An Approach to News Event Detection and Tracking Based on Stream of Online News,

Authors : Yajie Qi, Li Zhou, Huayou Si, Jian Wan, Ting Jin. About the paper :

Once an event occurs, usually there are a large number of online news to be released. How to quickly and accurately detect the hot events from the huge amount of online news is the focus and hotspot.

* + 1. Exploring Mobile News Reading Interactions for News App Personalisation

Authors: Marios Constantinides, John Dowell, David Johnson, Sylvain Malacria

About the paper :

As news is increasingly accessed on smartphones and tablets, the need for personalising news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces.

* + 1. Android News App

Authors: Brijesh Joshi, Nehal Patel. About the paper :

As world’s technology is rapidly growing, we have fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have this facilities.

* + 1. Research on Topic Detection and Tracking for Online News Text Authors: Guixian Xu, Yueting Meng, Zhan Chen, Xiaoyu Qiu, Changzhi Wang, HaishenYao.

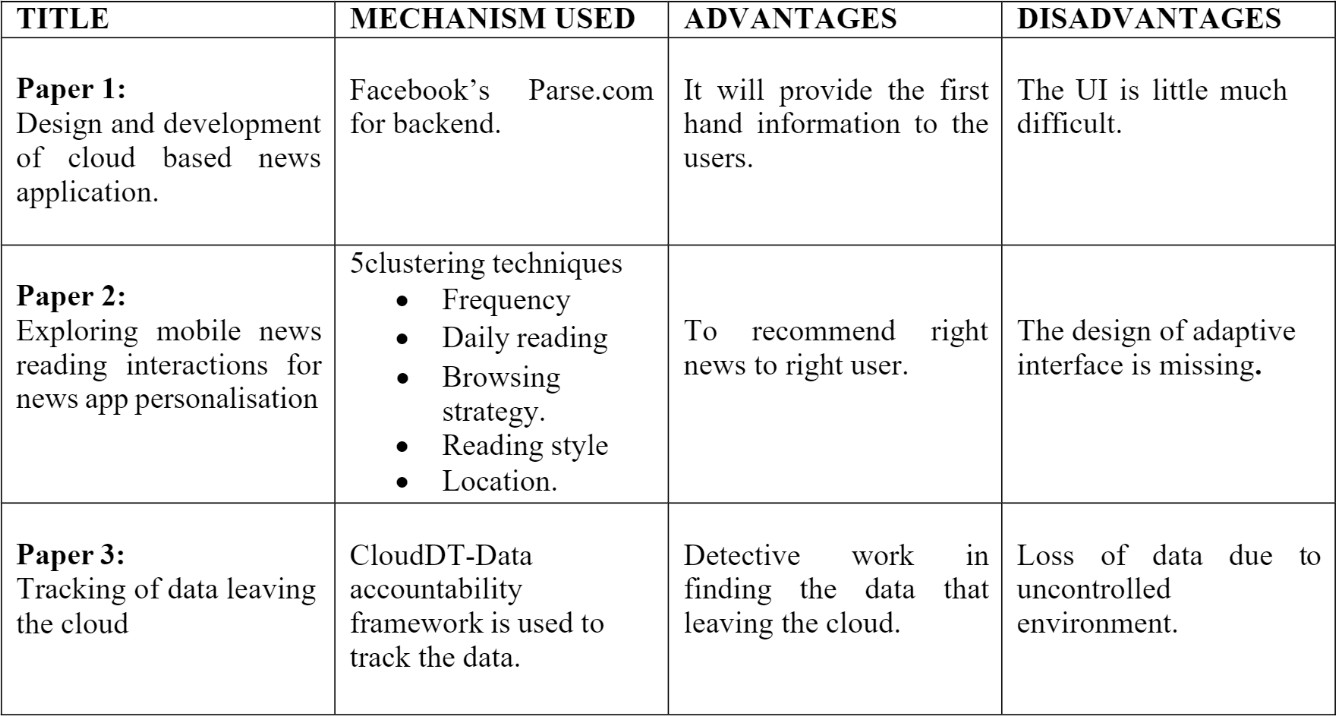
About the paper :

With the rapid development of the Internet, the amount of data has grown exponentially. On the one hand, the accumulation of big data provides the basic support for artificial intelligence. On the other hand, in the face of such huge data information, how to extract the knowledge of interest from it has become a matter of general concern.

# PROBLEM STATEMENT DEFINITION

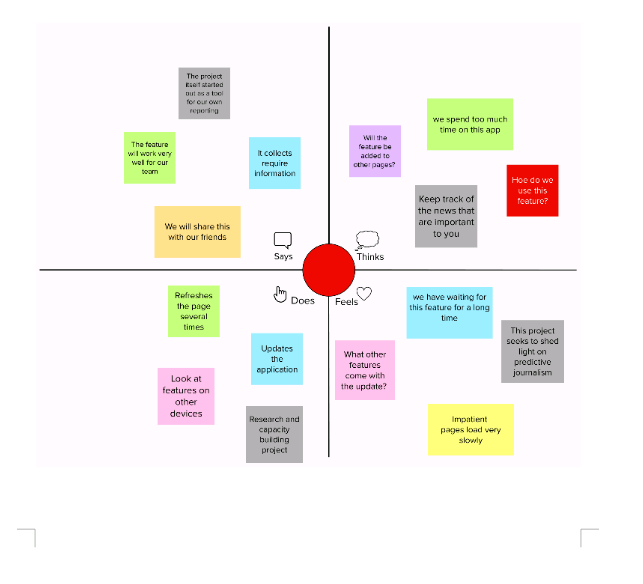
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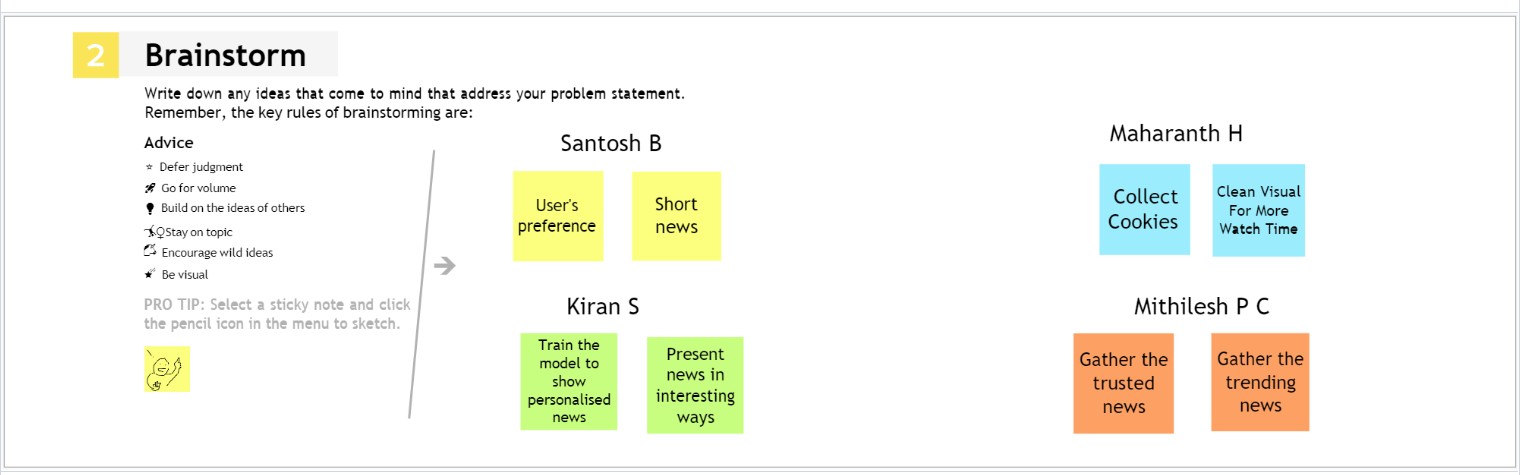


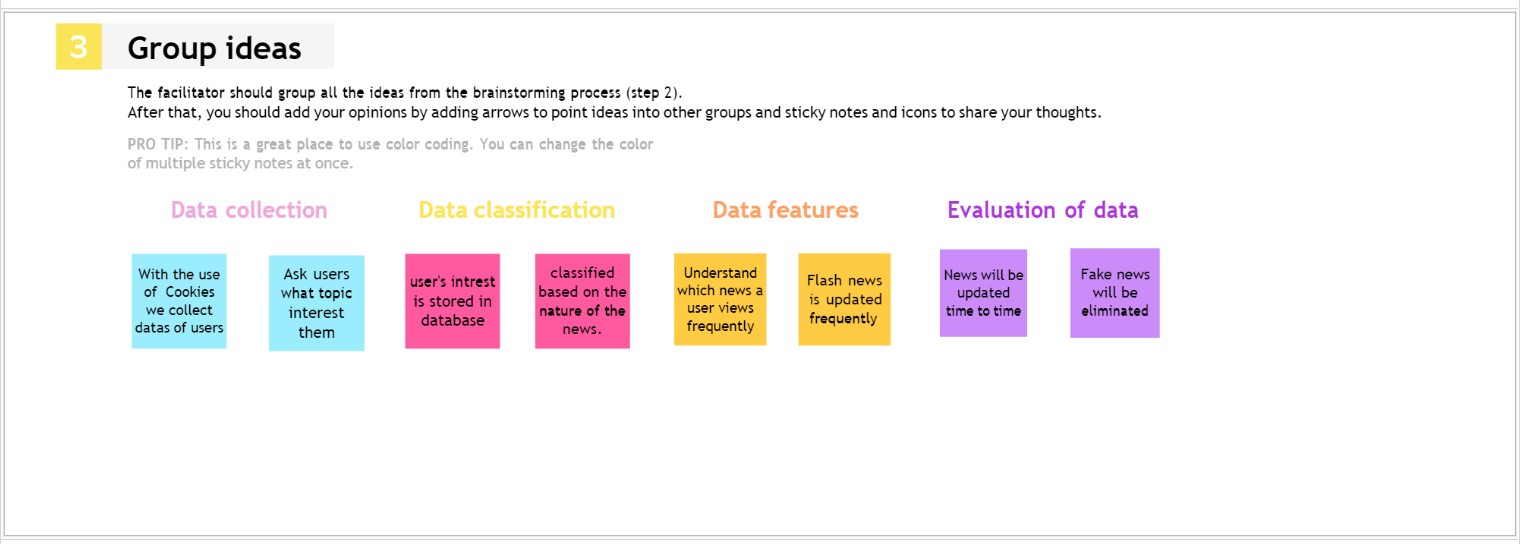
# IDEATION AND PROPOSED SYSTEM

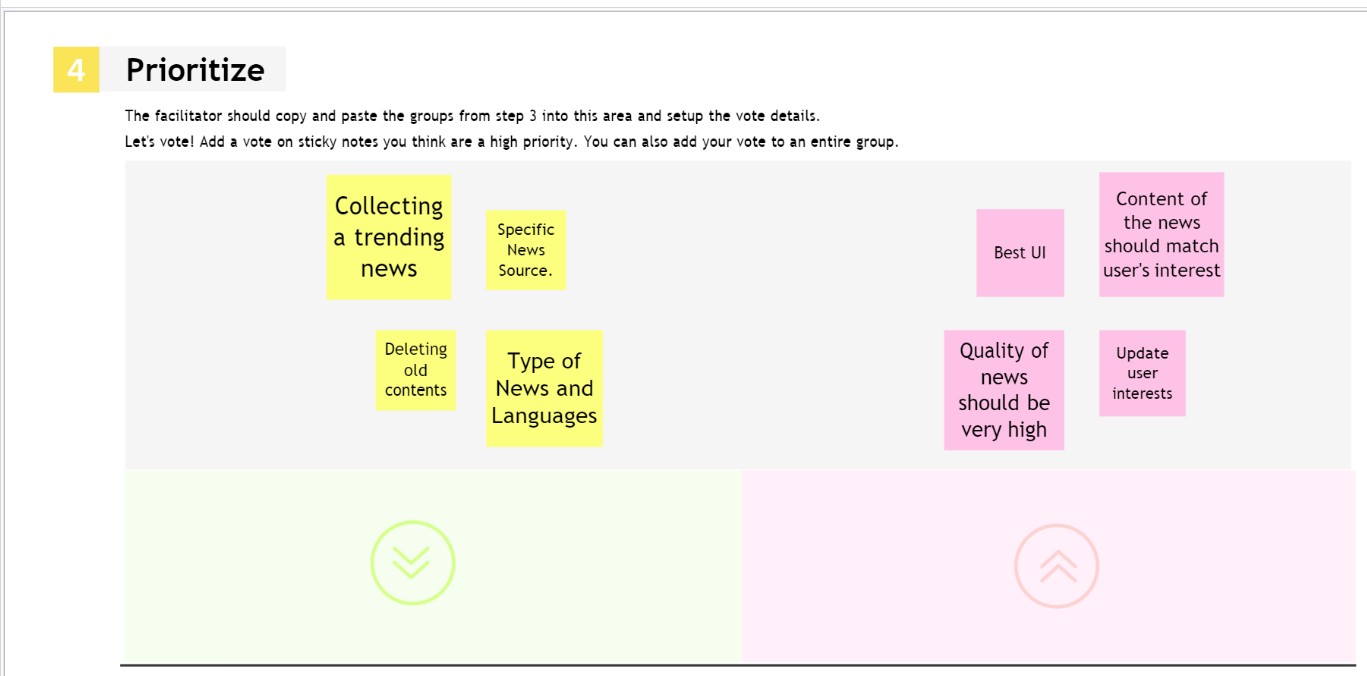
* 1. **EMPATHY MAP CANVAS**



# IDEATION AND BRAINSTORMING







* 1. **PROPOSED SOLUTION**

PROBLEM STATEMENT (PROBLEM TO BE SOLVED)

It is a cloud based application that it is mainly used for the users who hasn't have their enough time their daily updation. It gives the quality news which will be provided by the best news sources and also a news will be displayed according to the users interests ‚so that they could read easily.

IDEA / SOLUTION DESCRIPTION

We are using html - bootstrap ,python - flask. This is for the continuous display ofnews. As Python has lot of libraries ,it is easier and faster. Provides an analyzed insight into day to day news. It gives unbiased news in easy and orderly manner. News today is ridiculed with adverts and sponsorships which fail to provide unparalleled news. Our solution prevents adverts therefore providing users unbiased news. Our solution aims to provide new news upto date in real-time with personal suggestions.

NOVELTY / UNIQUENESS

Usually people use javascript ,php as a backend for web development. But we are using flask for that purpose. It predicts output with high accuracy.App-based news tracker dashboard systems which can analyze real-time images of an incident and analyze it for news content which can be very handy and usefull.

SOCIAL IMPACT / CUSTOMER SATISFACTION

Less time and more knowledge consumption.

BUSINESS MODEL (REVENUE MODEL)

A revenue model means understanding how a startup can make money. Our major revenue sources consist of sales, government funds, and public donations.

SCALABILITY OF THE SOLUTION

Design, news and flash news are flexible. IBM Cloud, for instance, is one of the cloud-based AI scalability options. Run and manage AI models, as well as optimise decisions at scale across any cloud, with the aid of IBM Cloud Build. The benefit of using the cloud to scale solutions is that we can install our AI programme there. the specific cloud environment that best supports our business needs. We can take advantage of built-in security capabilities and AI model monitoring. we can drive better business outcomes by optimizing our decisions and also make our solution scalable using cloud.

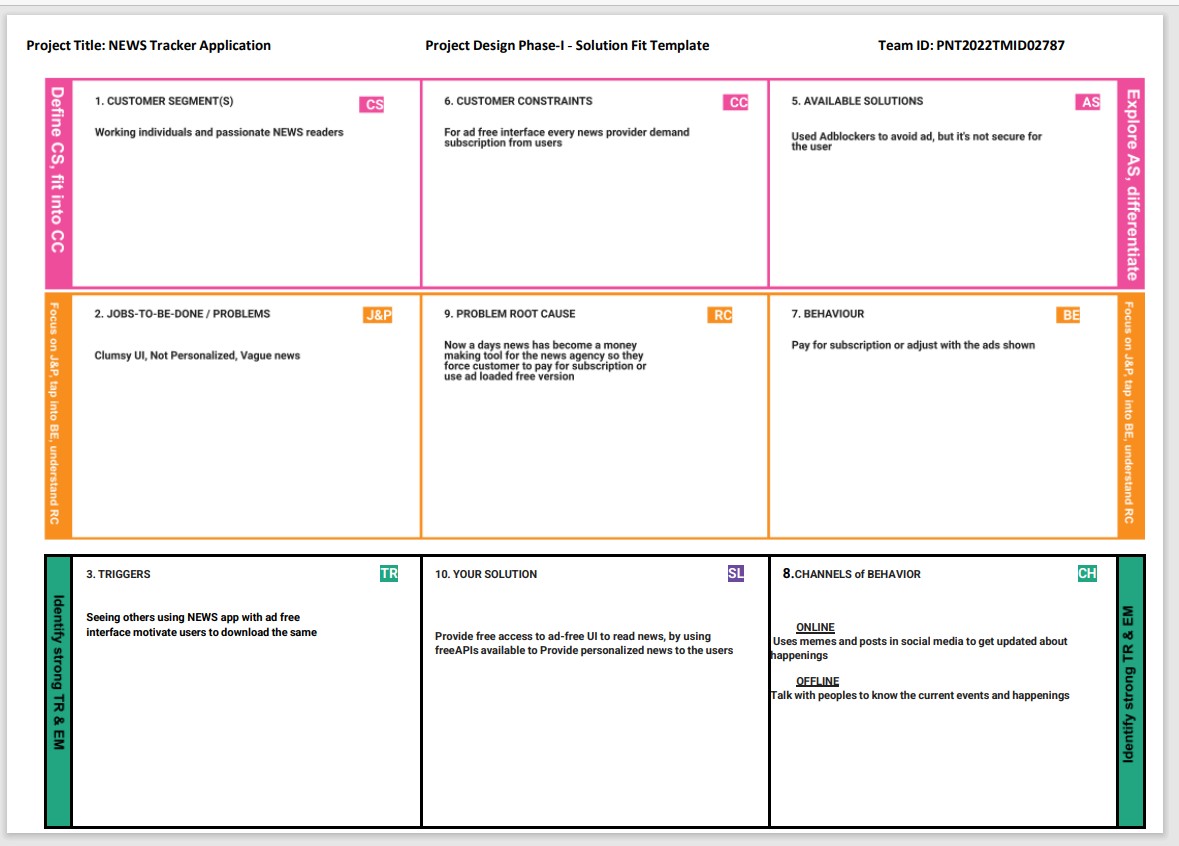
# PROBLEM SOLUTION FIT

Cloud Computing is one of the fast growing and it offers flexible resources, and economies of scale. In this article we are going make an application which tracks the news. It is an News Tracker Application where it gives crisp news from the reputed news sources and it’s just gives the simple sentence which saves the readers time and also it is high in knowledge.

# PURPOSE:

Solve complex problems in a way that fits the state of your customers.

Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior. Sharpen your communication and marketing strategy with the right triggers and messaging. Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems. Understand the existing situation in order to improve it for your target group.



# REQUIREMENT ANALYSIS

* 1. **FUNCTIONAL REQUIREMENTS**

User Registration

* + - Registration through Form
    - Registration through Gmail User Confirmation
* Confirmation via Email
* Confirmation via OTP

Searching

Real-time News

Location Based

* Search the news based on the user interest.
* Trending news will be shown.
* User can choose the genre.
* User could see the real news from trusted sources.
* Auto update news because it fetch news from NEWS-API.
* User could see their country news.
* They could also see other country news.

# NON-FUNCTIONAL REQUIREMENTS

PERFORMANCE

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design an application, which will fit into the required environment. The load for the user interface screens shall take no longer than 2 seconds. The login information shall be verified within 5 seconds. Queries shall return results within 5 seconds.

Usability

* The news is updated almost every second, it does not affect the user who reads his/her favourite news.

Security

* Authentication and Password Management. Reliability
* Avoid fake news.
* Instant news.
* Location based news. Performance
* Smooth UI makes the user to stay in app.
* Showing the current trending news first. Availability
* Minimum idle time is 24/7.
* Recent news will based on user’s previous news visit. Scalability
* Get more user’s attention by sharing the app in social media

SAFETY AND SECURITY REQUIREMENTS

* User Identification:

The system requires the user to identify himself/herself User

* Login ID:

Any user who uses the system shall have a Login.

* Modification:

Any modification (insert, delete (or) update) for the Database shall be synchronized and done only by the admin in the ward.

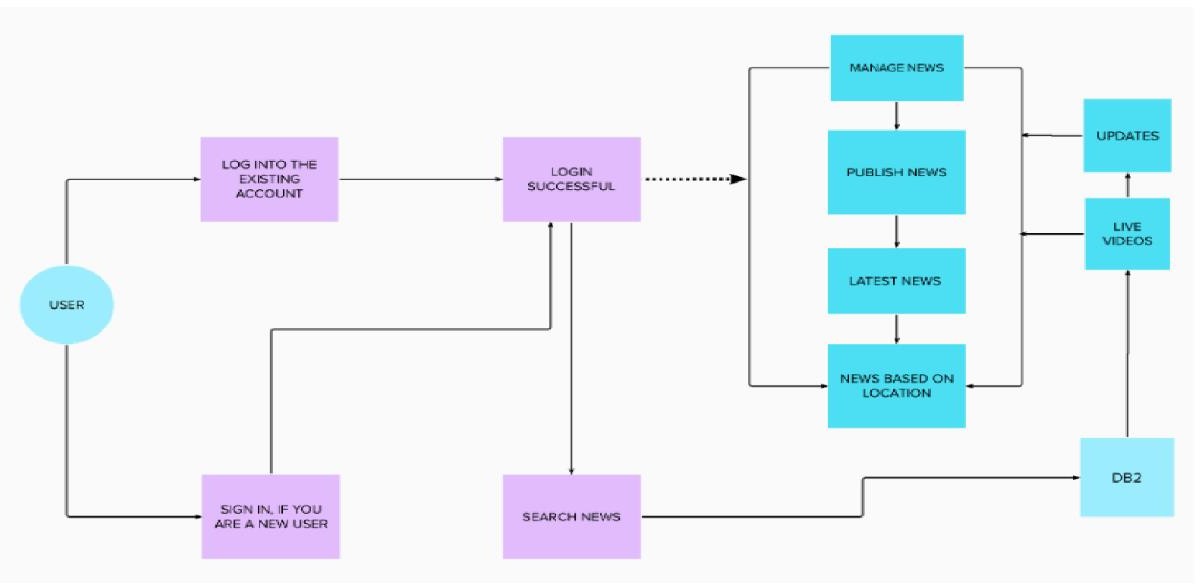
* Admin Rights:

Admin shall be able to view and modify the information.

# PROJECT DESIGN

* 1. **DATA FLOW DIAGRAMS**

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.



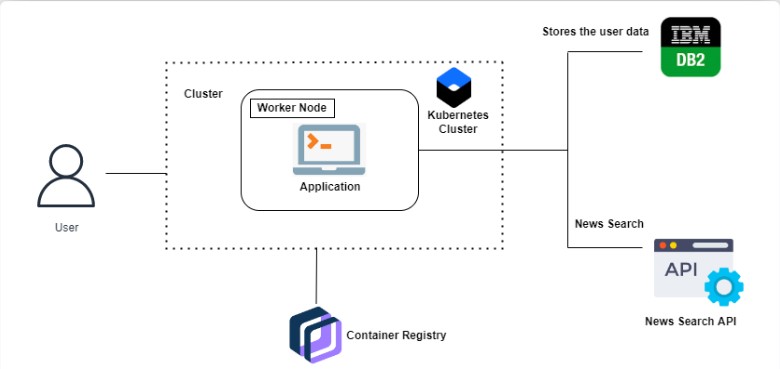
# SOLUTION AND TECHNICAL ARCHITECTURE

**PROJECT DESCRIPTION:**

It is a cloud based application that it is mainly used for the users who hasn't have their enough time their daily updation. It gives the quality news which will be provided by the best news sources and also a news will be displayed according to the users interests ‚so that they could read easily.

To develop an news application which provides the quality news based on the user interest. Here there are many sections and those section's news are tracked from the news sources and the user could select their required section and they could read the news that are given as a snippet and that will be enough for a user to gain an knowledge about that particular news.

# TECHNICAL ARCHITECTURE



**SOLUTION**

* + - The user interacts with the application.
    - Registers by giving the details.
    - Integrate the application with news APIs and store the data in the database.
    - The database will have all the details and the user can search the news by using a search bar.

# PROCEDURE

Registration :

As a user, I can register for the application by entering my email, password, and confirming my password.

Login :

As a user, I can log into the application by entering email & password Dashboard :

The news portal fetches for the most recent news and shows it as “Breaking News”.

Search Bar :

User search data based on their personal interests.

Administrator Server :

Provides the exact news from the database.

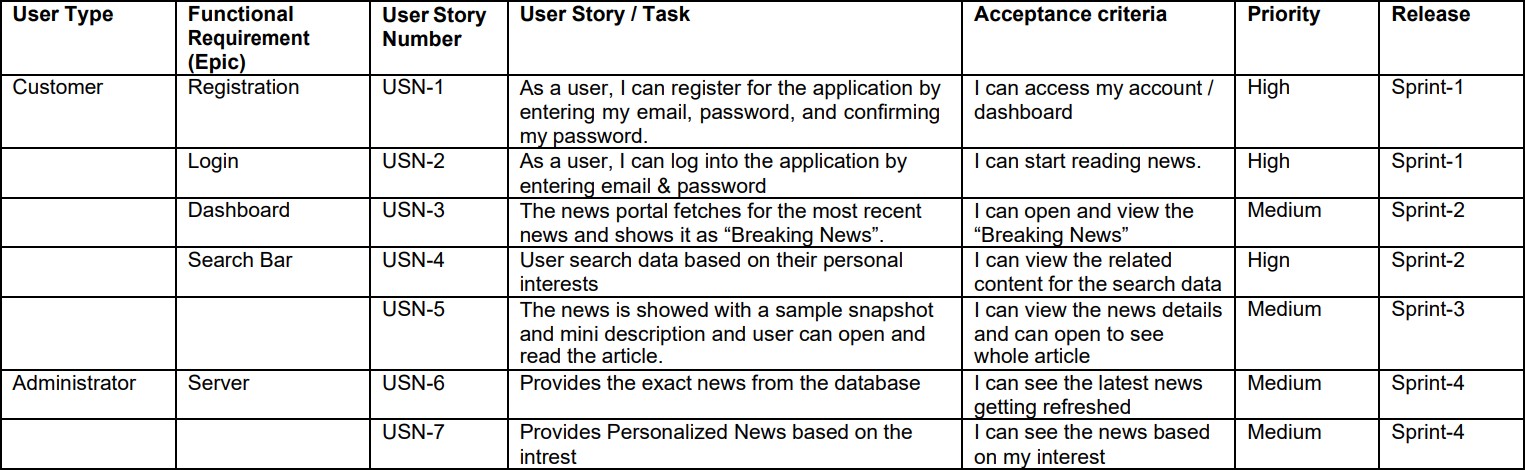
# APPROACH:

KUBERNETES CLUSTERS - Kubernetes clusters allow containers to run across multiple machines and cloud based application.

IBM DB2- Used for Backup & recovery. Comprehensive data resilience for physical and virtual servers.Cloud hosting. Dedicated, virtual private, and bare metal server options

CONTAINER REGISTRY - Container Registry is a single place for your team to manage Docker images, perform vulnerability analysis, and decide who can access what with fine-grained access control

# USER STORIES



1. **PROJECT PLANNING & SCHEDULING**

# SPRINT PLANNING & ESTIMATION

**.PRODUCT BACKLOG, SPRINT SCHEDULE, AND ESTIMATION**

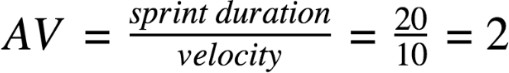
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| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional Requiremen ts(Epic)** | **User Story Number** | **User Story/Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint 1 | Registration | USN-1 | As a user, I can register for the application by entering my email, password, and confirming my password | 15 | High | Ariharan  Arun  Arun Kumar  Aseela |
| Sprint 2 | Login | USN-2 | As a user, I can log into the application by entering email & password | 10 | High | Ariharan S  Arun J  Arun Kumar K  Aseela A |
| Sprint 3 | Database | USN-3 | Connection to the database for maintaining the user details. | 10 | High | Ariharan S  Arun J  Arun Kumar K  Aseela A |
| Sprint 4 | Notifications | USN-4 | As a user, I will receive notifications to my email so that I’ll be updated on the news | 10 | Medium | Ariharan S  Arun J  Arun Kumar K  Aseela A |

# PROJECT TRACKER, VELOCITY & BURNDOWN CHART

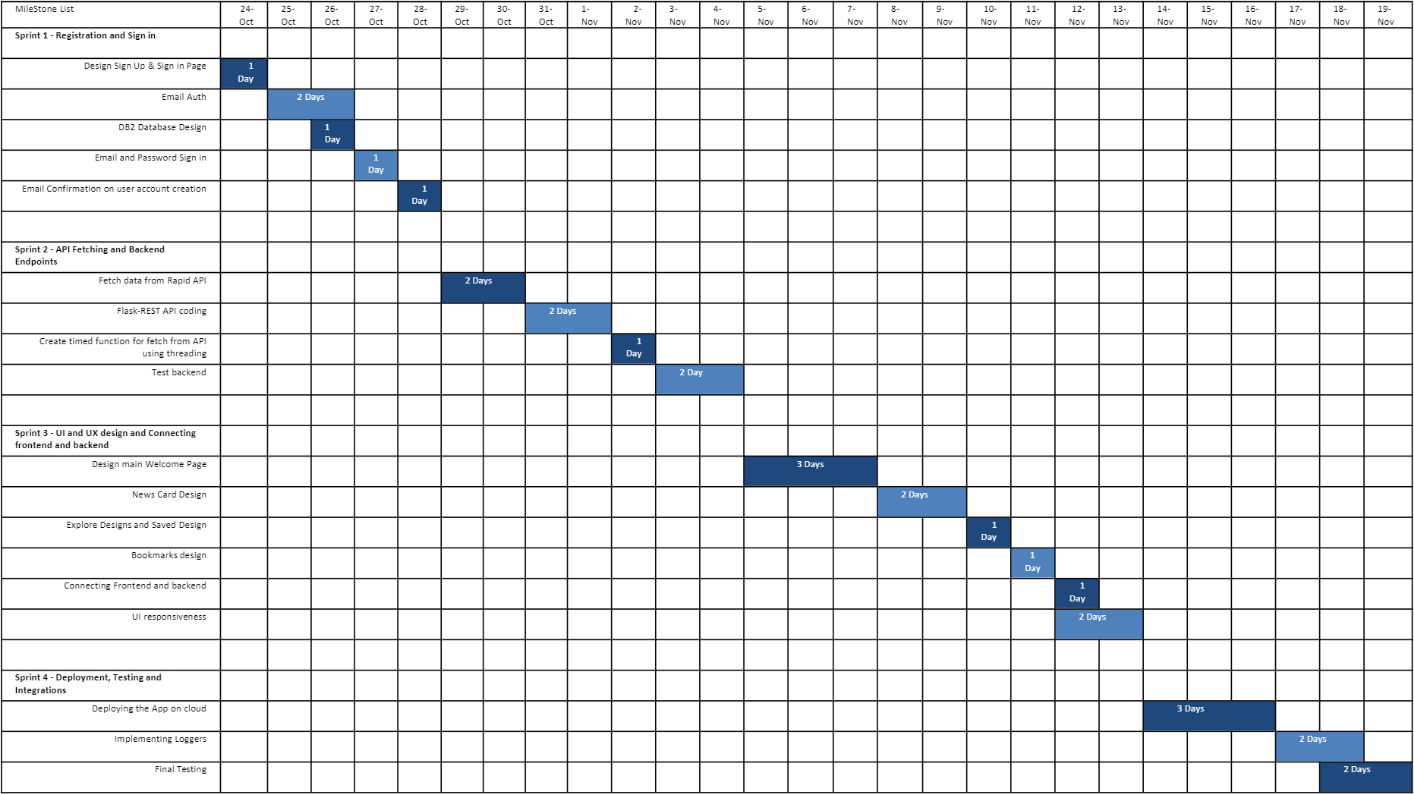
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Total Story points** | **Duration** | **Sprint Start Date** | **Sprint End Date(Planne d)** | **Story Points Completed (as on planned end date)** | **Sprint Release Date(actual)** |
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 19 Nov 2022 |

**VELOCITY:**

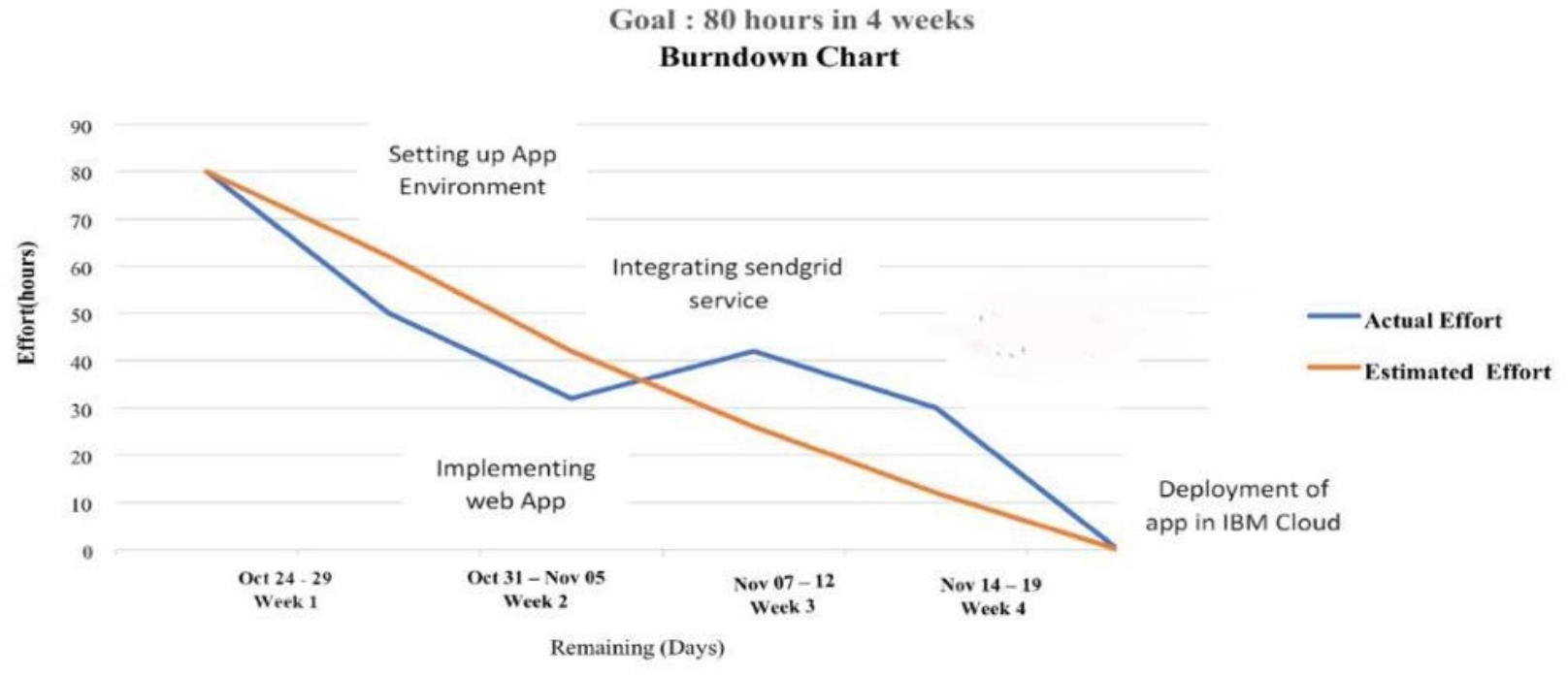
Imagine we have a 10-day sprint duration, and the velocity of the team 20(points per sprint).Let’s calculate the team’s average velocity (AV) per iteration unit.



# SPRINT DELIVERY SCHEDULE



* 1. **REPORT FROM JIRA**



# CODING AND SOLUTIONING

* 1. **FEATURE 1**
  2. **Verification and email sender:**

def emailSender(email, token):

configuration = sib\_api\_v3\_sdk.Confi guration()

configuration.api\_key['api-key'] = a pp.data['mail\_api\_key']

api\_instance = sib\_api\_v3\_sdk.Transa

ctionalEmailsApi(

sib\_api\_v3\_sdk.ApiClient(configu

ration))

now= datetime.now() dt\_string = now.strftime("%d/%m/%Y %

H:%M:%S")

msg = {} msg('Subject']"Verfiy your NewsTracker Account

msg['From"] = {"name": "News Tracker

Dev Team",

"email": "verifyänews

[tracker.com](http://tracker.com/)"}

msg['To] [{"email": email}]

msg['Text']=f'Please click this <a h

ref="<http://127.0.0.1:5500/frontend/page>

s/verify.html?token={token}">link</a> to

verify your account html = f\*\*"\

<html>

<head></head>

<body> <p>, for joining NewsTracke

r A</p>

<br>

<p>Hurray, you just registerd at NewsTracker<br><br>

Please click the following link to verify your account:<br>

<a href="<http://127.0.0.1:5500/f>

rontend/pages/verify.html?token={token}

">Click Here to Verify</a>

</p>

<br> <p>Note: This link expires wit

20

hin one hour from the time sent</p>

<br><br> <p>Regrads, <br></p>

<p><a href="[https://localhost:50](https://localhost:50/) 00">NewsTracker Dev Team</a></p>

<br><br>

<p>Email sent at [dt\_string}</p>

</body> </html>

53

send\_smtp\_email = sib\_api\_v3\_sdk.Sen dSmtpEmail(

tomsg['To'], html\_content=html, sender-msg['From 1, subject=msg[ 'Subjec t'l, text\_content=msg['Text'])

try:

api\_response = api\_instance.send transac\_email(send\_smtp\_email)

print(api\_response)

except ApiException as e:

print("Exception when calling SM TPApi→→send\_transac\_email: %s\n" e)

# FEATURE 2

# Cookie Checker

def token\_required(f):

@wraps(f)

def decorated(\*args, \*\*kwargs): token request.cookies.get("access\_token")

try:

data = jwt.decode(token, app.app.config['SECRET\_KEY' ], algorithms=['HS256'])

ip request.headers.get("ip")

cookieIp-data['ip']

if(ip cookieIp):

resp={"status": "not logged in"}

@after this request

def deleter(response):

response.delete cookie("access\_token",path="/")

response.delete\_cookie("email",path="/")

return response

return resp,401

except:

resp = {"status": "not logged in"}

@after\_this\_request

def deleter(response):

response.delete cookie("access\_token",path="/") response.delete\_cookie("email",path="/") return response

return resp, 401 return f(data['email'], \*args, \*\*kwargs)

return decorated

|  |  |
| --- | --- |
|  |  |

# TESTING

* 1. **TEST CASES**

# USER ACCEPTANCE TESTING

def token\_required(f): @wraps(f)

def decorated(\*args, \*\*kwargs): token request.cookies.get("access\_token")

try:

data = jwt.decode(token, app.app.config['SECRET\_KEY' ], algorithms=['HS256'])

ip request.headers.get("ip")

cookieIp-data['ip']

if(ip cookieIp):

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except:

resp = {"status": "not logged in"}

@after\_this\_request

def deleter(response):

response.delete cookie("access\_token",path="/") response.delete\_cookie("email",path="/") return response

return resp, 401 return f(data['email'], \*args, \*\*kwargs)

return decorated

|  |  |
| --- | --- |
|  |  |

1. **ADVANTAGES AND DISADVANTAGES**
   * This app can be accessed anywhere and anytime, So that the user can view

the news

* + Its ad free
  + The news is only based on the API
  + It may contain some unwanted content but we don’t have control over it
  + The user can bookmark their favourite news.

# CONCLUSION

Thus we have developed a full stack application based on the plans and within the given time. We have tested the application in both desktop and mobile and it worked well, Overall it was a great experience.

# FUTURE SCOPE

In future we may integrate our own news API instead of third party APIs and may develop a mobile native application so that it can be used in both android and ios.