PROJECT REPORT

AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY

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Batch: B7-1A3E

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1. INTRODUCTION

1.1 Project Overview

This project, titled “Airlines Data Analytics for Aviation Industry”, aims at providing a platform for customers to clarify their queries online regarding delays and schedules of flights. This is achieved with the help of IBM Cognos where data visualization can be made according to the dataset. The data visualizations will then be available on the website which can be viewed by the passengers. Passengers can create an account and then view the flight delays and schedules and clarify their queries.

1.2 Purpose

The main purpose of the project is to provide better Airline and AirPort services and to avoid delays in Air Travel across different locations at Municipality level. The aim is to provide airports, airlines, and the travelling public with a neutral, third-party view of which airlines are delivering on their promise to get passengers from Point A to Point B on-time. Passengers can view the data in the form of graphs and charts instead of plain texts. Plaintexts and huge tables can make the passengers frustrated whereas graphs and other visualizations provided in our project provide more effortless and less time-consuming knowledge about the countries, airports, regions and number of flights, flight schedules and various other combinations of these.

2. LITERATURE SURVEY

2.1 Existing problem

Airline websites these days provide airline information via texts and huge tables. This makes the users get frustrated as they go through a series of information. Live delays and scheduling updates are not quickly reflected in the websites which may lead to chaos among the users and airline industries.

2.2 References

Paper 1

Authors: Saba Firdous, HaseebaFathiya, LipsaSadath

Year : 2021

Title: Exploratory Data Analysis on Aviation Dataset

Methodology: The usage of big data analytics is booming today, with its ability to be used to draw useful insights from past data research. Its uses in the aviation industry have a wide array of applications ranging from predicting flight delays to detecting faults in airplane parts. In this paper, we conducted exploratory data analysis on flight dataset to draw inferences on arrival and departure delays and to identify relationships between flight timings and delays.

Advantage: Using the flight delay data, we identified which flight is mostly prone to delays. The arrived upon conclusions are useful for selecting flights in the future.

Disadvantage: If not perform properly EDA can misguide a problem.EDA does not effective when we deal with high-dimensional data.

Paper 2

Authors: P. H. K Tissera, A. N. M. R. S. P. llwana, K. T. Waduge, M. A. l. Perera, D. P. Nawinna and D. Kasthurirathna

Year : 2020

Title: Predictive Analytics Platform for Airline Industry

Methodology: The research is to develop accurate demand forecasting model to control the availability in Airline industry. The primary outcome of the model is that the Airline organization can maximize the revenue by controlling the availability.

Advantage: This paper minimizes the overall time taken to make decisions by manually and this identifies the passenger demand and it makes easier for the arrangement of flights by allocating optimum flights to the predicted results. This saves Airline’s money.

Disadvantage: With the limitation of the predictors because of the sensitivity of the data and limited access to the data, it may have impacted the models and the accuracy level of the system.

Paper 3

Authors: S. Weerasinghe and S. Ahangama

Year : 2018

Title: Predictive Maintenance and Performance Optimisation in Aircrafts using Data Analytics

Methodology: The study critically reviews the techniques and tools, infrastructure and general application architecture for discussing the applicability of data analytics based on both batch processing and real time stream data in general aviation for health monitoring and predictive analysis in order to predict maintenance and optimize the performance of aircrafts.

Advantage: Aviation big data analytics has promoted the viability for performance optimization of aircrafts through predictive maintenance at a cheaper and effective manner for the airline industry, also providing operational and financial advantages over limited infrastructural operational modifications.

Disadvantage: Although the technique adopts a heuristic technique based on statistical inference on traditional flight performance data, scalability of the system has been considered a limitation.

Paper 4

Authors: S. Ayhan, J. Pesce, P. Comitz, D. Sweet, S. Bliesner and G. Gerberick

Year : 2020

Title: Predictive analytics with aviation big data.

Methodology: In this paper, we describe a novel analytics system that enables query processing and predictive analytics over streams of big aviation data. As part of an Internal Research and Development project, Boeing Research and Technology (BR&T) Advanced Air Traffic Management (AATM) built a system that makes predictions based upon descriptive patterns of massive aviation data.

Advantage: With the ASDI data correlated to flight plans and stored in a structured fashion, meaningful data can be extracted. The extracted data can then be used as input for analytics tools. The entire ASDI archival service has been developed, tested, and deployed entirely on commodity hardware. This hardware allows for easy maintenance and scalability as the database grows.

Disadvantage: Even if a company has sufficient data, critics argue that computers and algorithms fail to consider variables—from changing weather to moods to relationships—that might influence customer-purchasing patterns when anticipating human behavior.

Paper 5

Authors: J. Pulido, D. Moore and W. Hill.

Year : 2018

Title: Life Data Analysis with Applications for the Airline Industry.

Methodology: This paper presents a methodology for using Life Data Analysis (LDA) techniques for evaluating new product innovation and projecting product performance due to several failure modes. The paper presents an application for a brake design where the technique was used in determining the right failure mode based on failure mechanisms.

Advantage: The paper presents an application for a brake design where the technique was used in determining the right failure mode based on failure mechanisms.

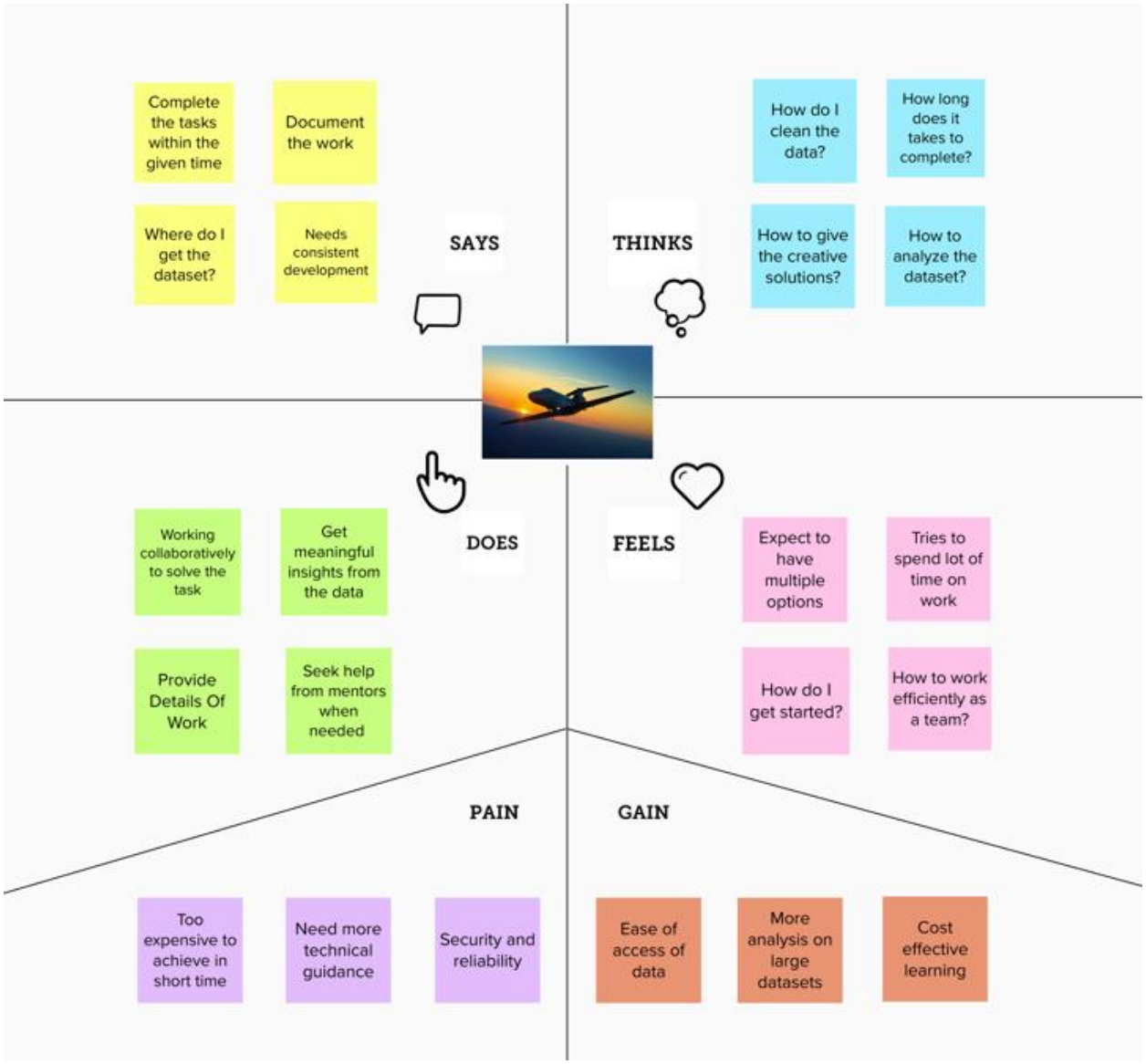
Disadvantage: The challenge relates to failure modes that show after the warranty period of the part. A Design for Reliability (DFR) or Design Based Asset Management (RBAM) programs should account for ways to collect data after warranty programs. This could be a challenging activity but necessary to demonstrate or model potential long term failure modes.

2.3 Problem Statement Definition

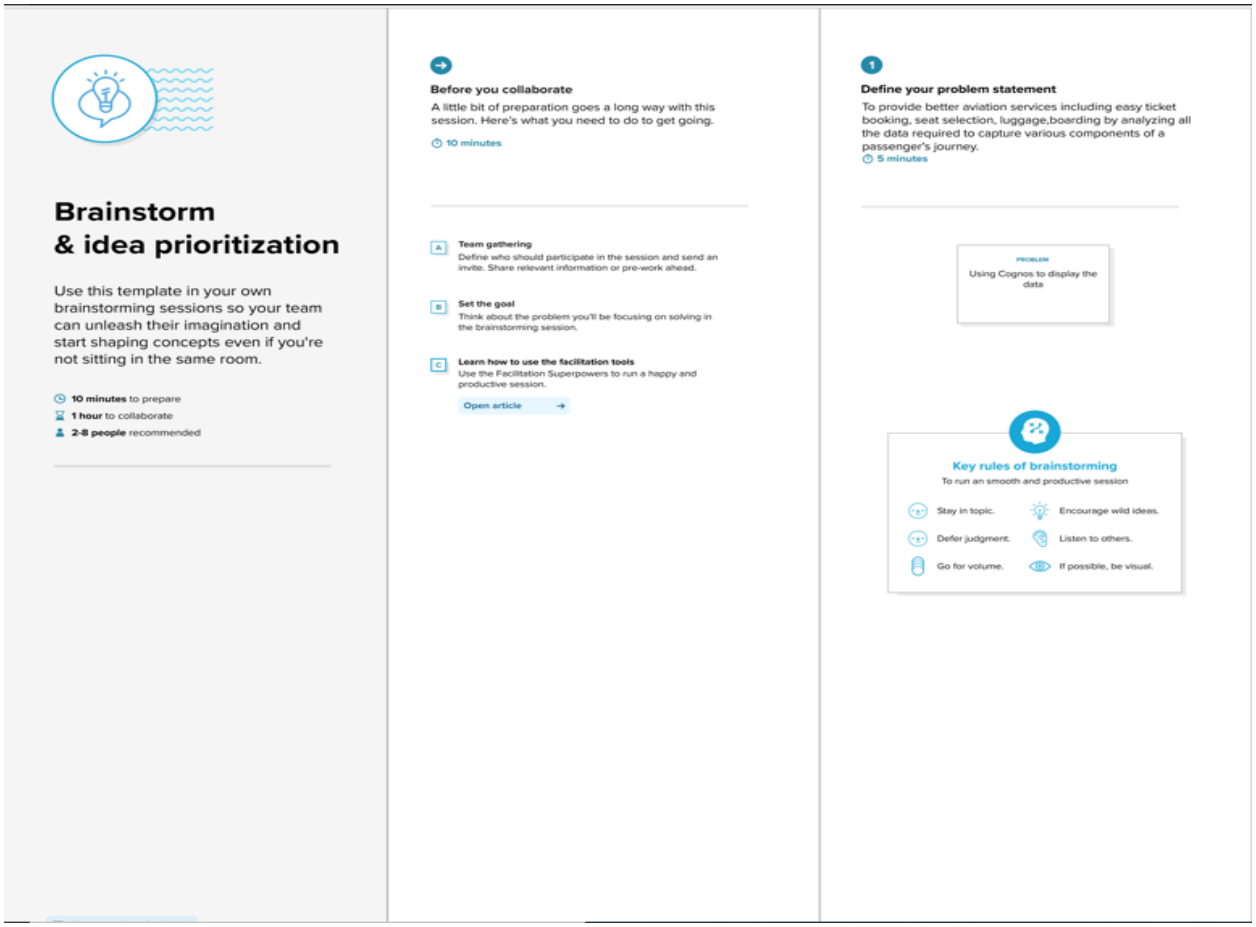
Space Gen airline website provides better airline services. It provides user friendly graphical user interface. The user can register using their personal information and get into the website through login page. The website provides different combination of data and helps the user to go through the website effortlessly. The number of flight details and information about the countries, airports and regions data is provided in a graphical form in a clear manner. The user gets better understanding to the statistics and delays about the flights. The visualizations provided in our project provide more effortless and less time-consuming knowledge about the countries, airports, regions and number of flights, flight schedules and various other combinations of these.

3. IDEATION AND PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming



Brainstorm
& idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

10 minutes to prepare
1 hour to collaborate
2-8 people recommended

Before you collaborate
A little bit of preparation goes a long way with this session. Here's what you need to do to get going.
10 minutes

A Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.
Open article →

1 Define your problem statement
To provide better aviation services including easy ticket booking, seat selection, luggage,boarding by analyzing all the data required to capture various components of a passenger's journey.
5 minutes

PROBLEM
Using Cognos to display the data

Key rules of brainstorming
To run an smooth and productive session

Stay in topic.
Defer judgment.
Go for volume.
Encourage wild ideas.
Listen to others.
If possible, be visual.

2 Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP
You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Pavithra M

- Effective in booking tickets
- Compare the airline statistics
- Number of airports in a country
- Transparency in cost estimation of tickets

Abirami P S

- Prior notifications about the trip
- User-friendly experience
- Best airline suggestions
- Considering passengers safety

Amritha S

- Refunding on cancellation of tickets
- Better visualization of data
- Get feedback from users frequently
- Specifying flight details properly

Kirthika V

- Categorizing flight based on several factors
- Count of flights from particular source to destination
- Attract economy passengers
- Proper scheduling of flights and reducing delays

3 Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

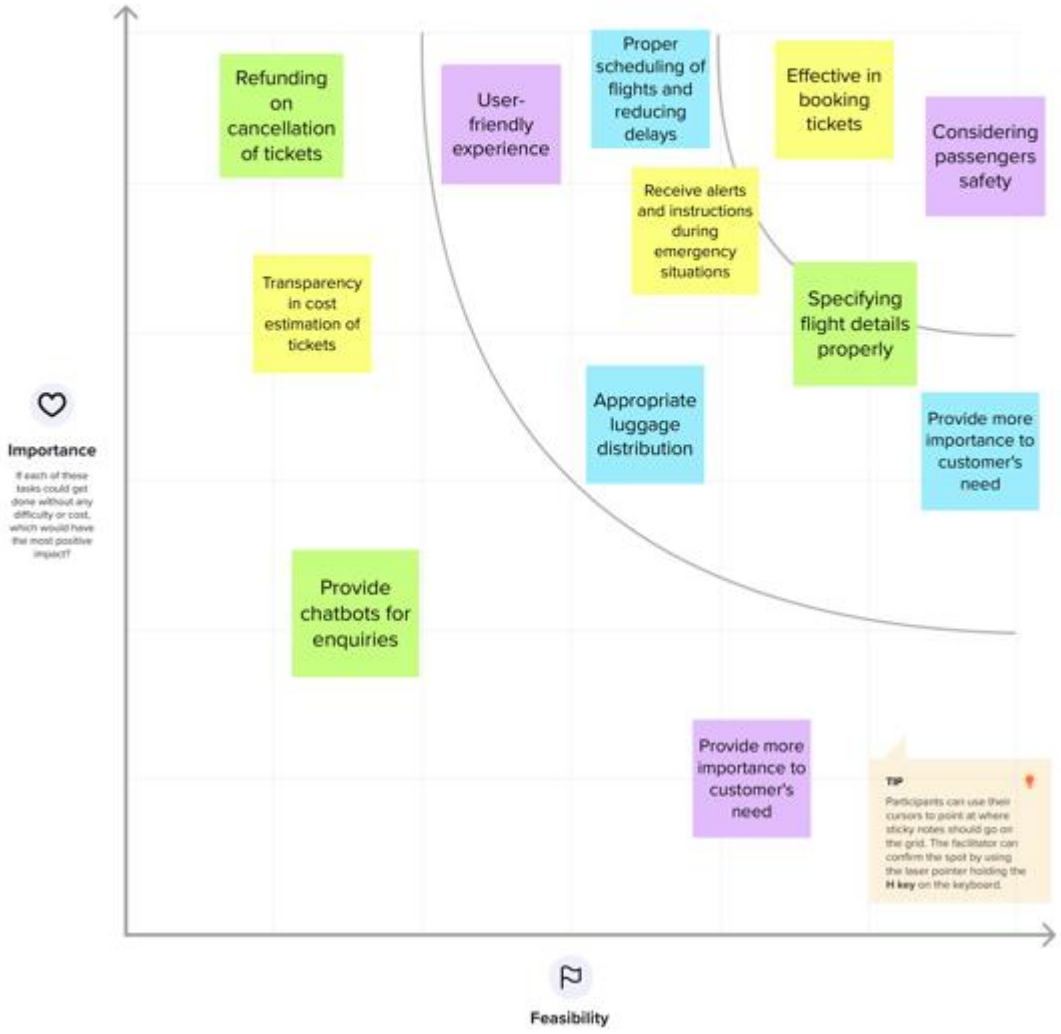
ALERTS AND NOTIFICATION SYSTEM	USER EXPERIENCE	PROPER INSTRUCTIONS	USER FEEDBACK
Receive alerts and instructions during emergency situations	Provide chatbots for enquiries	Provide compensations for delay	Track passengers request
Receive information about flight details priorly	Providing platform guide to new users	Proper instructions for transit flights	Get ratings and reviews from passengers
Announce passengers about flight delays	Coupons and vouchers for regular booking users	Appropriate luggage distribution	Provide more importance to customer's need

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.

20 minutes

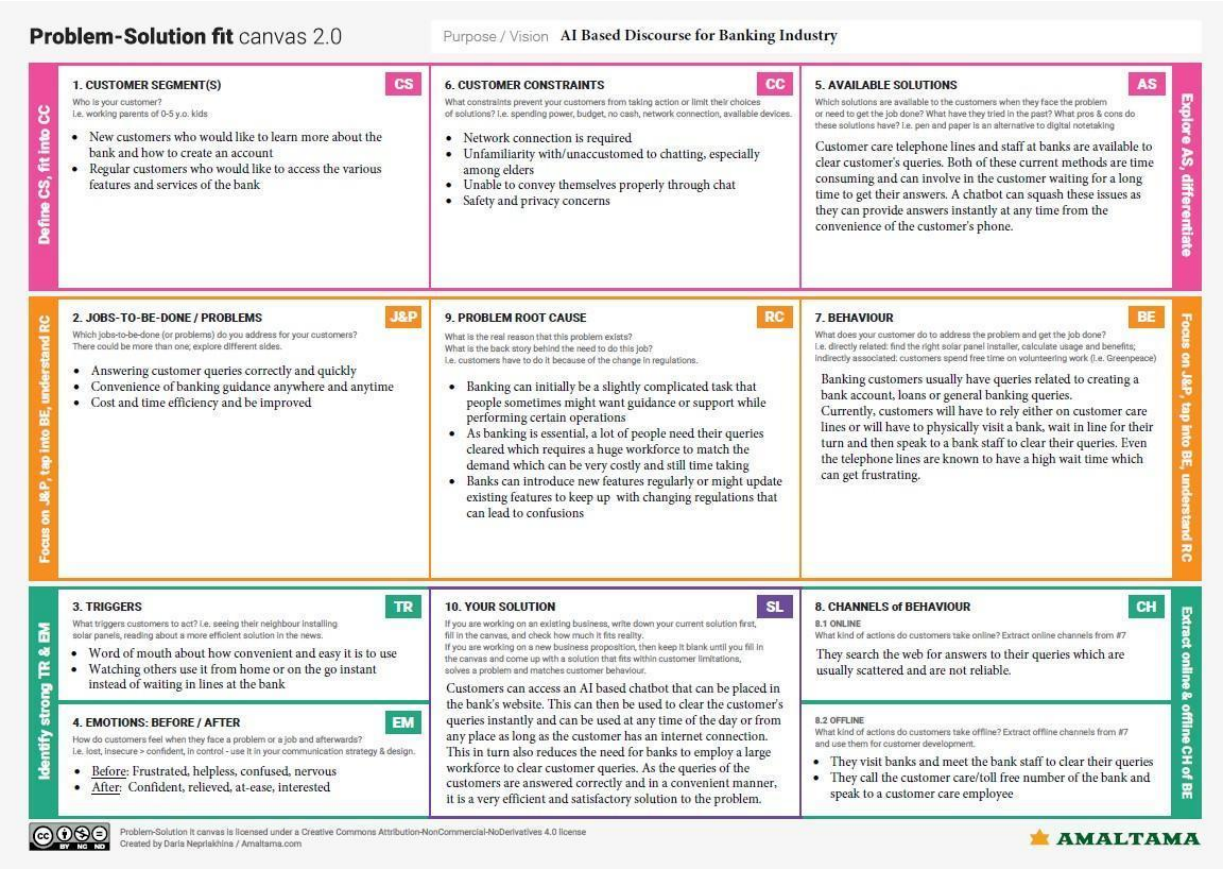


3.3 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To provide better aviation services including easy ticket booking, seat selection, luggage, boarding by analyzing all the data required to capture various components of a passenger's journey.
2.	Idea / Solution description	● Collecting the required data from available sources and analyzing and exploring it to achieve better results ● Make the UI user friendly to satisfy the customer's need ● Understanding the customer's need and demand and working accordingly
3.	Novelty / Uniqueness	As Data analysis is done on the data available about delays, flights etc. , the ibm cognos platform can be used to create interactive dashboards with data visualization tools like graphs and lists
4.	Social Impact / Customer Satisfaction	● The main aim of the project is to achieve better customer satisfaction and it is built considering the customer's needs. ● Effective mechanisms for seat selection during ticket, tracking and all is done with data analysis to understand customers' preferences and provide personalized services
5.	Business Model (Revenue Model)	By making a reliable user friendly system for the airline industry, revenue could be generated by targeting the airlines which are in need of a proper data analytic model.

6.	Scalability of the Solution	The cognos platform is feasible and can be used by everyone. It is not restricted for a particular organization or government. Airline industry is an evolving field which is increasingly being used so there is a need for a platform with better analyzed data.

3.4 Problem Solution fit



4. REQUIREMENT ANALYSIS

4.1 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	Registration through Gmail Registration through Form
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Visualizing data	Using IBM Cognos Analytics user can visualize the data.
FR-4	Generating Report	Users can view the flight delay reports, schedules.
FR-5	Better airline service	Provide better airline service by analysing time consuming, comfort of passenger.

4.2 Non-Functional requirements

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

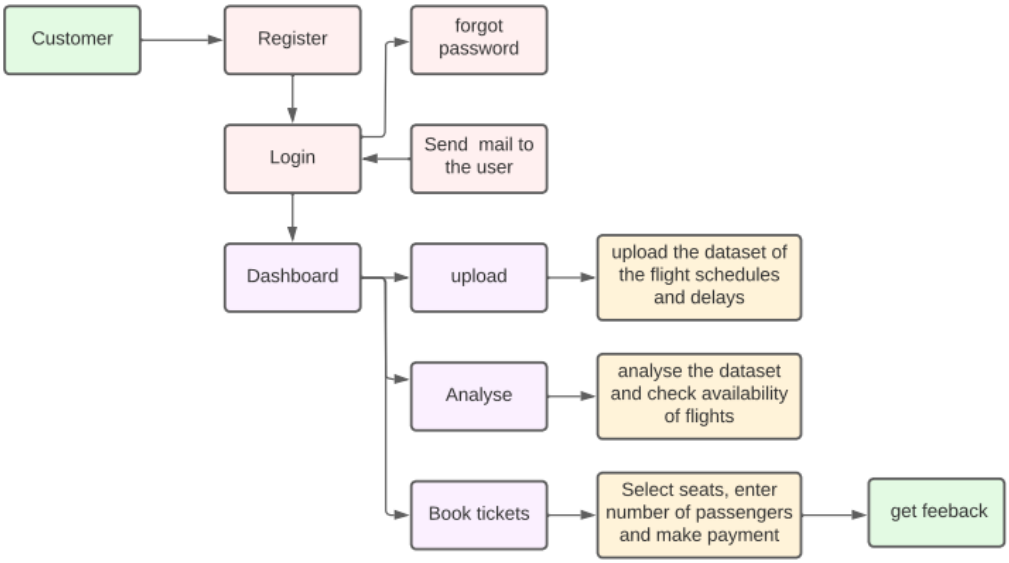
FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The application is user friendly and effective. The graphical user interface is simple for new users and is done in a short time rather than wasting the user's time.
NFR-2	**Security**	Authentication is the major priority in this application. Security of passengers is ensured at the most. Disclosure of personal information is avoided to protect user's privacy.
NFR-3	**Reliability**	The application should save all the activities that the user made even if the connection gets lost or disconnected thus providing a sense of reliability to the user

NFR-4	**Performance**	The application's speed and response must be in a good manner for providing a good user experience
NFR-5	**Availability**	The application must be accessible anywhere and anytime by the user
NFR-6	**Scalability**	The application must maintain its performance even when the number of users increases.

5. PROJECT DESIGN

5.1 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.



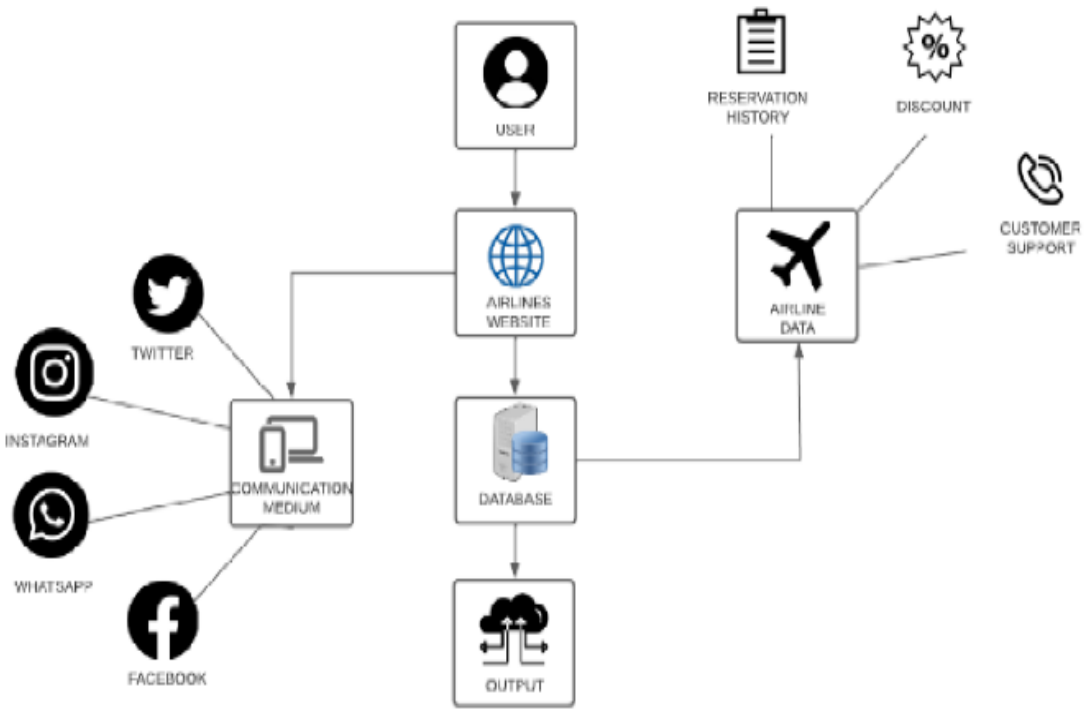
5.2 Solution & Technical Architecture

Solution Architecture

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.

- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.



5.3 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 user, I can register to the system by entering necessary credentials like mail id, password and	I can access my account / dashboard	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			confirm password or I can directly register through gmail.			
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	As a user, I can register for the application through google or any other browser.	I can register & access the dashboard through the browser.	Medium	Sprint-1
	Login	USN-4	As a user, I can log into the application by entering email & password	I can login into the system and get access to the dashboard	Medium	Sprint-1
	Dashboard	USN-5	As a user, I can view the charts and graphs representation of the dataset and the information shown in the dashboard.	I can analyse the flight details.	High	Sprint-2
Customer (Web user)		USN-6	Visit the website and get more information about the flights.	I can get knowledge about the website and get information about flights	Medium	Sprint-1
Customer Care Executive	Feedbacks, Tollfree numbers	USN-7	As a Customer Care Executive, I will always be available for the	Maintaining proper environment for the	High	Sprint-3

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			interaction with the customers to clarify their queries about flight bookings and flight schedules. Also collect feedbacks from the user.	customers.		
Administrator		USN-8	As an administrator, I will manage backup, recovery and generate reports about the flights.	Zero issues from the user.	High	Sprint-4

6. PROJECT PLANNING AND SCHEDULING

6.1 Sprint Planning & Estimation

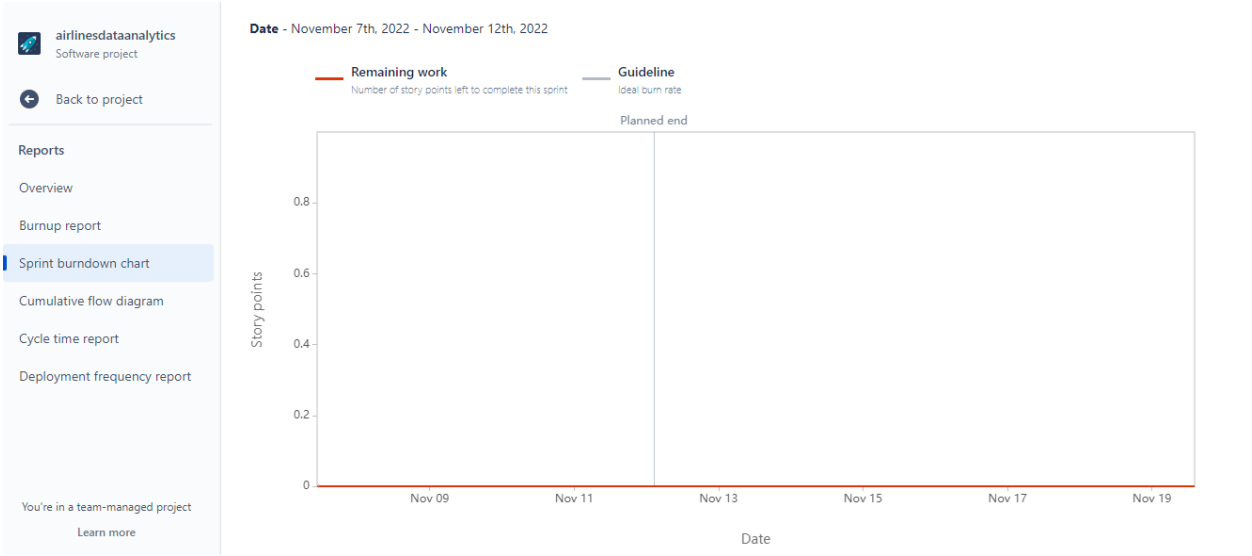
Sprint planning & estimation

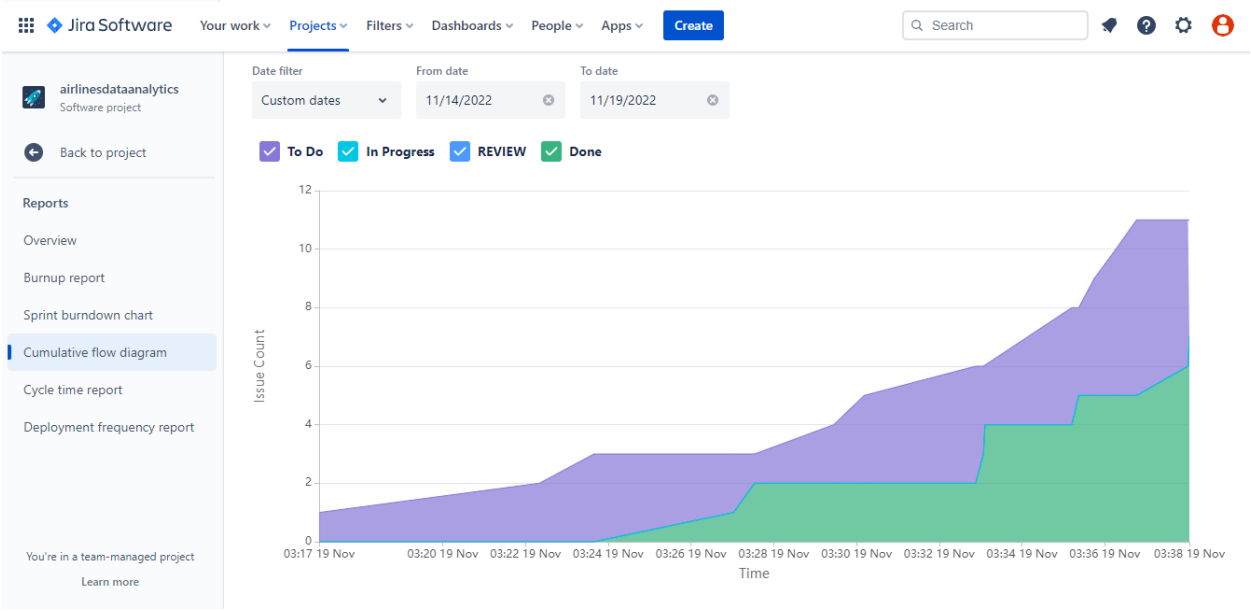
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	10	Medium	Pavithra M
Sprint-1	Login	USN-2	As a user, I can log into the application by entering email & password.	10	Medium	Pavithra M
Sprint-2	Data processing	USN-3	Data in the dataset is cleaned and processed to remove any null values.	10	Medium	Abirami P S
Sprint-2	Uploading and Exploration of Dataset	USN-4	As a user, I can upload the dataset into cognos platform and explore the dataset.	10	High	Abirami P S
Sprint-3	Visualization of dataset	USN-5	As a user, I can create graphs and charts to visualize the dataset.	20	High	Amritha S
Sprint-4	Dashboard	USN-6	As a user, I can create dashboard based on the created visualization charts.	10	High	Kirthika V
Sprint-4	Report Generating	USN-7	As a user, I can view the story and report.	10	Medium	Kirthika V

2. SPRINT DELIVERY SCHEDULE

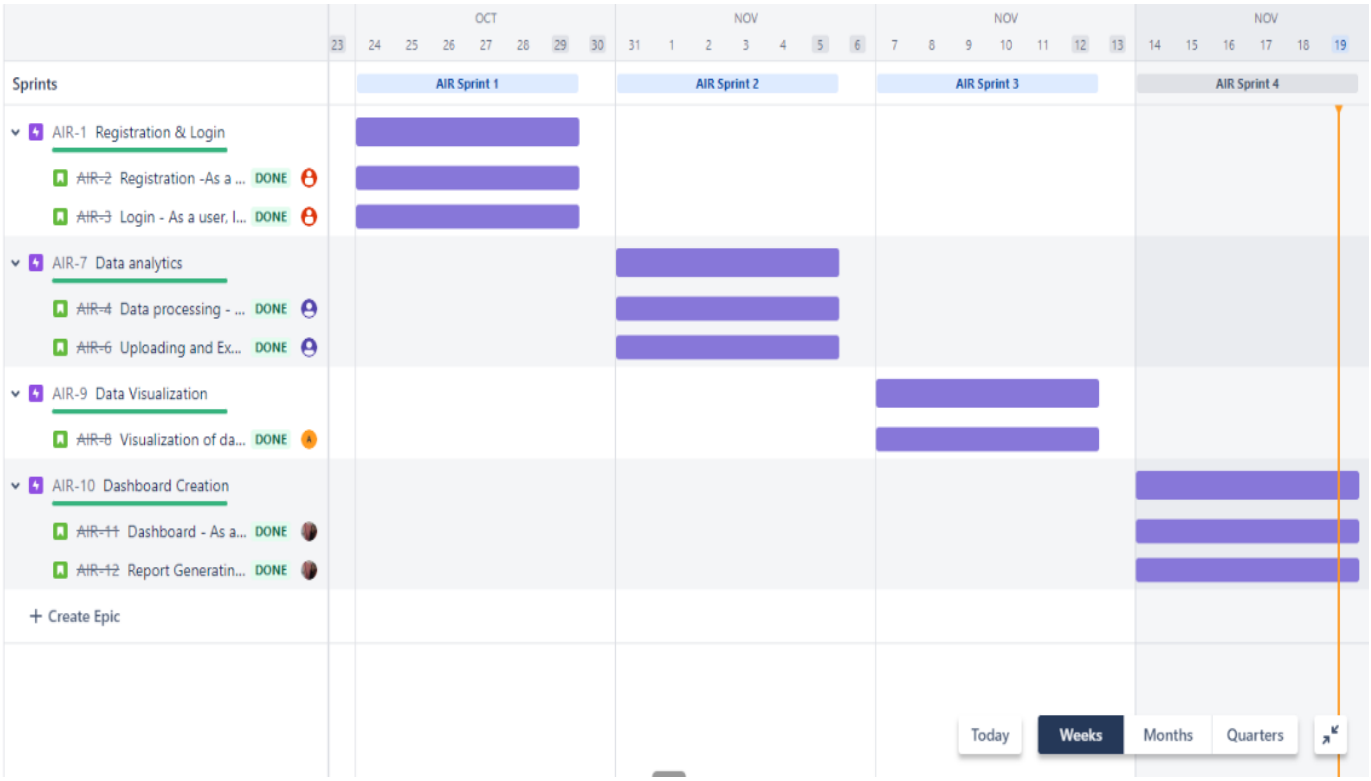
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Burndown chart





6.3 Reports from JIRA



7. CODING & SOLUTIONING (Explain the features added in the project along with code)

7.1 Feature 1

HTML

The HTML and CSS is used to design the overall Space Gen website**.** HTML is used to add UI components and CSS is used to add style to those components.

HTML WEBPAGES:

Signup.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">
                   <link rel="stylesheet" href="login.css">
                   <link href='https://fonts.googleapis.com/css?family=Quicksand' rel='stylesheet'>
                   <title>Document</title>
                </head>
                 <body>
                      <form method="POST">
                            <a href="login.php" class="logo">

                            </a>

                      <section id="user">
                       <h1><b>Register</h1></b>
                       <label> Name<br>
                          <input id="username" placeholder="Enter your name" name="username"
            type="text">
                           </label><br><br>
                           <label> Email - id<br>
                             <input id="email" placeholder="Enter your mail-id" name="email_id"
            type="text">
                              </label><br><br>
                      <label> Password<br>
                           <input type="password" placeholder="Enter Password" name="password" >
```

```
        </label><br><br>
        <a href="#">
            <input type="submit" name="submit" value="Register" class="btn_css">

        </a>
        <hr style="margin-top: 26px"/>
        <section id="Login">
           <p>
               Already have an account?<a href="index.html"> <input type="button"
value="Login" class="btn_css"></a>

          </p>
          </section>
        </section>

    </form>
    </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">
                    <link rel="stylesheet" href="login.css">
                    <link href='https://fonts.googleapis.com/css?family=Quicksand' rel='stylesheet'>
                    <title>Document</title>
                </head>
                 <body>
                    <form method="POST">
                        <a href="login.php" class="logo">

                        </a>

                    <section id="user">
                     <h1><b>Login</h1></b>
                     <label> Username<br>
```

```
            <input id="username" placeholder="Enter Username" name="username"
type="text">
            </label><br><br>
        <label> Password<br>
            <input type="password" placeholder="Enter Password" name="password" >
        </label><br><br>
        <a href="#">
            <input type="submit" name="submit" value="Login" class="btn_css">

        </a>
        <hr style="margin-top: 26px"/>
        <section id="register">
          <p>
              Don't have an account?<a href="signup.html"> <input type="button"
value="Register" class="btn_css"></a>

          </p>
          </section>
        </section>

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

Homepage.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" />

    <link

      rel="stylesheet"

      href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css"

      integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
```

```
    crossorigin="anonymous"
  />
  <script src="https://code.jquery.com/jquery-3.4.1.js"></script>
  <title>Spacegen</title>
</head>
<body>
  <nav
    class="navbar sticky-top navbar-dark bg-dark navbar navbar-expand-lg"
    style="height: 100px; background-color: black"
  >
    <a
      class="navbar-brand"
      style="font-size: xxx-large; margin-left: 20px"
      href="#"
      >Space Gen</a
    >

    <button
      class="navbar-toggler"
      type="button"
      data-toggle="collapse"
      data-target="#navbarText"
      aria-controls="navbarText"
      aria-expanded="false"
      aria-label="Toggle navigation"
    >
```

```
    <span class="navbar-toggler-icon"></span>
  </button>
  <div
    class="collapse navbar-collapse"
    id="navbarText"
    style="margin-left: 700px"
  >
    <ul class="navbar-nav mr-auto">
      <li class="nav-item active" style="margin-left: 15px">
        <a class="nav-link" href="#"
          >Home <span class="sr-only">(current)</span></a
        >
      </li>
      <li class="nav-item" style="margin-left: 15px">
        <a class="nav-link" href="aboutus.html">About us</a>
      </li>
      <li class="nav-item" style="margin-left: 15px">
        <a class="nav-link" href="login.html">Signin</a>
      </li>
    </ul>
  </div>
</nav>
<section class="zoomm">
  <img src="flight.jpg" />
</section>
<div class="card-deck" style="margin-top: 20px">
```

```
<div class="card zoom">
  <img class="card-img-top" src="img1.jpg" alt="Card image cap" />
  <div class="card-body">
    <p class="card-text">
      Navigate aviation fuel demand with effective forecasting.Supplement
      traditional demand models with robust and accurate schedule data and
      forecasting tools.
    </p>
    <a href="https://www.prescouter.com/2018/01/technologies-improving-aircraft-fuel-efficiency/" class="btn btn-primary">Learn more</a>
  </div>
</div>
<div class="card zoom">
  <img class="card-img-top" src="img2.jpg" alt="Card image cap" />
  <div class="card-body">
    <p class="card-text">
      Chasing the Holy Grail: Why are some airlines seemingly always on
      time, and others struggle?Trends emerge amongst the airlines that
      win on-time rankings on a monthly basis.
    </p>

    <a href="https://timesofindia.indiatimes.com/readersblog/modern-indian/why-are-airlines-struggling-to-survive-3062/" class="btn btn-primary">Learn more</a>
  </div>
</div>
<div class="card zoom">
  <img class="card-img-top" src="img3.jpg" alt="Card image cap" />
```

```
<div class="card-body">
  <p class="card-text">
    Electric planes are coming: Short-hop regional flights could be
    running on batteries in a few years.Electric planes might seem
    futuristic, but they aren’t that far off, at least for short hops.
  </p>

  <a href="https://www.smithsonianmag.com/smart-news/electric-planes-are-taking-flight-180980821/" class="btn btn-primary">Learn more</a>
</div>
</div>
</div>
<div class="card text-white" style="margin-top:30px;padding: 30px;background-color: rgba(0, 0, 0, 0.603);">
  <img class="card-img" src="img4.jpg" alt="Card image" style="opacity: 0.5;">
  <div class="card-img-overlay" style="margin-top: 200px;margin-left:30px;">
    <h5 class="card-title">Contact Us</h5>

  <p class="card-text" style="margin-top: 20px"><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" class="bi bi-facebook" viewBox="0 0 16 16">
 <path d="M16 8.049c0-4.446-3.582-8.05-8-8.05C3.58 0-.002 3.603-.002 8.05c0 4.017 2.926 7.347 6.75 7.951v-5.625h-2.03V8.05H6.75V6.275c0-2.017 1.195-3.131 3.022-3.131.876 0 1.791.157 1.791.157v1.98h-1.009c-.993 0-1.303.621-1.303 1.258v1.51h2.218l-.354 2.326H9.25V16c3.824-.604 6.75-3.934 6.75-7.951z"/>
</svg><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" style="margin-left:20px"class="bi bi-twitter" viewBox="0 0 16 16">
  <path d="M5.026 15c6.038 0 9.341-5.003 9.341-9.334 0-.14 0-.282-.006-.422A6.685 6.685 0 0 0 16 3.542a6.658 6.658 0 0 1-1.889.518 3.301 3.301 0 0 0 1.447-1.817 6.533 6.533 0 0 1-2.087.793A3.286 3.286 0 0 0 7.875 6.03a9.325 9.325 0 0 1-6.767-3.429 3.289 3.289 0 0 0 1.018 4.382A3.323 3.323 0 0 1 .64 6.575v.045a3.288 3.288 0 0 0 2.632 3.218 3.203 3.203 0 0 1-.865.115 3.23 3.23 0 0 1-.614-.057 3.283 3.283 0 0 0 3.067 2.277A6.588 6.588 0 0 1 .78 13.58a6.32 6.32 0 0 1-.78-.045A9.344 9.344 0 0 0 5.026 15z"/>
```

```
</svg><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" style="margin-left:20px"fill="currentColor" class="bi bi-instagram" viewBox="0 0 16 16">

</svg><span style="margin-left: 20px;font-size:x-large;padding-bottom:5px">Space_gen</span></p>

<p><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" class="bi bi-envelope" style="padding-top:4px;"viewBox="0 0 16 16">

<path d="M0 4a2 2 0 0 1 2-2h12a2 2 0 0 1 2 2v8a2 2 0 0 1-2 2H2a2 2 0 0 1-2-2V4Zm2-1a1 1 0 0 0-1 1v.217l7 4.2 7-4.2V4a1 1 0 0 0-1-1H2Zm13 2.383-4.708 2.825L15 11.105V5.383Zm-.034 6.876-5.64-3.471L8 9.583l-1.326-.795-5.64 3.47A1 1 0 0 0 2 13h12a1 1 0 0 0 .966-.741ZM1 11.105l4.708-2.897L1 5.383v5.722Z"/>

</svg><span style="font-size: x-large;padding-left:10px;">spacegen@gmail.com</span></p>

    </div>

  </div>

</body>

<style>

  .zoom {

    padding: 50px;

    transition: transform 0.2s;

    margin: 0 auto;

    width: 280px;

    height: 520px;

    background-color: rgba(245, 245, 245, 0.829);

  }

  .zoom:hover {

    transform: scale(0.9);

  }

  body {

    background-color: black;

    overflow-x: hidden;

  }
```

```
  </style>
  <script type="text/javascript">
    $(window).scroll(function () {
      var scroll = $(window).scrollTop();
      $(".zoomm img").css({
        width: 100 + scroll / 15 + "%",
      });
    });
  </script>
</html>
```

Page1.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">
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css" integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-
KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.12.9/dist/umd/popper.min.js"
integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/js/bootstrap.min.js" integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl"
crossorigin="anonymous"></script>
    <title>Document</title>
</head>
<body style="background-color: black;">
    <nav class="navbar navbar-expand-lg navbar-light bg-light" style="height: 50px;">
```

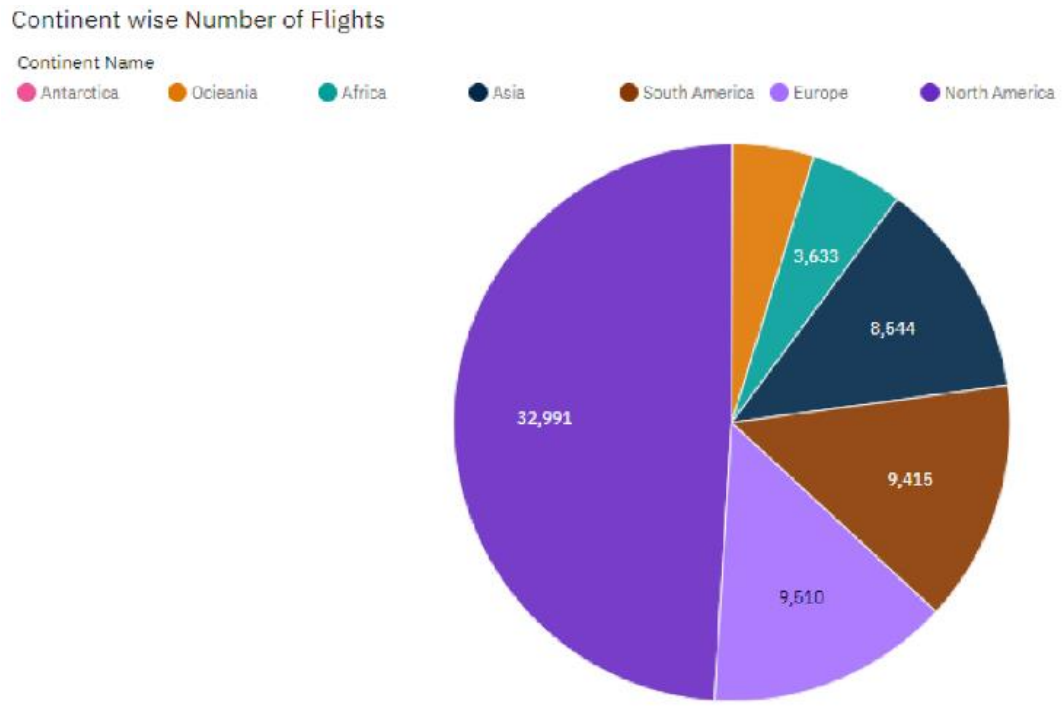
```
      <div class="collapse navbar-collapse" id="navbarNav">
        <ul class="navbar-nav">
          <li style="margin-left: 390px;"> <a href="login.html"><svg
xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-
arrow-left" viewBox="0 0 16 16">
            <path fill-rule="evenodd" d="M15 8a.5.5 0 0 0-.5-.5H2.707l3.147-3.146a.5.5 0 1 0-.708-
.708l-4 4a.5.5 0 0 0 0 .708l4 4a.5.5 0 0 0 .708-.708L2.707 8.5H14.5A.5.5 0 0 0 15 8z"/>
          </svg></a></li>
          <li class="nav-item active" style="left: 400px;margin-left: 20px;">
            Airlines Data Analytics for Aviation Industry
          </li>
          <li style="margin-left: 20px;"><a href="page2.html"><svg
xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-
arrow-right" viewBox="0 0 16 16">
            <path fill-rule="evenodd" d="M1 8a.5.5 0 0 1 .5-.5h11.793l-3.147-3.146a.5.5 0 0 1 .708-
.708l4 4a.5.5 0 0 1 0 .708l-4 4a.5.5 0 0 1-.708-.708L13.293 8.5H1.5A.5.5 0 0 1 1 8z"/>
          </svg></a></li>
          <li style="margin-left: 500px;"><a href="index.html"><svg
xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-
power" viewBox="0 0 16 16">
            <path d="M7.5 1v7h1V1h-1z"/>
            <path d="M3 8.812a4.999 4.999 0 0 1 2.578-4.375l-.485-.874A6 6 0 1 0 11 3.616l-
.501.865A5 5 0 1 1 3 8.812z"/>
          </svg></a></li>
        </ul>

      </div>
    </nav>
  <div style="display: flex; flex-flow: row wrap;margin-left: 50px;">
  <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FPro
ject%2FContinent%2Bwise%2Bno%2Bof%2Bflights_1&amp;closeWindowOnLastView=true&amp
;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=view&amp;mode
=dashboard&amp;subView=model000001847a1b75ea_00000000" width="600" height="500"
frameborder="0" gesture="media" allow="encrypted-media"style="margin-top: 30px;"
allowfullscreen=""></iframe>
  <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FPro
ject%2FContinent%2Bwise%2Bnumber%2Bof%2Bflights%2Bby%2Btype%2Bcolored%2Bby%2Bt
ype_2&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;sha
reMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=model000001847a32
3baf_00000002" width="600" height="500" frameborder="0" gesture="media" allow="encrypted-
media" style="margin-left: 20px;margin-top: 30px;"allowfullscreen=""></iframe>
```

<iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FContinent%2B-%2BList%2BFilter_3&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001847ff2a011_00000003"width="410" height="450" frameborder="0" gesture="media" allow="encrypted-media"style="margin-top: 30px;" allowfullscreen=""></iframe>
<iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FTop%2B10%2Bcountries%2Bby%2Bcount%2Bof%2Bairports&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model00000184851fd232_00000001" style="margin-left: 40px;margin-top: 30px;"width="750" height="450" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

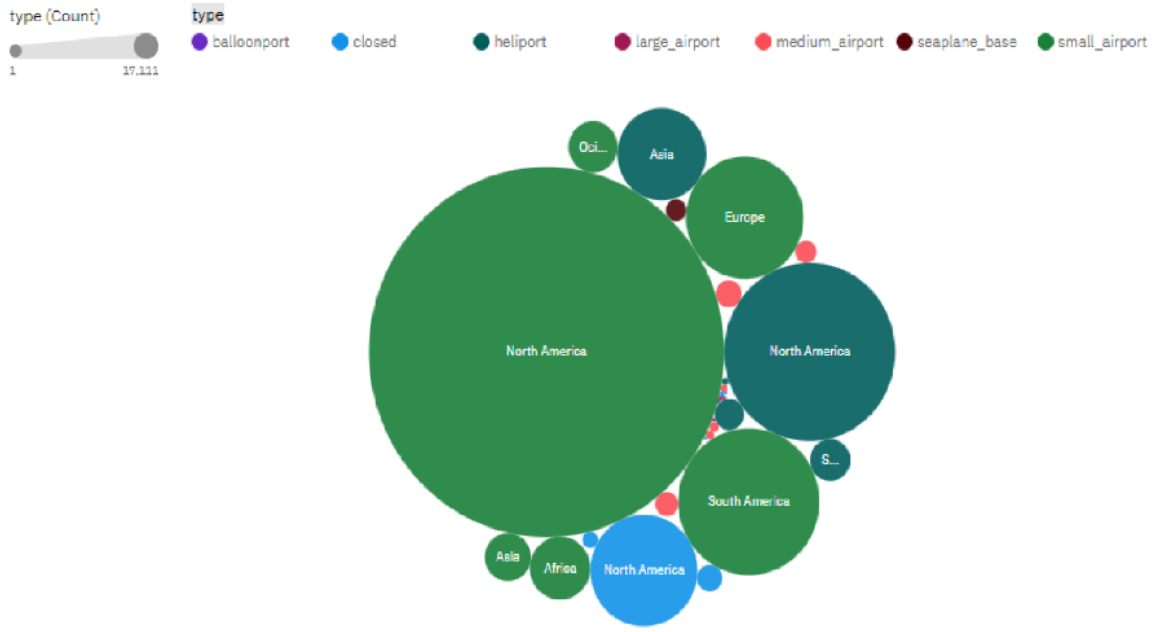
</body>
</html>

7.2 Feature 2

IBM COGNOS:



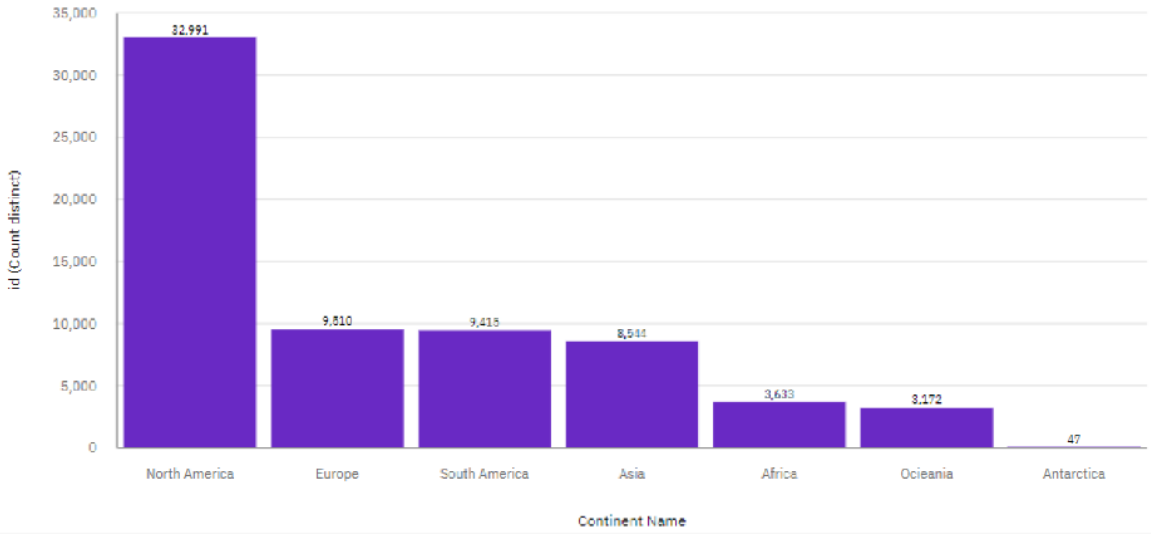
Continent wise number of flights by type colored by type



Number of countries

247

Continent wise number of flights



Number of airports

63.8K

8. TESTING

8.1 Test Cases

	Test for registration and login UI
1	Verify user is able to open and view the registration UI
2	Verify user is able to open and view the login UI
3	Verify user is able to interact with the registration UI
4	Verify the registration and login pages save data correctly
	Test for dashboard page contents
1	Verify user is able to navigate to dashboard page
2	Verify user is able to view the dashboard page
3	Verify user is able to see visualizations in the page
	Test for changes in data
1	Verify user is able to view the changes in live
2	Verify user is able to navigate to the about us page
3	Verify user is able to navigate through different visualizations

8.2 User Acceptance Testing

1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the AI based Discourse for Banking Industry project at the time of the release to User Acceptance Testing (UAT).

2. Defect Analysis

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	0	0	2	1	3
Duplicate	0	0	0	0	0
External	0	0	0	0	0
Fixed	0	0	2	1	3
Not Reproduced	0	0	0	0	0
Skipped	0	0	0	0	0
Won't Fix	0	0	0	0	0
Totals		0	2	2	6

3. Test Case Analysis

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	0	0	0	0
Client Application	25	0	0	25
Security	0	0	0	0
Outsource Shipping	0	0	0	0
Exception Reporting	0	0	0	0
Final Report Output	25	0	0	25
Version Control	0	0	0	0

9. RESULTS

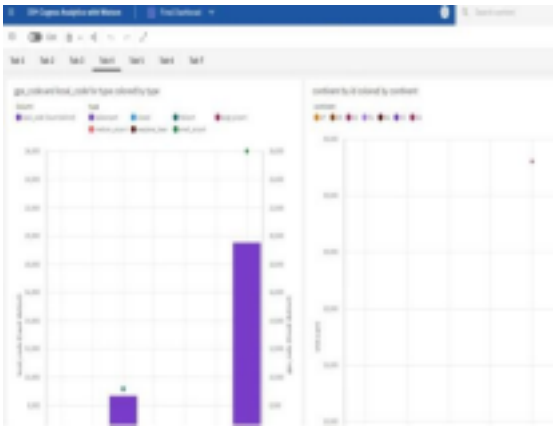
9.1 Performance Metrics

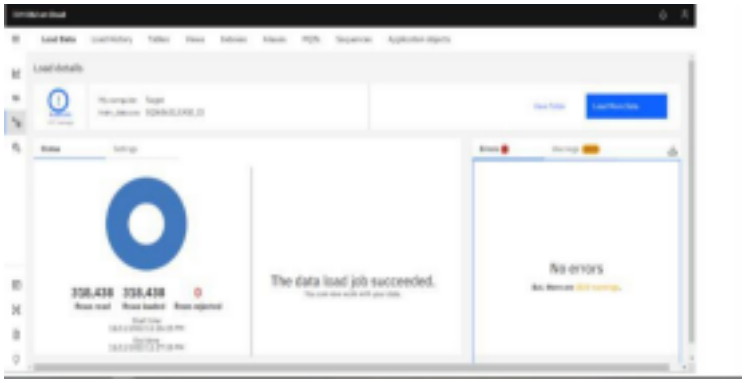
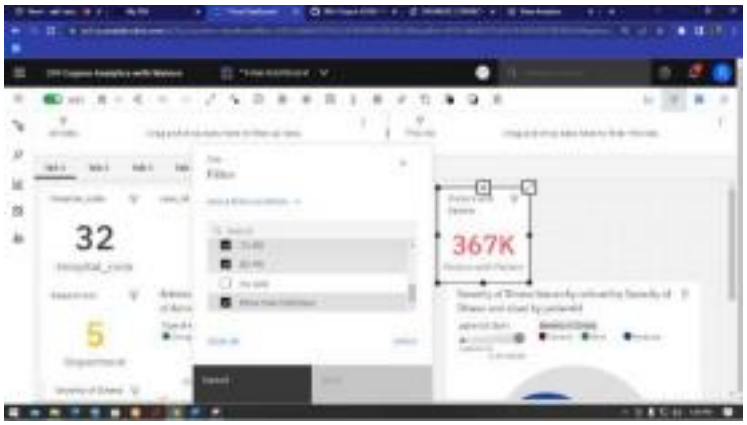
Model Performance Testing:

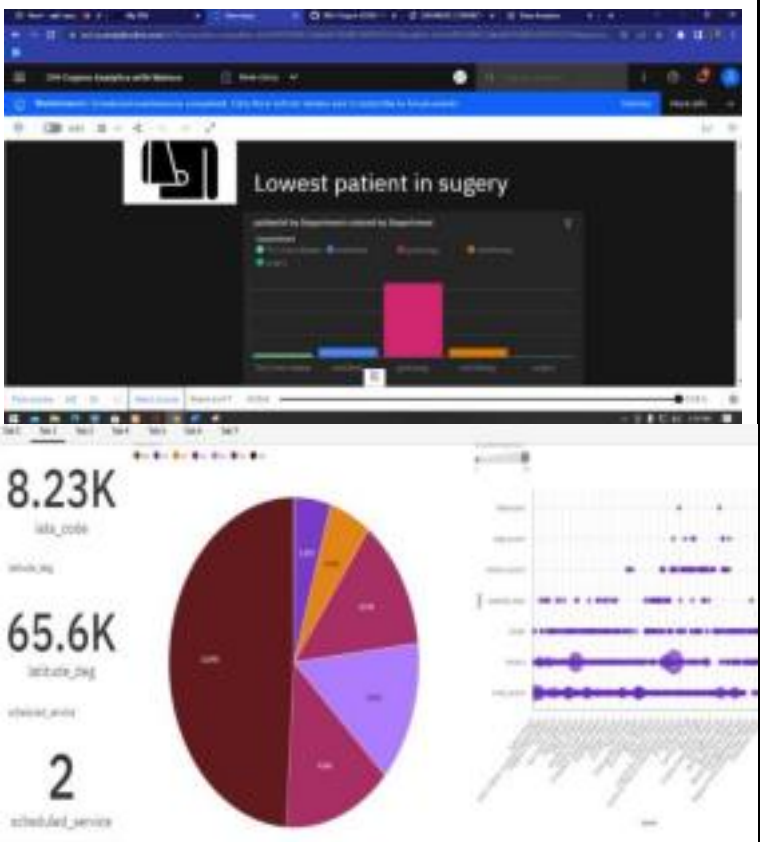
Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Screenshot / Values
1.	Dashboard design	Number of Visulizations / Graphs – 22 Number of tabs – 8

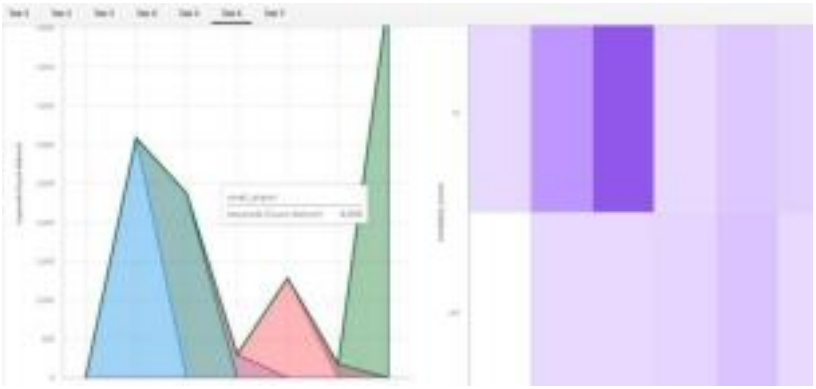
2. Data Responsiveness Data's will dynamically changed and graph also changed.



3.	Amount Data to Rendered (DB2 Metrics)	Number of rows read – 318438 Number of rows loaded –318438 Number of rows rejected – 0 
4.	Utilization of Data Filters	We created filters for Dashboards which is perfectly working. 

5.	Effective User Story	Number of Scene Added – 7 Animations are perfectly displayed. Images are perfectly rendered. 

6.	Descriptive Reports	Number of Visulizations / Graphs – 18



10. ADVANTAGES AND DISADVANTAGES

Advantages

1) With this application, we can easily analyze flight delays and simplify the extensive traffic at the airport and can prevent the major confusions over flight delays.
2) This can enable customer satisfaction and incomes of major airlines.

3) Accuracy is measured with the previous models and we have analyzed that this model is much more effective in every way.

4) The delay prediction can make the concerned authorities be well prepared for any possible problem.

5) can easily be understood by a layman: the model is simple and effective.

Disadvantages

1. This application needs to be more compact and flexible. The interoperability feature should be more enhanced.

2. The application can be automated instead of static data from the user(airport authorities).

11. CONCLUSION

In the present world, the major components of any transportation system include passenger airline, cargo airline and air traffic control system. They all face difficulties due to some sort of miscommunication. Our model has been made with the motive of simplifying complex situations due to flight delays and increasing customer satisfaction. With delays being predicted before, the passengers can easily schedule their plans well before.

12. FUTURE SCOPE

Our project aims in attracting a huge number of customers. We would improvise it by providing even more faster loading time. In future, the number of visualizations will be increased even more and provide more combinations of data to provide more knowledge to the user. These contributions in future would make our website a better place for the users and make it easy for them to know about the flight details and location data in an effortless and effective way.

13. APPENDIX

Source Code

Signup.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">
                   <link rel="stylesheet" href="login.css">
                   <link href='https://fonts.googleapis.com/css?family=Quicksand' rel='stylesheet'>
                   <title>Document</title>
                </head>
                 <body>
                      <form method="POST">
                            <a href="login.php" class="logo">

                            </a>

                      <section id="user">
                       <h1><b>Register</h1></b>
                       <label> Name<br>
                          <input id="username" placeholder="Enter your name" name="username"
                type="text">
                           </label><br><br>
                           <label> Email - id<br>
                             <input id="email" placeholder="Enter your mail-id" name="email_id"
                type="text">
                              </label><br><br>
                      <label> Password<br>
                           <input type="password" placeholder="Enter Password" name="password" >
                      </label><br><br>
                      <a href="#">
                            <input type="submit" name="submit" value="Register" class="btn_css">

                      </a>
                      <hr style="margin-top: 26px"/>
```

```
        <section id="Login">
          <p>
              Already have an account?<a href="index.html"> <input type="button"
value="Login" class="btn_css"></a>

          </p>
          </section>
        </section>

    </form>
    </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">
                    <link rel="stylesheet" href="login.css">
                    <link href='https://fonts.googleapis.com/css?family=Quicksand' rel='stylesheet'>
                    <title>Document</title>
                </head>
                 <body>
                      <form method="POST">
                           <a href="login.php" class="logo">

                           </a>

                      <section id="user">
                       <h1><b>Login</h1></b>
                       <label> Username<br>
                          <input id="username" placeholder="Enter Username" name="username"
type="text">
                           </label><br><br>
                      <label> Password<br>
                           <input type="password" placeholder="Enter Password" name="password" >
                      </label><br><br>
```

```
                <a href="#">
                    <input type="submit" name="submit" value="Login" class="btn_css">

                </a>
                <hr style="margin-top: 26px"/>
                <section id="register">
                  <p>
                      Don't have an account?<a href="signup.html"> <input type="button"
            value="Register" class="btn_css"></a>

                  </p>
                  </section>
                </section>

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

Homepage.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" />

    <link

      rel="stylesheet"

      href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css"

      integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"

      crossorigin="anonymous"

    />

    <script src="https://code.jquery.com/jquery-3.4.1.js"></script>
```

```
  <title>Spacegen</title>
</head>
<body>
  <nav
    class="navbar sticky-top navbar-dark bg-dark navbar navbar-expand-lg"
    style="height: 100px; background-color: black"
  >
    <a
      class="navbar-brand"
      style="font-size: xxx-large; margin-left: 20px"
      href="#"
      >Space Gen</a
    >

    <button
      class="navbar-toggler"
      type="button"
      data-toggle="collapse"
      data-target="#navbarText"
      aria-controls="navbarText"
      aria-expanded="false"
      aria-label="Toggle navigation"
    >
      <span class="navbar-toggler-icon"></span>
    </button>
    <div
```

```
   class="collapse navbar-collapse"
   id="navbarText"
   style="margin-left: 700px"
  >
   <ul class="navbar-nav mr-auto">
    <li class="nav-item active" style="margin-left: 15px">
     <a class="nav-link" href="#"
      >Home <span class="sr-only">(current)</span></a
     >
    </li>
    <li class="nav-item" style="margin-left: 15px">
     <a class="nav-link" href="aboutus.html">About us</a>
    </li>
    <li class="nav-item" style="margin-left: 15px">
     <a class="nav-link" href="login.html">Signin</a>
    </li>
   </ul>
  </div>
</nav>
<section class="zoomm">
  <img src="flight.jpg" />
</section>
<div class="card-deck" style="margin-top: 20px">
  <div class="card zoom">
   <img class="card-img-top" src="img1.jpg" alt="Card image cap" />
   <div class="card-body">
```

```
        <p class="card-text">
          Navigate aviation fuel demand with effective forecasting.Supplement
          traditional demand models with robust and accurate schedule data and
          forecasting tools.
        </p>
        <a href="https://www.prescouter.com/2018/01/technologies-improving-aircraft-fuel-efficiency/" class="btn btn-primary">Learn more</a>
      </div>
    </div>
    <div class="card zoom">
      <img class="card-img-top" src="img2.jpg" alt="Card image cap" />
      <div class="card-body">
        <p class="card-text">
          Chasing the Holy Grail: Why are some airlines seemingly always on
          time, and others struggle?Trends emerge amongst the airlines that
          win on-time rankings on a monthly basis.
        </p>

        <a href="https://timesofindia.indiatimes.com/readersblog/modern-indian/why-are-airlines-struggling-to-survive-3062/" class="btn btn-primary">Learn more</a>
      </div>
    </div>
    <div class="card zoom">
      <img class="card-img-top" src="img3.jpg" alt="Card image cap" />
      <div class="card-body">
        <p class="card-text">
          Electric planes are coming: Short-hop regional flights could be
```

running on batteries in a few years.Electric planes might seem

futuristic, but they aren’t that far off, at least for short hops.

<a href="https://www.smithsonianmag.com/smart-news/electric-planes-are-taking-flight-180980821/" class="btn btn-primary">Learn more</a>

<img class="card-img" src="img4.jpg" alt="Card image" style="opacity: 0.5;">

<h5 class="card-title">Contact Us</h5>

<svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" class="bi bi-facebook" viewBox="0 0 16 16">

<path d="M16 8.049c0-4.446-3.582-8.05-8-8.05C3.58 0-.002 3.603-.002 8.05c0 4.017 2.926 7.347 6.75 7.951v-5.625h-2.03V8.05H6.75V6.275c0-2.017 1.195-3.131 3.022-3.131.876 0 1.791.157 1.791.157v1.98h-1.009c-.993 0-1.303.621-1.303 1.258v1.51h2.218l-.354 2.326H9.25V16c3.824-.604 6.75-3.934 6.75-7.951z"/>

</svg><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" style="margin-left:20px"class="bi bi-twitter" viewBox="0 0 16 16">

<path d="M5.026 15c6.038 0 9.341-5.003 9.341-9.334 0-.14 0-.282-.006-.422A6.685 6.685 0 0 0 16 3.542a6.658 6.658 0 0 1-1.889.518 3.301 3.301 0 0 0 1.447-1.817 6.533 6.533 0 0 1-2.087.793A3.286 3.286 0 0 0 7.875 6.03a9.325 9.325 0 0 1-6.767-3.429 3.289 3.289 0 0 0 1.018 4.382A3.323 3.323 0 0 1 .64 6.575v.045a3.288 3.288 0 0 0 2.632 3.218 3.203 3.203 0 0 1-.865.115 3.23 3.23 0 0 1-.614-.057 3.283 3.283 0 0 0 3.067 2.277A6.588 6.588 0 0 1 .78 13.58a6.32 6.32 0 0 1-.78-.045A9.344 9.344 0 0 0 5.026 15z"/>

</svg><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" style="margin-left:20px"fill="currentColor" class="bi bi-instagram" viewBox="0 0 16 16">

</svg>Space_gen

```
  <p><svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" class="bi bi-envelope" style="padding-top:4px;"viewBox="0 0 16 16">

    <path d="M0 4a2 2 0 0 1 2-2h12a2 2 0 0 1 2 2v8a2 2 0 0 1-2 2H2a2 2 0 0 1-2-2V4Zm2-1a1 1 0 0 0-1 1v.217l7 4.2 7-4.2V4a1 1 0 0 0-1-1H2Zm13 2.383-4.708 2.825L15 11.105V5.383Zm-.034 6.876-5.64-3.471L8 9.583l-1.326-.795-5.64 3.47A1 1 0 0 0 2 13h12a1 1 0 0 0 .966-.741ZM1 11.105l4.708-2.897L1 5.383v5.722Z"/>

  </svg><span style="font-size: x-large;padding-left:10px;">spacegen@gmail.com</span></p>

        </div>

      </div>

  </body>

  <style>

    .zoom {

      padding: 50px;

      transition: transform 0.2s;

      margin: 0 auto;

      width: 280px;

      height: 520px;

      background-color: rgba(245, 245, 245, 0.829);

    }

    .zoom:hover {

      transform: scale(0.9);

    }

    body {

      background-color: black;

      overflow-x: hidden;

    }

  </style>

  <script type="text/javascript">
```

```
    $(window).scroll(function () {
      var scroll = $(window).scrollTop();
      $(".zoomm img").css({
        width: 100 + scroll / 15 + "%",
      });
    });
  </script>
</html>
```

Page1.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">
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css" integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-
KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.12.9/dist/umd/popper.min.js"
integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/js/bootstrap.min.js" integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl"
crossorigin="anonymous"></script>
    <title>Document</title>
</head>
<body style="background-color: black;">
    <nav class="navbar navbar-expand-lg navbar-light bg-light" style="height: 50px;">

        <div class="collapse navbar-collapse" id="navbarNav">
          <ul class="navbar-nav">
            <li style="margin-left: 390px;"> <a href="login.html"><svg
```

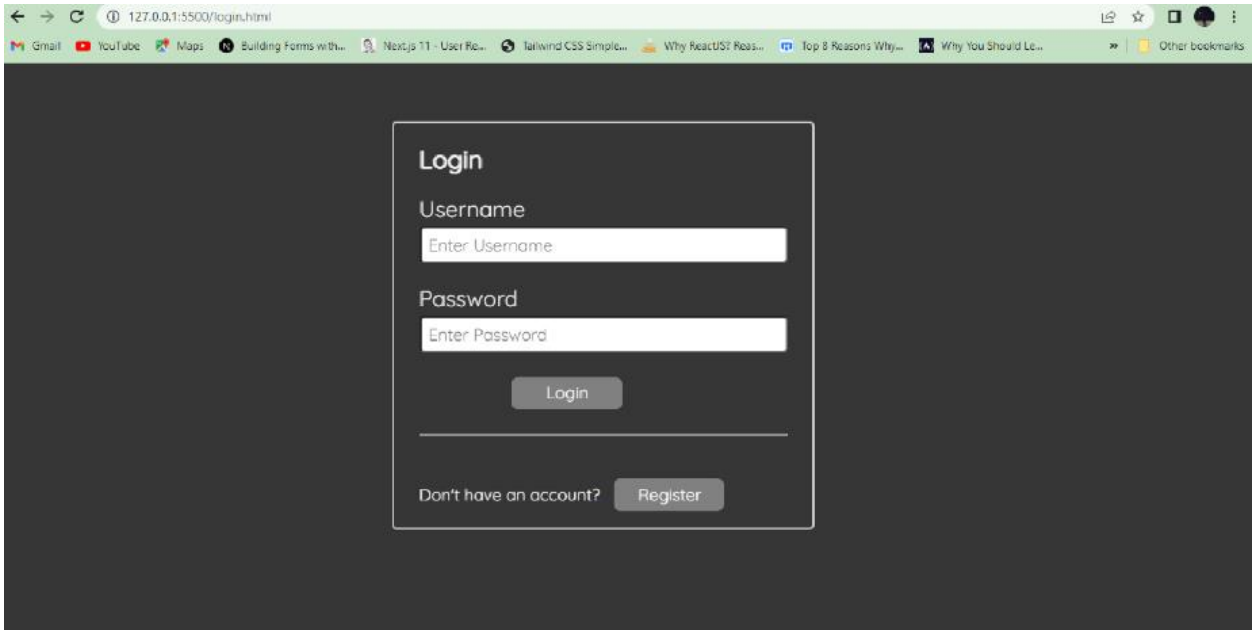
xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-arrow-left" viewBox="0 0 16 16">
<path fill-rule="evenodd" d="M15 8a.5.5 0 0 0-.5-.5H2.707l3.147-3.146a.5.5 0 1 0-.708-.708l-4 4a.5.5 0 0 0 0 .708l4 4a.5.5 0 0 0 .708-.708L2.707 8.5H14.5A.5.5 0 0 0 15 8z"/>
</svg></a></li>
<li class="nav-item active" style="left: 400px;margin-left: 20px;">
Airlines Data Analytics for Aviation Industry
</li>
<li style="margin-left: 20px;"><a href="page2.html"><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-arrow-right" viewBox="0 0 16 16">
<path fill-rule="evenodd" d="M1 8a.5.5 0 0 1 .5-.5h11.793l-3.147-3.146a.5.5 0 0 1 .708-.708l4 4a.5.5 0 0 1 0 .708l-4 4a.5.5 0 0 1-.708-.708L13.293 8.5H1.5A.5.5 0 0 1 1 8z"/>
</svg></a></li>
<li style="margin-left: 500px;"><a href="index.html"><svg xmlns="http://www.w3.org/2000/svg" width="16" height="16" fill="currentColor" class="bi bi-power" viewBox="0 0 16 16">
<path d="M7.5 1v7h1V1h-1z"/>
<path d="M3 8.812a4.999 4.999 0 0 1 2.578-4.375l-.485-.874A6 6 0 1 0 11 3.616l-.501.865A5 5 0 1 1 3 8.812z"/>
</svg></a></li>
</ul>

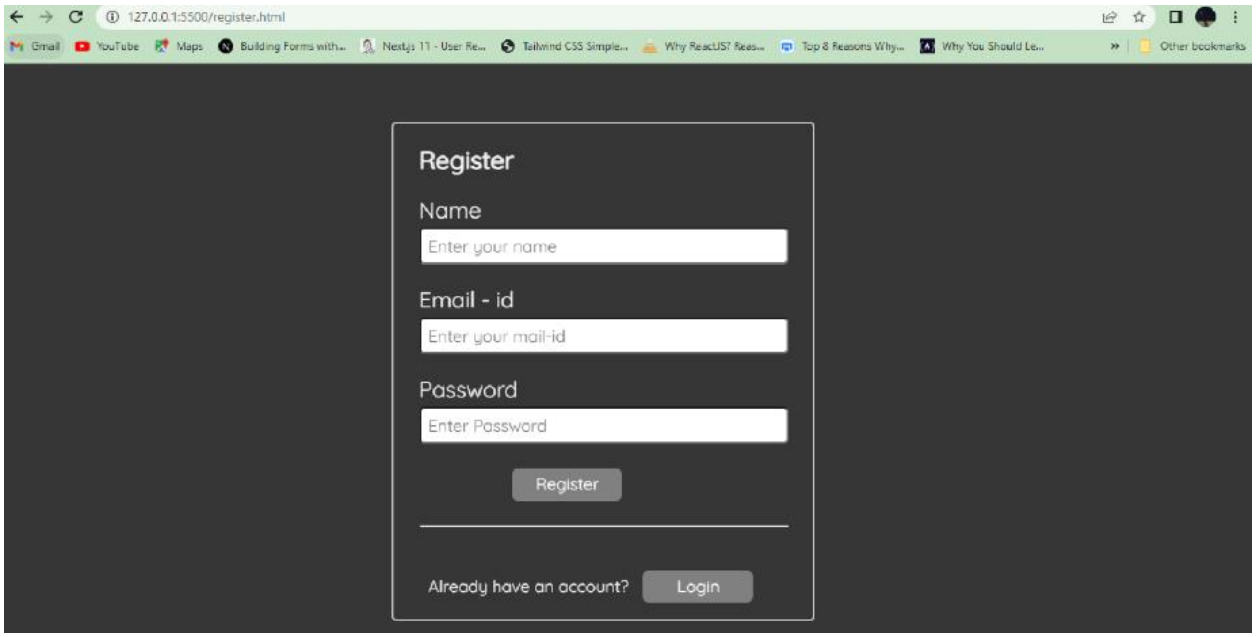
</nav>

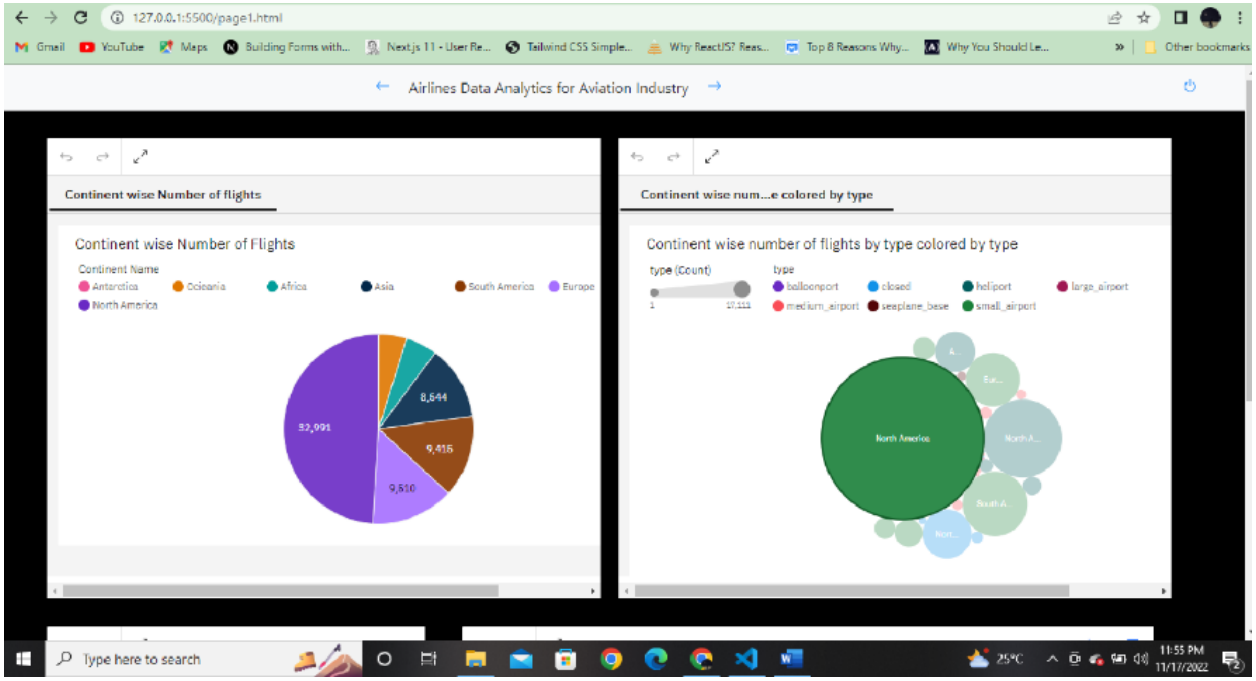
<iframe src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FContinent%2Bwise%2Bno%2Bof%2Bflights_1&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001847a1b75ea_00000000" width="600" height="500" frameborder="0" gesture="media" allow="encrypted-media"style="margin-top: 30px;" allowfullscreen=""></iframe>
<iframe src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FContinent%2Bwise%2Bnumber%2Bof%2Bflights%2Bby%2Btype%2Bcolored%2Bby%2Btype_2&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000001847a323baf_00000002" width="600" height="500" frameborder="0" gesture="media" allow="encrypted-media" style="margin-left: 20px;margin-top: 30px;"allowfullscreen=""></iframe>
<iframe src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2FProject%2FContinent%2B-

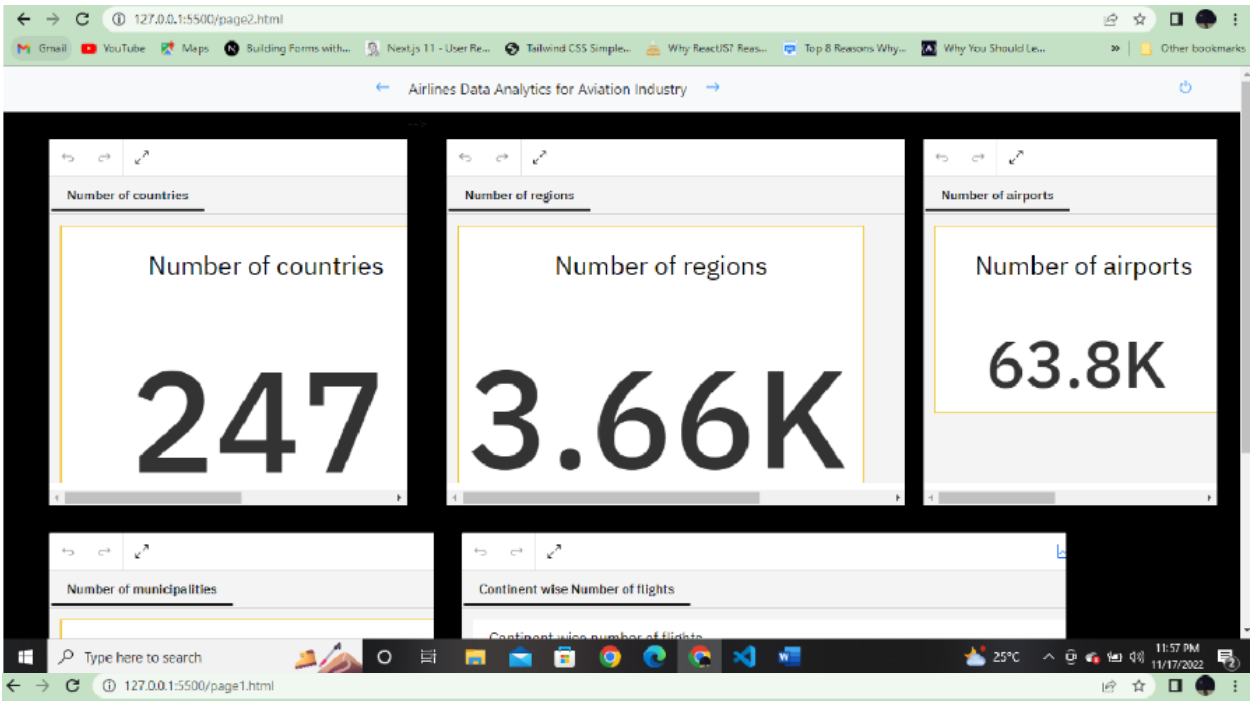
```
%2BList%2BFilter_3&amp;closeWindowOnLastView=true&amp;ui_appbar=false&amp;ui_navbar
=false&amp;shareMode=embedded&amp;action=view&amp;mode=dashboard&amp;subView=mod
el000001847ff2a011_00000003"width="410" height="450" frameborder="0" gesture="media"
allow="encrypted-media"style="margin-top: 30px;" allowfullscreen=""></iframe>
   <iframe
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&amp;pathRef=.my_folders%2FPro
ject%2FTop%2B10%2Bcountries%2Bby%2Bcount%2Bof%2Bairports&amp;closeWindowOnLastV
iew=true&amp;ui_appbar=false&amp;ui_navbar=false&amp;shareMode=embedded&amp;action=vi
ew&amp;mode=dashboard&amp;subView=model00000184851fd232_00000001" style="margin-
left: 40px;margin-top: 30px;"width="750" height="450" frameborder="0" gesture="media"
allow="encrypted-media" allowfullscreen=""></iframe>
  </div>
</body>
</html>
```

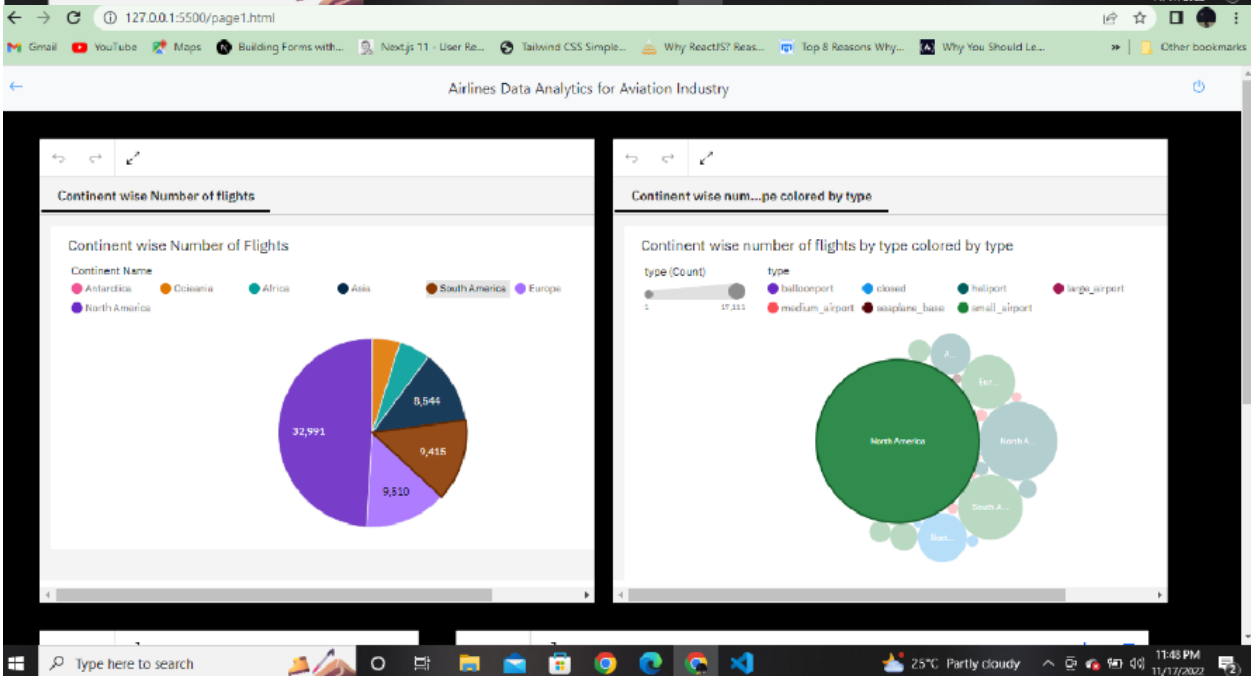
Space Gen Airlines website:

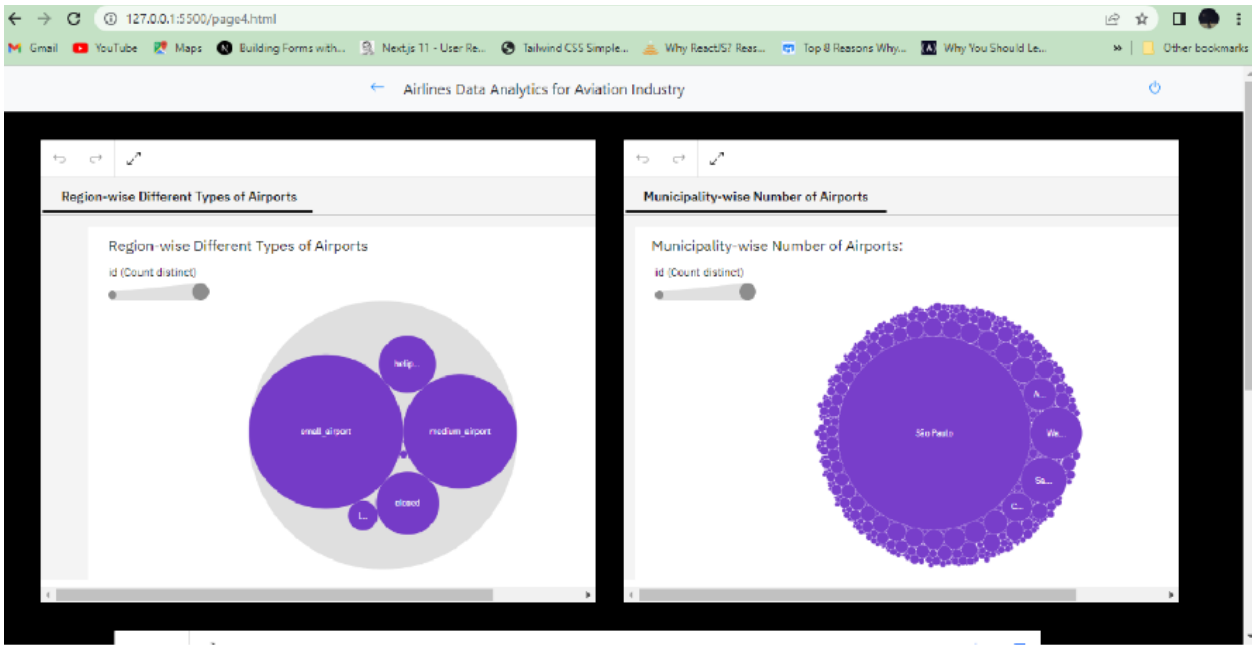



127.0.0.1:5500/register.html
Register
Name
Enter your name
Email - id
Enter your mail-id
Password
Enter Password
Register
Already have an account?
Login


127.0.0.1:5500/page1.html
Airlines Data Analytics for Aviation Industry
Continent wise Number of flights
Continent wise Number of Flights
Continent Name
Antarctica
Oceania
Africa
Asia
South America
Europe
North America
8,644
9,416
9,610
Continent wise num...e colored by type
Continent wise number of flights by type colored by type
type (Count)
type
balloonport
closed
heliport
large_airport
medium_airport
seaplane_base
small_airport
North America
Type here to search
25°C
11:55 PM
11/17/2022


127.0.0.1:5500/page2.html
Airlines Data Analytics for Aviation Industry
Number of countries
Number of countries
247
Number of regions
Number of regions
3.66K
Number of airports
Number of airports
63.8K
Number of municipalities
Continent wise Number of flights
Type here to search
25°C
11:57 PM
11/17/2022


127.0.0.1:5500/page1.html
Airlines Data Analytics for Aviation Industry
Continent wise Number of flights
Continent wise Number of Flights
Continent Name
Antarctica
Oceania
Africa
Asia
South America
Europe
North America
8,544
32,991
9,415
9,510
Continent wise num...pe colored by type
Continent wise number of flights by type colored by type
type (Count)
type
balloonport
closed
heliport
large_airport
medium_airport
seaplane_base
small_airport
North America
Type here to search
25°C Partly cloudy
11:48 PM
11/17/2022



GITHUB LINK:

https://github.com/IBM-EPBL/IBM-Project-21187-1659774812

PROJECT DEMO LINK:

https://youtu.be/CWnvt-wCjZ8