NEWS TRACKER APPLICATION

NALAIYA THIRAN PROJECT BASED LEARNING

On

PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP

A PROJECT REPORT

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ABSTRACT

As our lives are very busy these days, we often feel we need more than 24 hrs. a day to cope up with everything we have in our schedule. Well, that's not possible but reducing the time by changing the conventional method of reading news can help. Just tell us what market news you're interested in and get a quick peek for the day. Only read what you feel is relevant and save your time. This app helps you to query for all information about Indices, Commodities, Currencies, Future Rates, Bonds, etc.… as on official websites.

INTRODUCTION

Newspapers are one of the most popular and most needed commodities in our daily life. In today's busy world, reading newspapers has become one of the traditional ways of getting news. News is produced every minute and distributed via television, radio and the Internet, so the news updated the next morning is already outdated. So newspaper and magazine publishers have a hard time keeping up with the pace. Change is needed and publishers must embrace mobile.

OBJECTIVE

In today's world we have a lot of work and there is no time to cope up everything in the schedule. So, it is not possible to read the newspaper. By using this application, the user can access the news they are interested and get a quick peek for the day. 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. This news tracker application helps the user to get all information about commodities, sports, technology, education etc. The user can register using their personal details and interacts with the application and save their time.

IDEATION PHASE

Literature Survey

1. IoT Based Regional Speed Restriction Using Smart Sign Boards

Author: P.Madhumathy, H.K.Nithish Kumar, Pankhuri & D.S.Suspreeth Narayan

https://link.springer.com/chapter/10.1007/978-3-030-65661-4_10

Major cause for fatal accidents on the road is over speeding. Accident risk increases with an increase in speed. The judging ability of upcoming events also gets declined while moving at higher pace, which causes judgment mistakes and leads to a crash. Around 30% of road accidents are due to over speeding. There have been various ways to avoid accidents due to over speeding, but none of them can automatically control the speed and customize the regional speed limit together. An IoT-based smart solution is discussed to overcome this, limiting the vehicle's top speed to a particular region even though people are unwilling to use control stations, smart signboards, and speed control unit in the vehicle.

2. Smart transportation system using IoT

Authors: P.S.Saarika, K.Sandhya & T.Sudha

https://ieeexplore.ieee.org/abstract/document/8358540

Nowadays the concept of smart cities became more popular. The evolution of internet of things (IoT) helps the idea of smart city more achievable. A major branch of smart city is smart transportation. Problems such as traffic congestion, road safety, accident detection, automatic fare collection and limited car parking facilities can be resolved by IoT. In this paper, an IoT based smart parking system along with an intelligent signboard is proposed. The smart parking system composed of intelligent sensors deployed on site and are used to monitor and inform the availability of parking spaces. A mobile or internet application can be provided to check the availability of parking slot. The sign board with embedded RF module and connected sensors working with solar energy as well as in battery will show the place, distance to that place, weather condition, temperature and different routes to those laces.

3. Smart city for VANETs using warning messages, traffic statistics and intelligent traffic lights

Authors: Carolina Tripp Barba, Miguel Angel Mateos, Pablo Reganas Soto, Ahmed Mohamad Mezher & Monica Aguilar Igartua

https://ieeexplore.ieee.org/abstract/document/6232229

Road safety has become a main issue for governments and car manufacturers in the last twenty years. The development of new vehicular technologies has favoured companies, researchers and institutions to focus their efforts on improving road safety. During the last decades, the evolution of wireless technologies has allowed researchers to design communication systems where vehicles participate in the communication networks. Thus, new types of networks, such as Vehicular Ad Hoc Networks (VANETs), have been created to facilitate communication between vehicles themselves and between vehicles and infrastructure. New concepts where vehicular networks play an important role have appeared the last years, such as smart cities and living labs [1]. Smart cities include intelligent traffic management in which data from the TIC (Traffic Information Centre) infrastructures could be reachable at any point. To test the possibilities of these future cities, living labs (cities in which new designed systems can be tested in real conditions) have been created all over Europe. In this work, the development of a warning system composed of Intelligent Traffic Lights (ITLs) that provides information to drivers about traffic density and weather conditions in the streets of a city is proposed and evaluated through simulations.

4. Highway 4.0: Digitalization of highways for vulnerable road safety development with intelligent IoT sensors and machine learning

Authors: Rajesh Singh, Rohit Sharma, Shaik Vaseem Akram, Anita Gehlot, Dharam Buddhi, Praveen Kumar Malik, Rajeev Arya

https://www.sciencedirect.com/science/article/abs/pii/S0925753521002514

According to United Nations (UN) 2030 agenda, the transportation system needs to be enhanced for the establishment of access to safe, affordable, accessible, and sustainable transport systems along with enhanced road safety. The highway road transport system is one of the transport systems that enables to transits goods and humans from one location to another location.

The agenda of UN 2030 for the transport system will be accomplished with the assistance of digital technologies like the internet of things (IoT) and artificial intelligence (AI). The implementation of these digital technologies on highways empowers to provide reliable, smarter, intelligent, and renewable energy sources experience to the users travelling along the highways. This study discusses the significance of the digitalization of highways that supporting and realizing a sustainable environment on the highways. The significance of implementing smart display boards and renewable sources with real-time applications is also addressed in this study. Embedding the deep learning techniques in the vison node at the traffic junction and the highway lighting controller is able to deliver an intelligent system that provides sustained experience and management of the highways. Smart reflectors, adoption of renewable energy, developing vehicle-to-vehicle communication in vehicles, and smart lamppost are the few recommendations for the implementation of digitalizing highways.

5. Internet of Things Based Solutions for Road Safety and Traffic Management in Intelligent Transportation Systems

Authors: Arnav Thakur, Reza Malekian & Dijana Capeska Bogatinoska

https://link.springer.com/chapter/10.1007/978-3-319-67597-8_5

Road safety, traffic congestion and efficiency of the transport sector are major global concerns. Improving this is the primary objective of intelligent transport systems (ITS). Having Internet of things (IoT) based solutions for ITS would enable motorists to obtain prior contextual guidance to reduce congestion and avoid potential hazards. IoT based solutions enabling collection of data from client nodes in a wireless sensor network in the transport environment implementing ITS goals is studied. Road safety techniques studied include distance sensing, improper driving detection and accident prevention, weather related events and negligent driving detection and accident avoidance. Vehicle to vehicle communication and vehicle to infrastructure based channels are studied. Wireless communication technologies suitable for the channels are studied. Additional benefits and services that can be added to a system with the IoT approach are also studied. The effectiveness of such a system is studied with the use of validation framework. Multiple case studies of current and future IoT based ITS along with the challenges in the application is discussed.

EMPATHY MAP


What do they
THINK AND FEEL?
what really counts
major preoccupations
worries & aspirations
Simplify and Improve consumer's online Experience
physiological survival news
Feelings of safety and secured
News Available Offline
Esteem and Self Actualization
Notification of New Content
Icon On Home Screen
News Automatically Available In The Morning
What do they
HEAR?
what friends say
what boss say
what influencers say
Providing credible links for the use to refer to incese of any doubts on news credibily
Behaviour of Young and Old people with respect to being updated
They prefer personalized Push Notifications
Customization Everyone reads the news differently
Content Interaction option for engaging with content
Search and Filter looks for specific News Topic
Usage of news App increased after the Pandemic
Customizing the news based on the age of the user
What do they
SEE?
environment
friends
what the market offers
Easy Offline Access
A Fast site and Secured site
Preference in the Web,App,and others
Intresting Facts about the Guidelines
Quick Response Wish You Could Listen To Them
Expect as to be ProActive
Expects and Love to be Surprised
Organized Intuitively on custom Feed
What do they
SAY AND DO?
attitude in public
appearance
behavior towards others
Fake News detection
Immediate notification
Precised News are Only Published
Instant updates
Wishlist News are sent mail Everyday
Safe and secure
Ad free experience
Multi language support
User can create own wishlist
Different category news
PAIN
fears
frustrations
obstacles
Users doesn't want to waste time figuring out the relevance of the news
Too many remainders even it clusters the bar on their phone
More time consumption
Users sometimes get Overwhelmed by too many categories
Users don't want to spend time reading the entire content
Too many notifications irritate the users
Problems faced because of irrelevant content
Misinformation spreads like wildfire
Children can access inappropriate information more easily
Spammed with notifications
GAIN
"wants" / needs
measures of success
obstacles
Providing a report option for the user that could say that the user is not intrested with the info receiving
Needed News can be shared and downloaded
Only authorized content will be published
Filter capabilities including the ability to follow certain topics
comment section and share section
Prefer saving time over money
Urgent information is broadly dispersed
Precised information will be published
Your wishlist notification instantly
worldwide information Availability and connectivity

PROBLEM STATEMENT

Vijay is a busy business man who needs to read news on the go without any hassles while travelling because he considers carrying around a physical newspaper a nuisance to him and the people around him. Vijay needs to read needs to read news in such a way that he doesn't have to worry about ever buying physical newspapers or carrying with him everywhere. Something which should fit in the palm of his hands, which he could carry everywhere, access from everywhere, something digital such as an Application hosted on the internet which could be accessed from any device that is connected to the Internet. Such as smartphones and computers.

Question	Description
Who does the problem affect?	Customers such as Vijay.
What are the boundaries of the problem?	geographic, workflow, daily life
What is the issue?	Physical newspapers are old fashioned in this digital era. They cost money to buy, can easily be damaged, limited amount of information, not flexible to modifications, poor quality. Fixing these in such a way can make physical newspapers become extinct and their use can be abolished. If the problem isn't solved, it would become a greater problem to integrate people to become digitally aware.
When does this issue occur?	The issue occurs when the customer wants to read the news.
Where is the issue occuring?	The issue occurs when people try to access information i.e during the usage. Accessing information is flawed through the usage of physical newspapers in the digital era.

Why is it important that we fix this problem?	It is important to fix this problem because since everything in our day to day life is becoming/being converted to digital from a physical/analog entity. It is necessary to access information from anywhere. It reduces the hassles of getting knowledge and information that has happened before and will promote everyone to know better about the current events that's happening and will motivate everyone to gain a profound knowledge in the field of their interests. It wouldn't look weird when

PROJECT DESIGN PHASE 1

PROPOSED SOLUTION

1.PROBLEM STATEMENT:
Users are not possible to get latest news in their busy schedule.

2.IDEA/SOLUTION DESCRIPTION:
In context of changing the conventional reading method.We will aware of knowing the interested and uninterested topics of the user through which user will get relevant content what they need.By providing the news feed feature which contain quick short news where user time is saved.

3.NOVELTY/UNIQUENESS:
Implementing unique features like no ads,Basic life support and knowing uninterested topics which makes our customer useful in their daily life.

4.SOCIAL IMPACT/CUSTOMER SATISFACTION:
Since we provide short and crisp news user time is saved. User using the app regularly will create awareness of their surrounding.

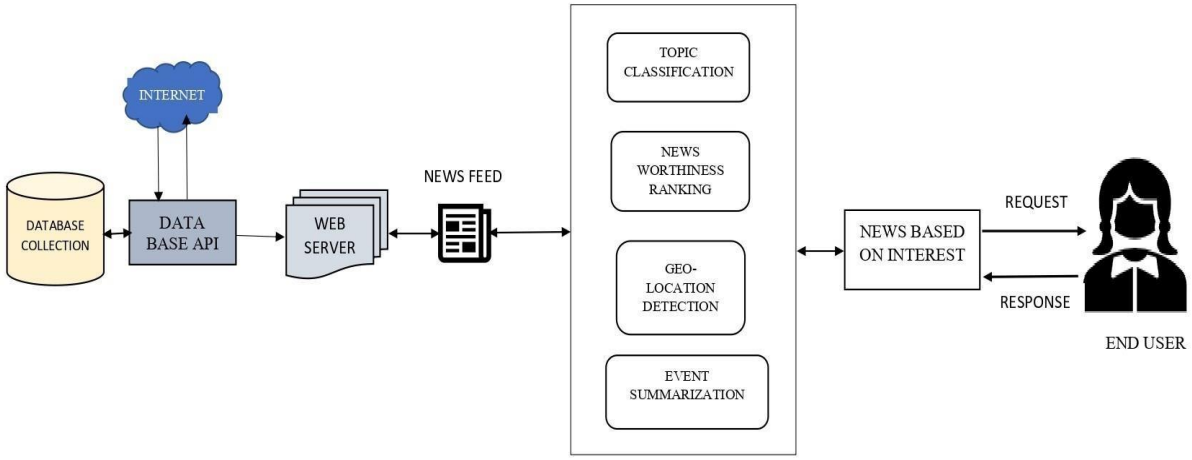
5.BUSINESS MODEL(REVENUE MODEL):
The main source of profit will be from affliated marketing.We receive profit from increasing the count of visitors and some kind of user activities such as like,share,comment and save the news.

6.SCALABILITY OF THE SOLUTION:
As we are using IBM CLOUD so as users increasing automatically the storage will scale up. Designing the app by using feasible tech stack.

PROBLEM SOLUTION FIT

1. CUSTOMER SEGMENT(S) CS The user is not able to identify the valuable news or valuable news application to manage their schedule.	**6. CUSTOMER LIMITATIONS** EG. BUDGET, DEVICES CL Since it is a mobile application user need to have smart phones with proper internet connection.	**5. AVAILABLE SOLUTIONS** PROS & CONS AS Since we provide short and crisp news user time is saved. User will get latest news , trending news of the day , based on the city , country and location user will get news.
2. PROBLEMS / PAINS - ITS FREQUENCY PR In other existing application users need to face issues like they haven't getting proper news ,subscribe to get news and getting unnecessary advertisement exist in the application.	**9. PROBLEM ROOT / CAUSE** RC User are not getting relevant news ,user time is not saved and they can't able to manage their schedule in their daily life.	**7. BEHAVIOR** - ITS INTENSITY BE In this application user will get world wide news and various types of news.
3. TRIGGERS TO ACT TR In our application user's can able to choose personalization feature for news like interested topic category ,showing estimated reading time, according to their language they can get news ,and they can use filter option for news **4. EMOTIONS** BEFORE / AFTER EM If user face any drastic incident in their life user need to manage that situation like basic life support . That feature is available in our application.	**10. YOUR SOLUTION** SL In the context of changing the conventional reading method . We will aware of knowing the interested and un interested topic of the user to which user will get relevant content what they need by providing the news feed feature which contain quick short news where users time is saved.As we are using IBM CLOUD so as users increasing automatically the storage will scale up. Designing the app by using feasible tech stack.	**8. CHANNELS of BEHAVIOR** CH ONLINE This application is ubiquity one users can able to access their news any time and any where. OFFLINE

SOLUTION ARCHITECTURE



PROJECT DESIGN PHASE 2

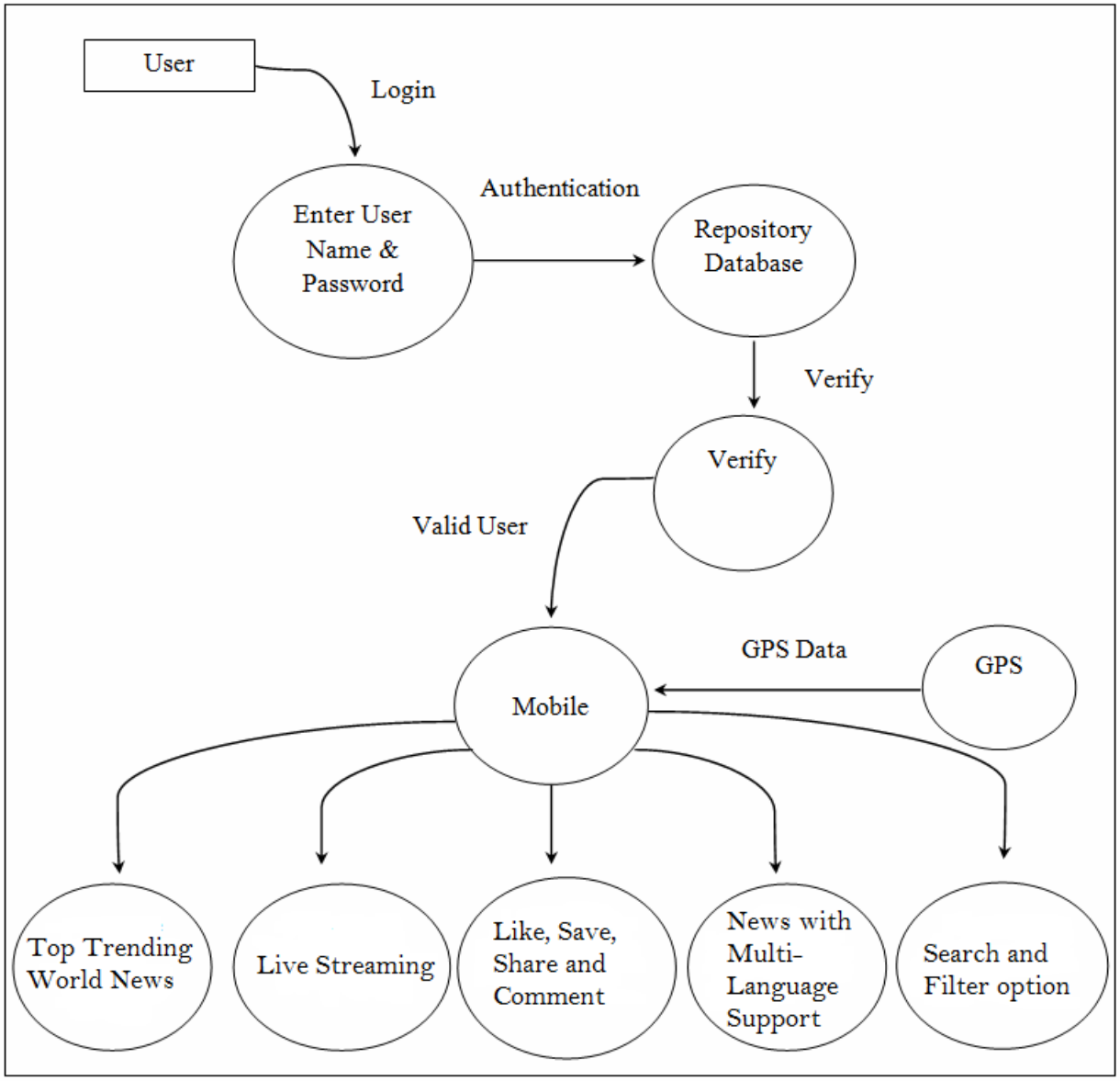
CUSTOMER JOURNEY MAP

Customer Journey: Current State	Step 1	Step 2	Step 3	Step 4
What is the customer thinking or feeling?	**Not getting Conventional reading application.**	**Not getting relevant news.**	**They Need to subscribe to get news.**	**May be this isn't the best.**
What is the customer's action?	**Looking for the Best News application.**	**Confused by their choice.**	**They will search proper information in news papers.**	**News from Social media news posts and news television channels.**
What is the customer's touchpoint with the business?	**By increasing the count visitors.**	**By Like ,Comments, Save and Share the news.**	**By customer regularly using this application.**	**By providing proper news according to their choice.**
What do we want to change about this step?	**By providing quick short news In our application.**	**Customer no need to subscribe to get news in our application.**	**Customer will have personalization features in our application.**	**Customer will not get unnecessary ads and also they will have basic life support.**
How and/or why will we make this change?	**By knowing uninterested topic or content.**	**Since we provide short crisp news user time is saved.**	**User using the app regularly will create awareness of their surrounding.**	**They can manage their profile and also they have search and filter option for getting news.**

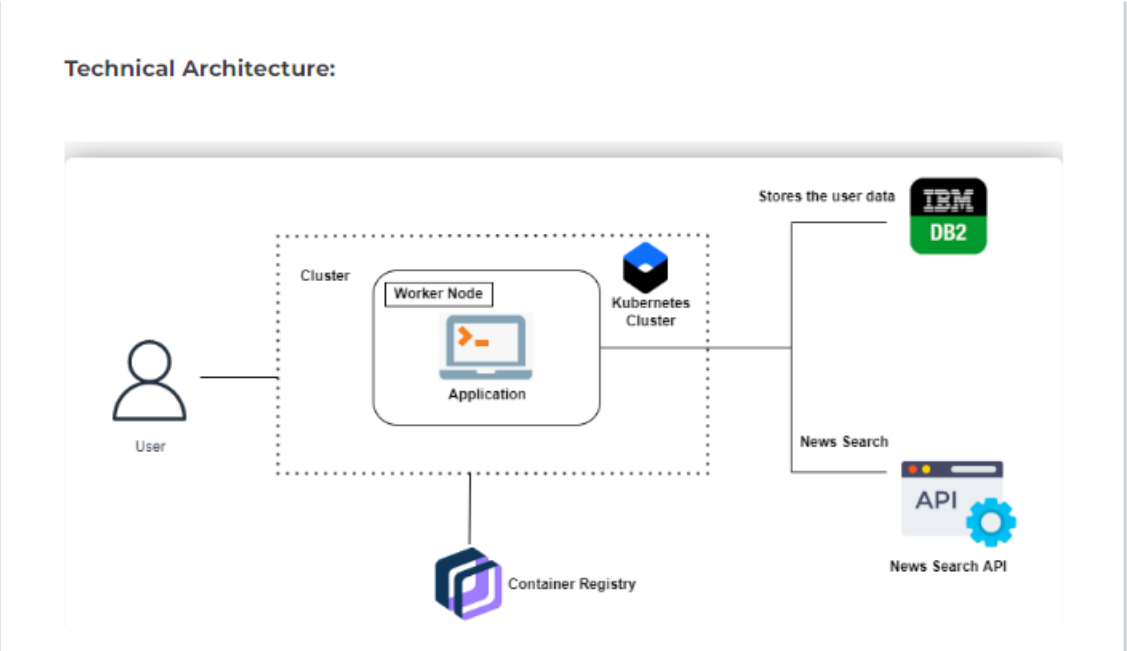
SOLUTION REQUIREMENTS

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Reading News	Application have simple interface with possibility to observe many news with small description in one page.Pressing Link/Button "Read More" to see full information.
FR-4	Searching	Application have text field and button for "Search" and "Filter" to find any news user needed.
FR-5	Sharing	Application have tools to share this news in social networks.

DATA FLOW DIAGRAMS



TECHNOLOGY STACK



PROJECT PLANNING PHASE

PREPARE MILESTONE AND ACTIVITY LIST

MILESTONE

Setting up Application Environment	M-01	To install and setup Flask in virtual environment	Yes
		Create IBM account to access IBM services(IBM DB2, chatbot, object storage)	Yes
		Install IBM Cloud CLI	Yes
		Install Docker and Docker CLI	Yes
		Create account in SendGrid and use it for transactions and email delivery.	Yes

Implementing Web Application	M-02	Create UI to interact with application - 1. Registration Page 2. Login Page 3. Dashboard	No
		Create IBM DB2 and connect with python.	Yes
Deployment of App in IBM Cloud	M-03	Create Docker image for Flask App, Upload image to container registry and deploy on Kubernetes	No
Ideation Phase	M-04	Prepare Literature Survey, Empathy Map and Ideation.	Yes
Project Design Phase-I	M-05	Prepare Proposed solution , problem-solution fit and Solution Architecture	Yes
Project Design Phase-II	M-06	Prepare Customer journey ,functional requirements,Data flow diagram and Technology Architecture	Yes
Project Planning Phase	M-07	Prepare Milestone list , Activity list and Sprint Delivery Plan	Yes
Project Development Phase	M-08	Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4	No

ACTIVITY LIST

Activity Number	Activity	Sub Activity	Assigned To	Status
1.	Setting up Application Environment	1.1 To install and setup Flask in virtual environment 1.2 Create IBM account to access IBM services(IBM DB2, chatbot, object storage) 1.3 Install IBM Cloud CLI 1.4 Install Docker and Docker CLI 1.5 Create account in SendGrid and use it for transactions and email delivery.	All Members	Completed
2.	Implementing Web Application	2.1 Create UI to interact with application - 2.1. 1. Registration Page 2.1.2 Login Page Dashboard 2.2 Create IBM DB2 and connect with python.	All Members	In Progress
3.	Deployment of App in IBM Cloud	Create Docker image for Flask App, Upload image to container registry and deploy on Kubernetes	All Members	In Progress
4.	IDEATION PHASE	4.1 Literature Review. 4.2 Empathy map. 4.3 Ideation.	All Members	Completed

5.	PROJECT DESIGN PHASE – I	5.1 Proposed Solution 5.2 Problem Solution Fit. 5.3 Solution Architecture	All Members	Completed
6.	PROJECT DESIGN PHASE -II	6.1 Customer journey. 6.2 Functional requirement. 6.3 Data flow Diagrams. 6.4 Technology Architecture.	All Members	Completed

7.	PROJECT PLANNING PHASE	7.1 Prepare milestones and activity lists. 7.2 Sprint delivery plan.	All Members	Completed
8.	PROJECT DEVELOP MENT PHASE	8.1Project development Delivery of Sprint-1. 8.2Project development Delivery of Sprint-2. 8.3Project development Delivery of Sprint-3. 8.4Project development Delivery of Sprint-4.	All Members	In Progress

SPRINT DELIVERY PLAN

Sprint	Functional Requirement (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.	5	High	
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	
Sprint-1		USN-3	As a user, I can register for the application through Gmail	5	Medium	
Sprint-1	Login	USN-4	As a user, I can log into the application by entering email & password	5	High	
Sprint-2	Dashboard	USN-5	As a user, I can enter the interests and choices of news I want to see for the first time in dashboard.	10	High	
Sprint-2	Dashboard User Interface	USN - 11	Administrator designing the user interface	10	Medium	
Sprint-3		USN-6	As a user I can go through the feed of news filtered according to my wish.	10	High	
Sprint-3		USN-7	As a user, I can log out my account in settings.	10	Medium	
Sprint-4		USN-8	As a user, I can update my interests and choice in account settings.	10	Medium	
Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-4	Chat bot / Query	USN-9	Solve issues brought up by client	5	Medium	
Sprint-4		USN-10	Roll out updates and bug fixes	5	High	

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	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

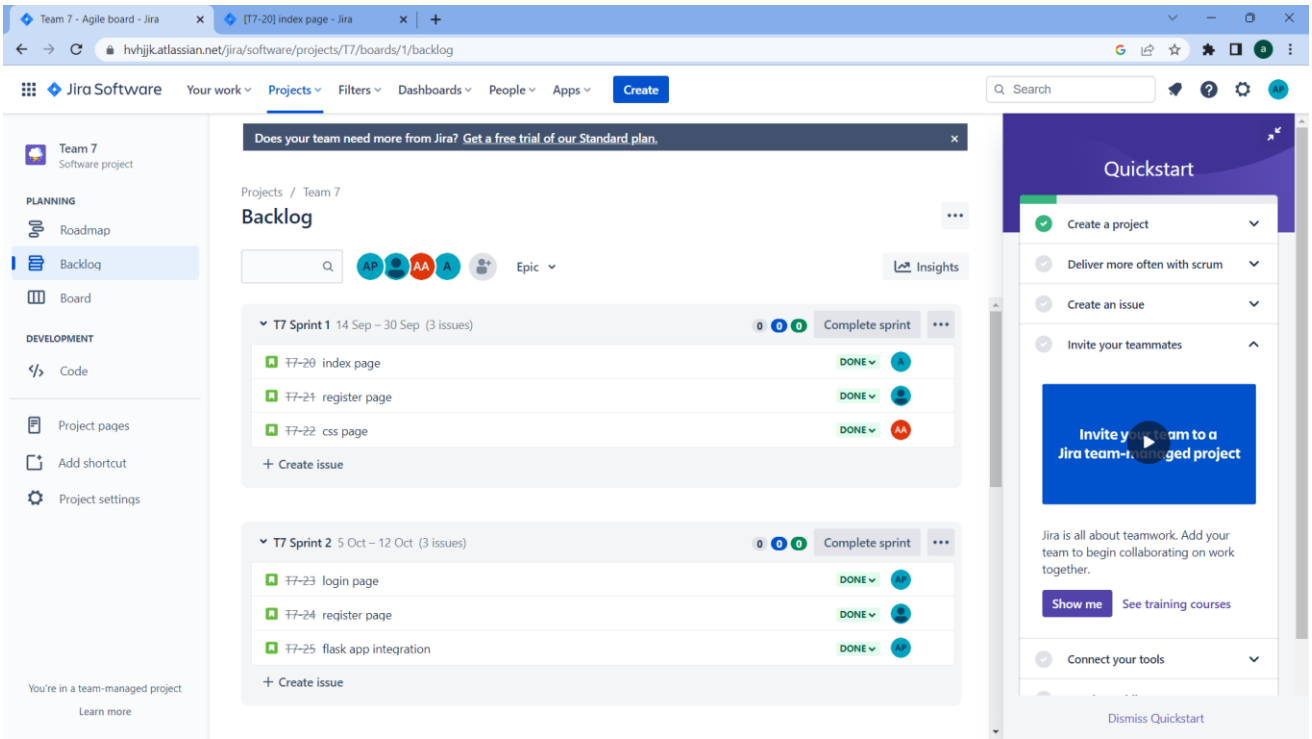
Velocity:
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

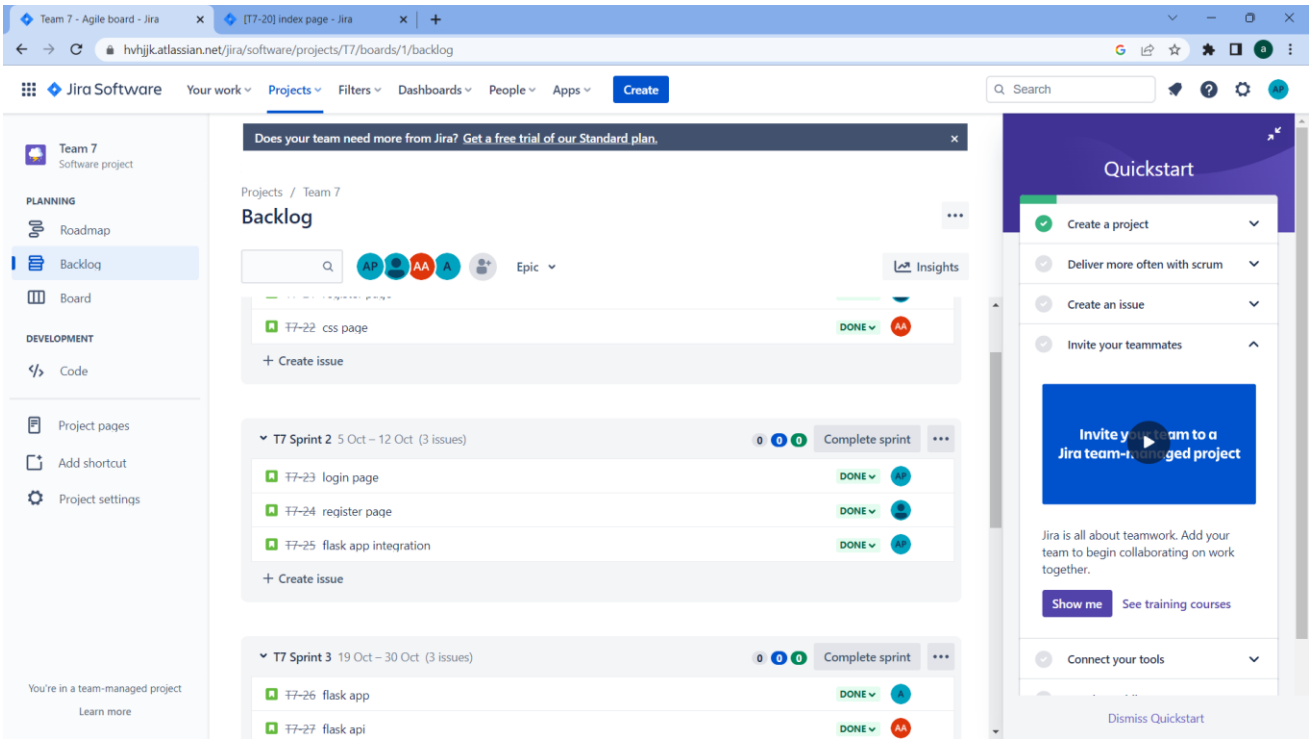
Burndown Chart: A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

PROJECT DEVELOPMENT PHASE

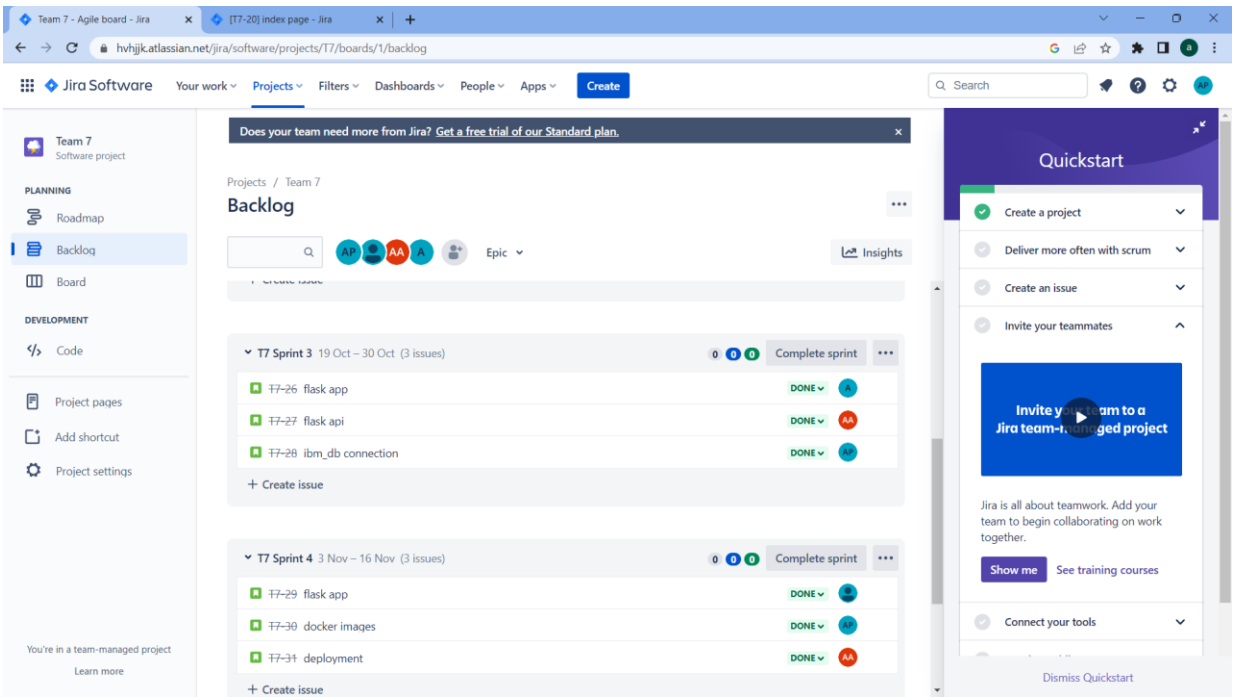
Project Development - Delivery of Sprint - 1



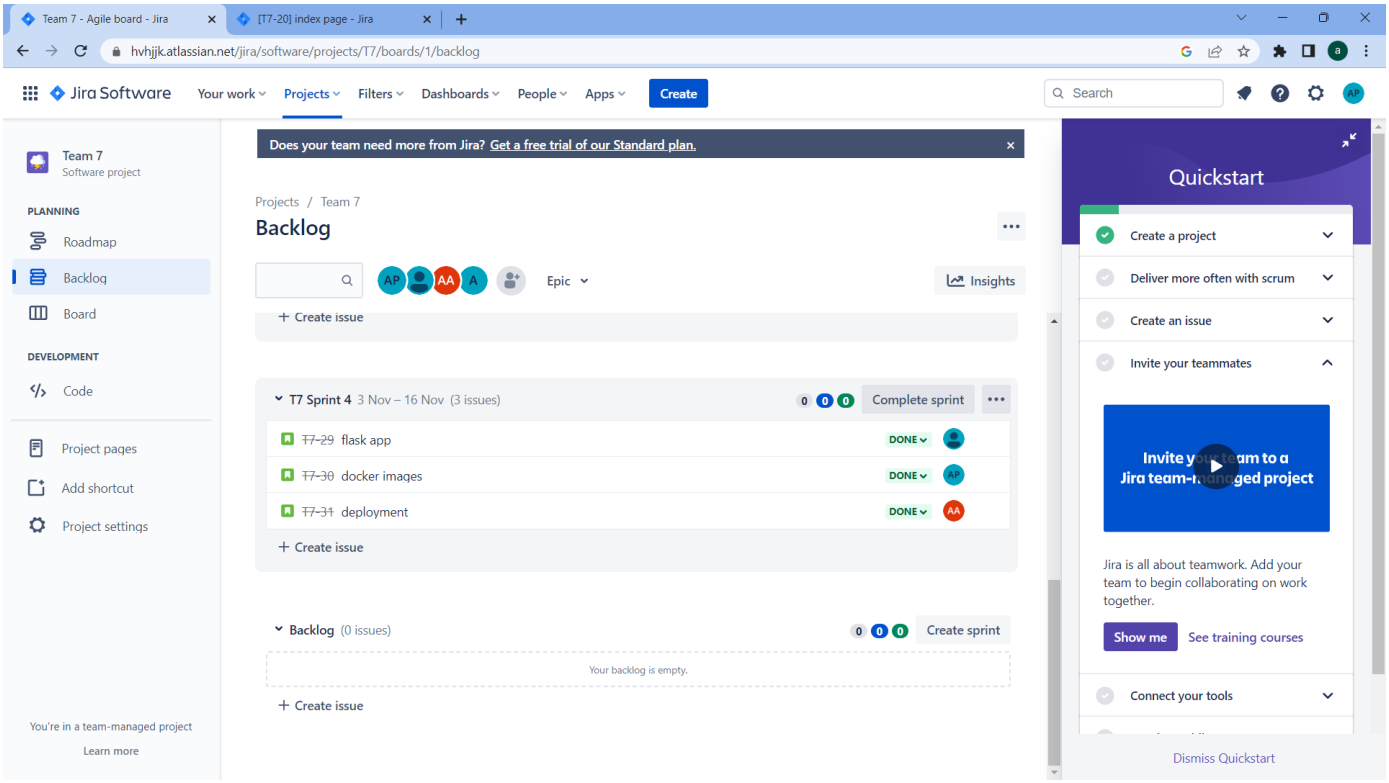
Project Development - Delivery of Sprint - 2



Project Development - Delivery of Sprint – 3



Project Development - Delivery of Sprint – 4



FINAL DELIVERABLES

Code

templates

/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>NewsTick | LOGIN</title>
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
        integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.css">
    <link rel="stylesheet" href="/static/style1.css">
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap" rel="stylesheet">
    <link href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
```

```
</head>

<body>
   <div class="register">

      <div class="login text-center mt-5">
         <h2> Register</h2>
         <form action="/register" method="post">
            <input type="text" name="username" placeholder="Enter Your Username" id="username"
required><br><br>
            <input type="email" name="email" placeholder="Enter Your Email ID" id="email"
required><br><br>
            <input type="password" name="password" placeholder="Enter Your Password" id="password"
required><br><br>

            <br>
            <br>
            <a div class = "reg"href="/login"> Register </a>
         </form>
      </div>


      <div class="note mt-3 text-center">
         <!--Register form -->
         <p id="black"> already have an account ? please login <a href="/login">login! </a> </p>

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

/login.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>NewsTick | LOGIN</title>
   <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
      integrity="sha384-
JcKb8q3iqJ61gNV9KGb8thSsNjpSL0n8PARn9HuZOnIxN0hoP+VmmDGMN5t9UJ0Z"
crossorigin="anonymous">
   <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-
awesome.css">
   <link rel="stylesheet" href="/static/style1.css">
   <link rel="preconnect" href="https://fonts.gstatic.com">
   <link href="https://fonts.googleapis.com/css2?family=Alegreya&display=swap" rel="stylesheet">
   <link href="https://fonts.googleapis.com/css2?family=Alegreya:wght@600&display=swap"
rel="stylesheet">
```

```
</head>

<body>
   <div class="login">
      <h2> Login </h2>
      <form action="/login" method="post">
         <div class="msg"></div>
         <input type="text" name="username" placeholder="Enter Your Username" id="username"
required></br></br>
         <input type="password" name="password" placeholder="Enter Your Password" id="password"
required></br></br>
         </br>
         </br>
         <a class="reg" href="/dashboard"> Login </a>
   </div>

   <div class="note mt-3 text-center">
      <!--Register form -->
      <p id="black"> Don't have an account yet? Click here to <a href="/">register! </a> </p>
   </div>
</body>

</html>
```

/style1.css

```
body{
   background-image: url(background1.jpg);
   background-size: cover;
   color: azure;
}
.login{
   margin-top: 10%;
   text-align: center;
}
.register{
   margin-top: 10%;
   text-align: center;
}
.logreg{
   margin-top: 10%;
   text-align: center;

}
#msg2{
   font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva,
Verdana, sans-serif;
   color: aqua;
}
.reg
{
   color:white;
```

```
    background-color: black;
    text-decoration: none;
    cursor: default;
}
.news
{
    color: lightcoral;
    background-color: lavenderblush;
    text-decoration: none;
}
.ruf
{
    color: black;
    text-decoration: none;
}
head{
    background-color: darkcyan;
}
.pics
{
    background-image: url(background2.jpg);
}
```

/news.html(same for all news pages)

```
  <!doctype html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
    <link rel="stylesheet" href="/static/style1.css">
    <script defer src="activePage.js"></script>
  <title>NewsTick</title>
</head>

<body>
  <nav class="navbar navbar-expand-lg bg-light">
    <div class="container-fluid">
      <a class="navbar-brand" href="#">NewsTick</a>
      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav"
        aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarNav">
        <ul class="navbar-nav">
          <li >
            <a class="news" href="/dashboard">Home   </a>     
```

```
        </li>
        <li >
          <a class="news" href="/Sports">Sports   </a>     
        </li>
        <li >
          <a class="news" href="/Science">Science    </a>     
        </li>
        <li >
          <a class="news" href="/Entertainment">Entertainment    </a>     
        </li>
        <li>
          <a class="news" href="/Business">Business    </a>     
        </li>
        <li>
          <a class="news" href="/Technology">Technology  </a>        
                        
                        
                        
                        
                        
                        
                        
 
        </li>
        <li>
          <a class="ruf" href="/logout">Logout   </a>
        </li>

      </ul>
    </div>
  </div>
</nav>

<h1>
  Today's News
</h1>
{% for news in cases.articles %}
<div class="newsbox">
  <div class="img_div">
    <img src="{{news.urlToImage}}" alt="No Image Found" height="270m">
  </div>
  <div class="main_news">
    <h3>{{news.title}}</h3>
    <h6>Author: {{news.author}}</h6>
    <h6>Published At: {{news.publishedAt}}</h6>
    <p>{{news.description}}


    </p>
  </div>
</div>
```

```
  {% endfor %}

  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min.js"
    integrity="sha384-OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6V8Qbsw3"
    crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.6/dist/umd/popper.min.js"
    integrity="sha384-
oBqDVmMz9ATKxIep9tiCxS/Z9fNfEXiDAYTujMAeBAsjFuCZSmKbSSUnQlmh/jp3"
    crossorigin="anonymous"></script>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.min.js"
    integrity="sha384-IDwe1+LCz02ROU9k972gdyvl+AESN10+x7tBKgc9I5HFtuNz0wWnPclzo6p9vxnk"
    crossorigin="anonymous"></script>
</body>

</html>
```

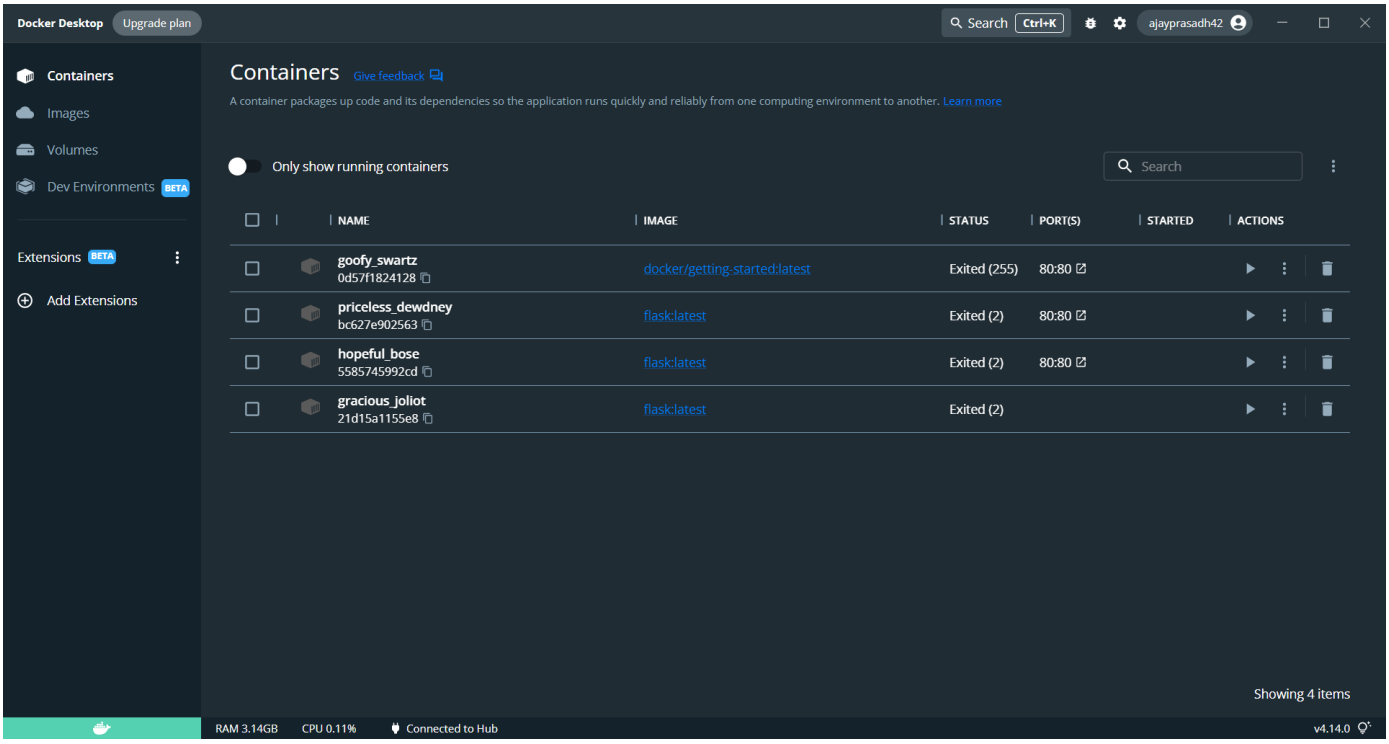
app.py

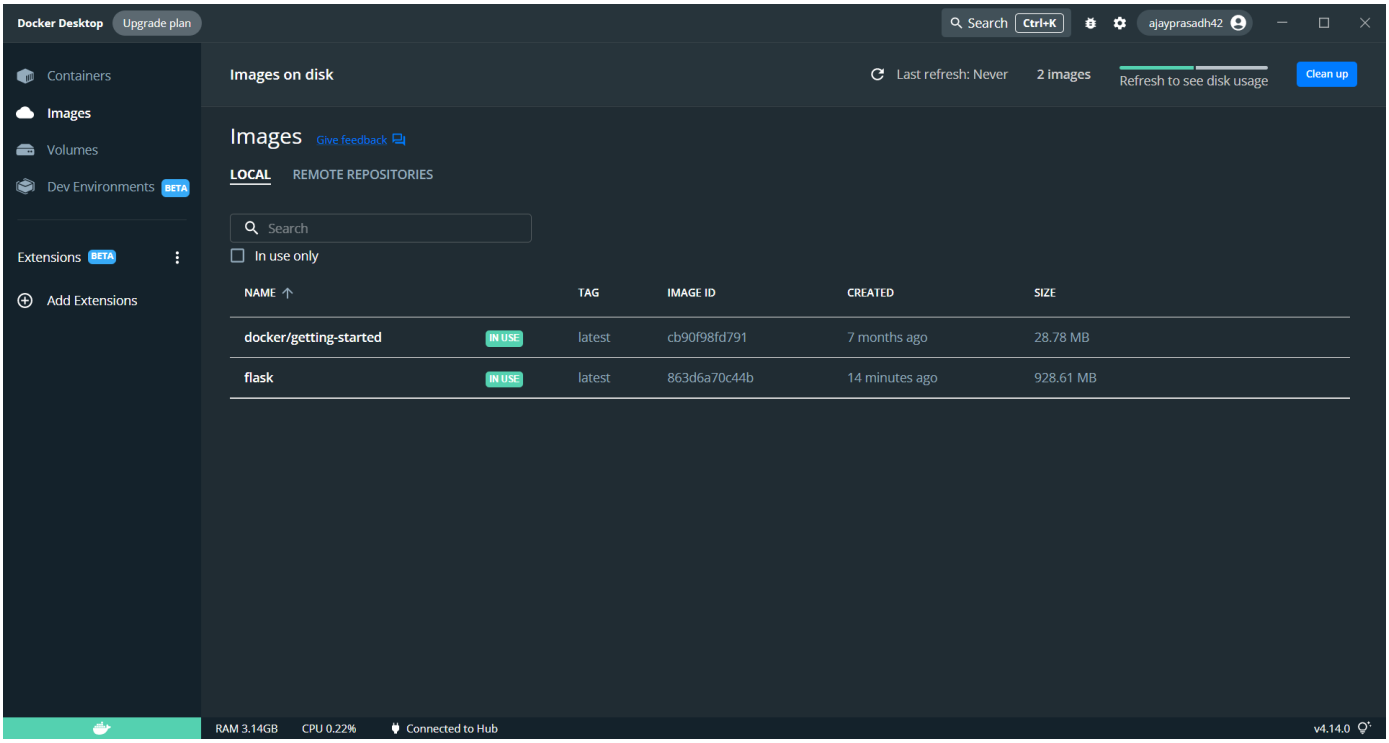
```
import requests
from flask import Flask, render_template
from flask import request, flash, redirect, url_for, session
app = Flask(__name__)
app.secret_key = "secret key"
@app.route('/')
def register():
    return render_template("register.html")

@app.route('/login')
def login():
    return render_template("login.html")

@app.route('/dashboard')
def dashboard():

    r = requests.get(
        "https://newsapi.org/v2/top-
headlines?country=in&category=general&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
    case= {
        'articles': current['articles']


    }

    return render_template("dashboard.html", cases=case)


@app.route('/Sports')
def Sports():

    r = requests.get(
```

```
        "https://newsapi.org/v2/top-
headlines?country=in&category=sports&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
    case = {
        'articles': current['articles']


    }

    return render_template("sports.html", cases=case)


@app.route('/Science')
def Science():

    r = requests.get(
        "https://newsapi.org/v2/top-
headlines?country=in&category=science&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
    case = {
        'articles': current['articles']


    }

    return render_template("science.html", cases=case)


@app.route('/Entertainment')
def Entertainment():

    r = requests.get(
        "https://newsapi.org/v2/top-
headlines?country=in&category=entertainment&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
    case = {
        'articles': current['articles']


    }

    return render_template("entertainment.html", cases=case)


@app.route('/Business')
def Business():

    r = requests.get(
        "https://newsapi.org/v2/top-
headlines?country=in&category=business&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
```

```
    case = {
        'articles': current['articles']


    }

    return render_template("business.html", cases=case)


@app.route('/Technology')
def Technology():

    r = requests.get(
        "https://newsapi.org/v2/top-
headlines?country=in&category=technology&apiKey=e0472fd1e74c4000a79ae6183f775634")
    current = r.json()
    case = {
        'articles': current['articles'] }

    return render_template("technology.html", cases=case)

@app.route('/logout')
def Logout():
    return render_template("register.html")
if __name__ == '__main__':
    app.run(debug=True)
```

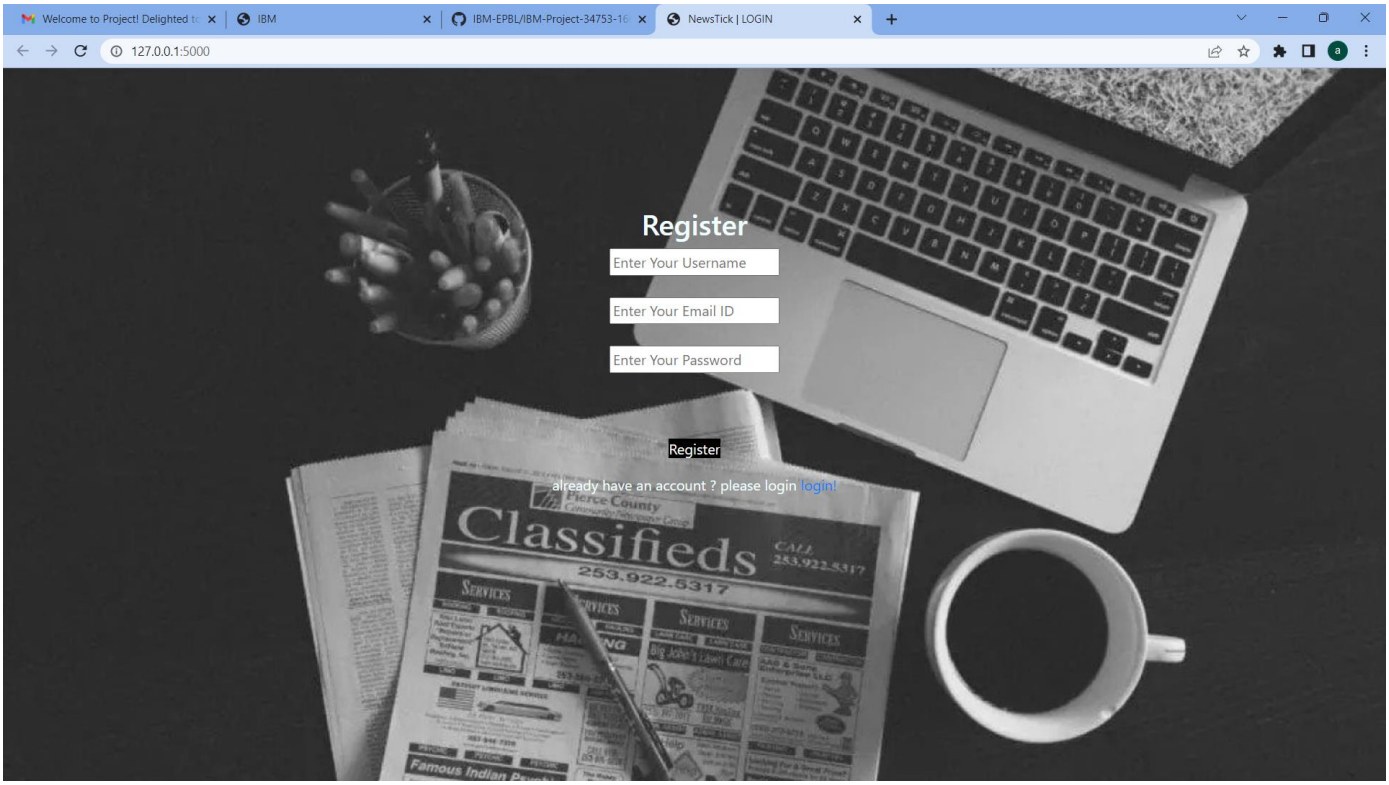
DOCKER CONTAINERS AND IMAGES

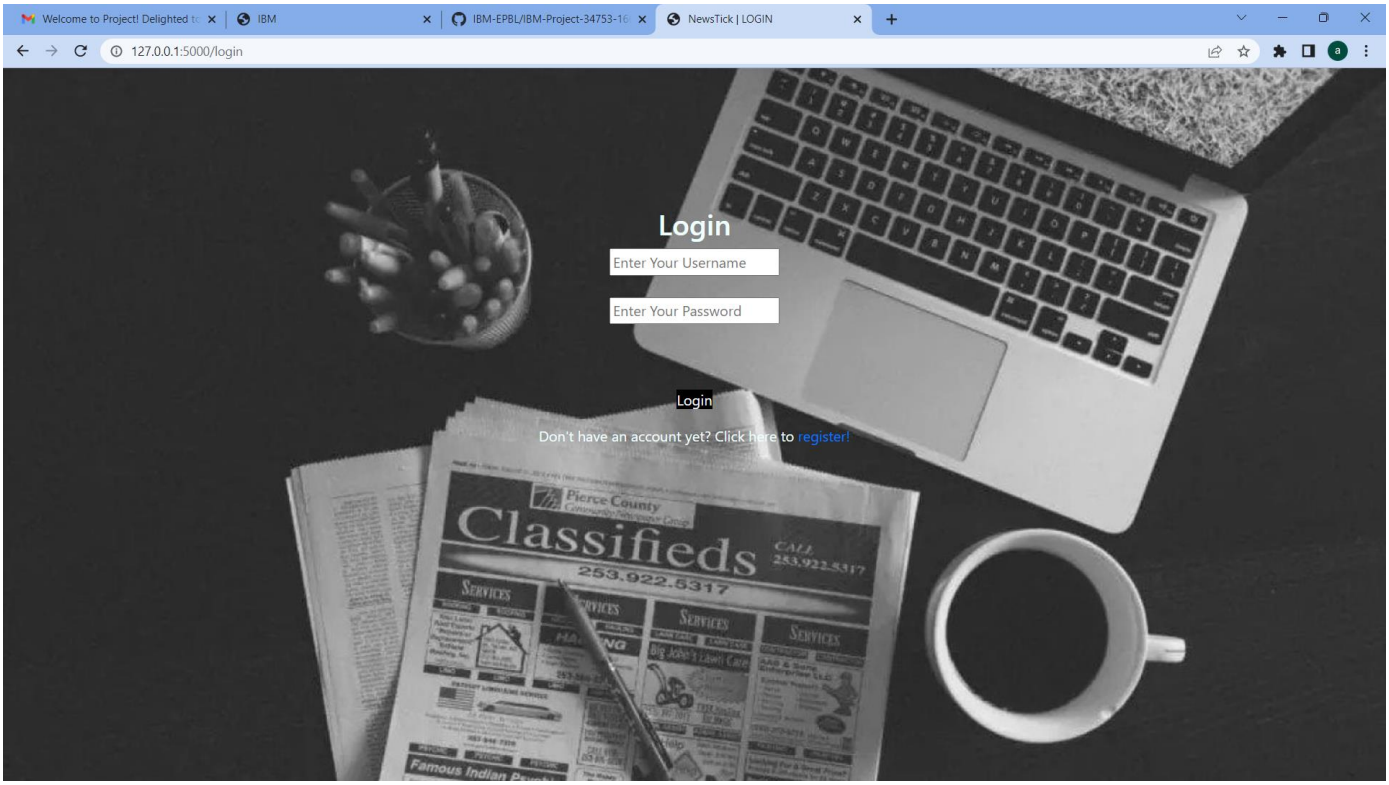


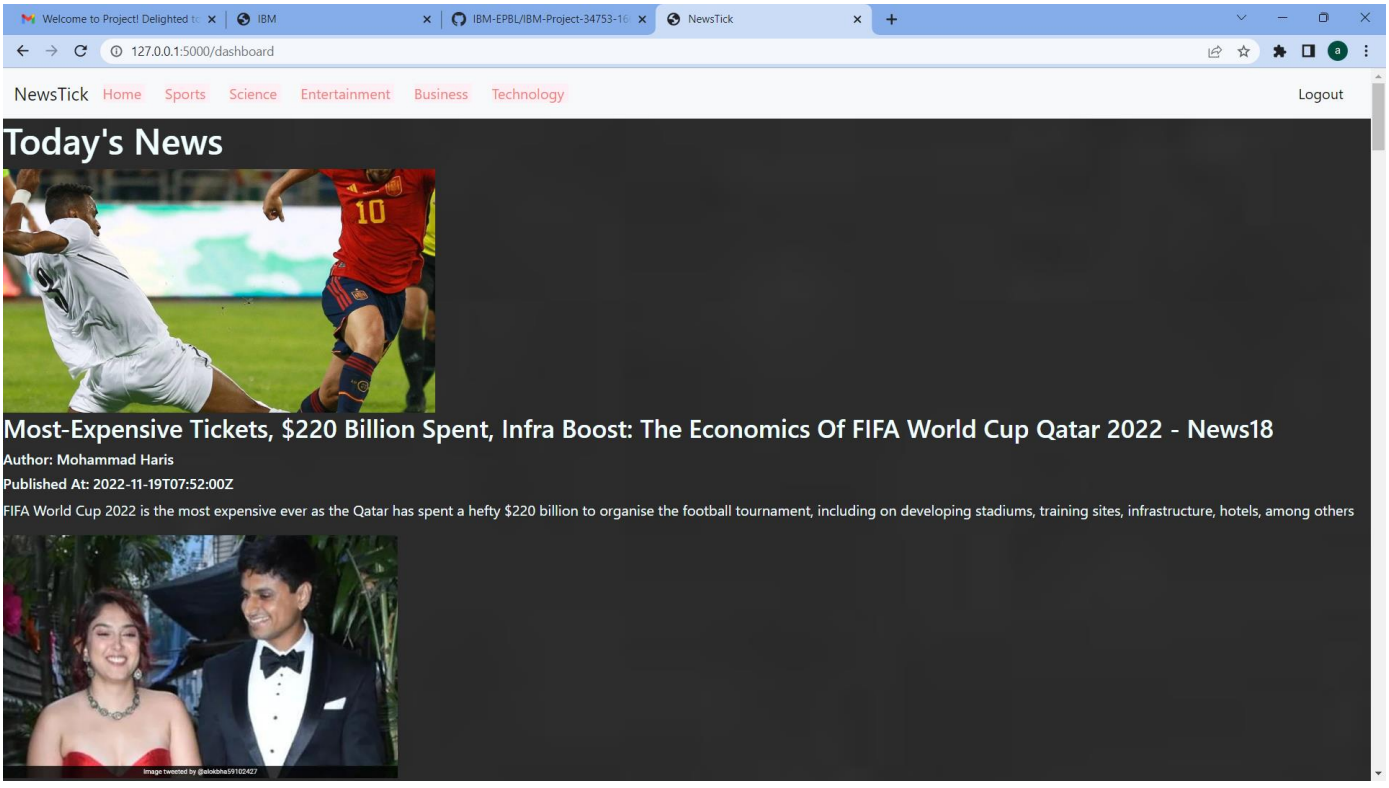


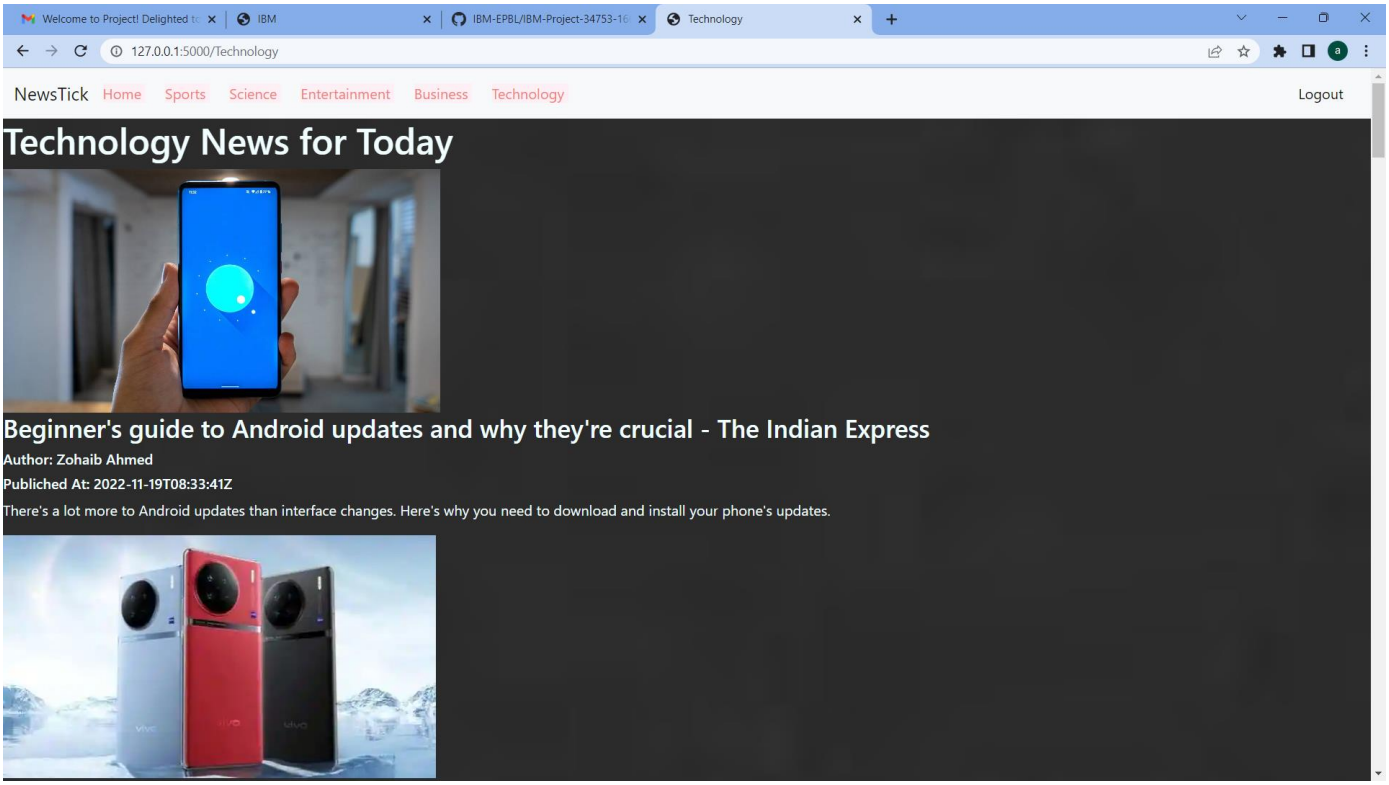
CONCLUSION

OUTPUT SCREENSHOTS




Welcome to Project! Delighted t
IBM
IBM-EPBL/IBM-Project-34753-16
NewsTick | LOGIN
127.0.0.1:5000/login
Login
Enter Your Username
Enter Your Password
Login
Don't have an account yet? Click here to register!
Classifieds
253.922.5317


Welcome to Project! Delighted t
IBM
IBM-EPBL/IBM-Project-34753-16
NewsTick
127.0.0.1:5000/dashboard
NewsTick
Home
Sports
Science
Entertainment
Business
Technology
Logout
Today's News
Most-Expensive Tickets, $220 Billion Spent, Infra Boost: The Economics Of FIFA World Cup Qatar 2022 - News18
Author: Mohammad Haris
Published At: 2022-11-19T07:52:00Z
FIFA World Cup 2022 is the most expensive ever as the Qatar has spent a hefty $220 billion to organise the football tournament, including on developing stadiums, training sites, infrastructure, hotels, among others



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