Project Report Format

1. INTRODUCTION

1.1 Project Overview

In the present world, the major components of any transportation system include passenger airline, cargo airline, and air traffic control system. With the passage of time, nations around the world have tried to evolve numerous techniques of improving the airline transportation system. This has brought drastic change in the airline operations. Flight delays occasionally cause inconvenience to the modern passengers [1]. Every year approximately 20% of airline flights are canceled or delayed, cost

1.2 Purpose

Average aircraft delay is regularly referred to as an indication of airport capacity. Flight delay is a prevailing problem in this world. It's very tough to explain the reason for a delay. A few factors responsible for the flight delays like runway construction to excessive traffic are rare, but bad weather seems to be a common cause. Some flights are delayed because of the reactionary delays, due to the late arrival of the previous flight. It hurts airports, airlines, and affects a company's

2. LITERATURE SURVEY

2.1 Existing problem

Choi et al proposed a prediction model to accurately predict individual flight delays. They have employed Long Short-Term Memory RNN architecture trying to prove that the accuracy increases with deeper architectures. To train the model, stochastic gradient descent (SGD) algorithm is utilized. Use of SGD helped prevent overfitting and increase general performance. The comparison of accuracies obtained with different number of layers has been formulated to support the claim of accuracy increasing with the increase in number of layers. The accuracy further improved with increasing epochs. The model has then been used to calculate and compare the delay of individual flights which manifests promising results.

Roshni Musaddi et al proposed a model to predict flight delays implementing Binary Classification. Their aim was to compare different flights and their delays to enable passengers to choose the apt airline before travelling. The dataset is converted into sparse matrices using label Binarizer and then the random forest algorithm is applied on the training dataset. Different histograms were plotted on basis of the obtained results and the ROC Curve is plotted to show the accuracy of the model.

Balasubramanian Thiagarajan et al. [6] proposed a two stage model to optimize prediction of flight delays. The first stage

predicts the occurrence of flight delays using binary classification where Gradient Boosting Classifier gave promising results. To improve the base results feature scaling, hyper-parameter tuning and selective training are applied. Random Forest gives the most optimum results for delay and arrival prediction. The ROC Curve plotted for arrival and delay prediction gives the maximum area under the curve for Random Forest algorithm.

Swaminathan Meenakshisundaram et al applied Logistic Regression and Decision Tree (Random Forest) algorithms on the model to predict delays. Factor analysis is used to understand the possible factors affecting the delay of a flight. Hence, the analyzed factors are implemented using the random forest algorithm. The estimate time of arrival and delays are compared from both the models. The research claims decision tree algorithm to be more effective compared to logistic regression.

2.2 References

1. Yogita Borse , Dhruvin Jain , Shreyash Sharma , Viral Vora, Aakash Zaveri, 2020, Flight Delay Prediction System, International Journal Of Engineering Research & Technology (IJERT) Volume 09, Issue 03 (March 2020).
2. Ye, B.; Liu, B.; Tian, Y.; Wan, L. A Methodology for Predicting Aggregate Flight Departure Delays in Airports Based on Supervised Learning. Sustainability 2020, 12, 2749.
3. Y. J. Kim, S. Choi, S. Briceno and D. Mavris, "A deep learning approach to flight delay prediction," 2016 IEEE/AIAA 35th Digital Avionics Systems Conference (DASC), Sacramento, CA, 2016, pp. 1-6, doi: 10.1109/DASC.2016.7778092.
4. Chakrabarty, Navoneel. “A Data Mining Approach to Flight Arrival Delay Prediction for American Airlines.” 2019 9th Annual Information Technology, Electromechanical Engineering and Microelectronics Conference (IEMECON) (2019): 102-107.
5. Musaddi, Roshni & Jaiswal, Anny & Girdonia, Mansvi & Sanjudharan, M S Minu. (2018). Flight Delay Prediction using Binary Classification. 6. 34-38.

2.3 Problem Statement Definition

Customer Problem Statement Template:
Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love.
A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you’ll also be able

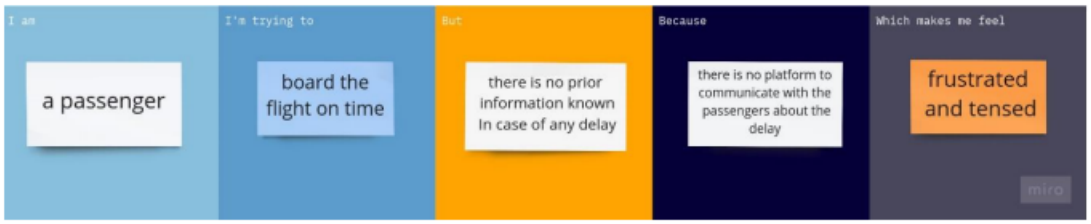
to empathize with your customers, which helps you better understand how they perceive your product or service.

PROBLEM STATEMENT

Questions	Description
who does the problem affect?	Air passengers who often travel in flight.
What are the boundaries of the problem?	Passenger group(business people,tourists,civilians)
What is the issue?	Massive levels of aircraft delays on the ground and in the air.
Why does the issue occur?	Flight delay may occur due to technical malfunction ,late arrival ,thunderstorm ,other extraordinary circumstance.
Why is it important that we fix the problem?	Flight delays are responsible for large economic and

	environmental losses. We need to fix this so that passenger can reach the airport on time knowing about the delay before hand and to have peaceful journey without unnecessary waits.

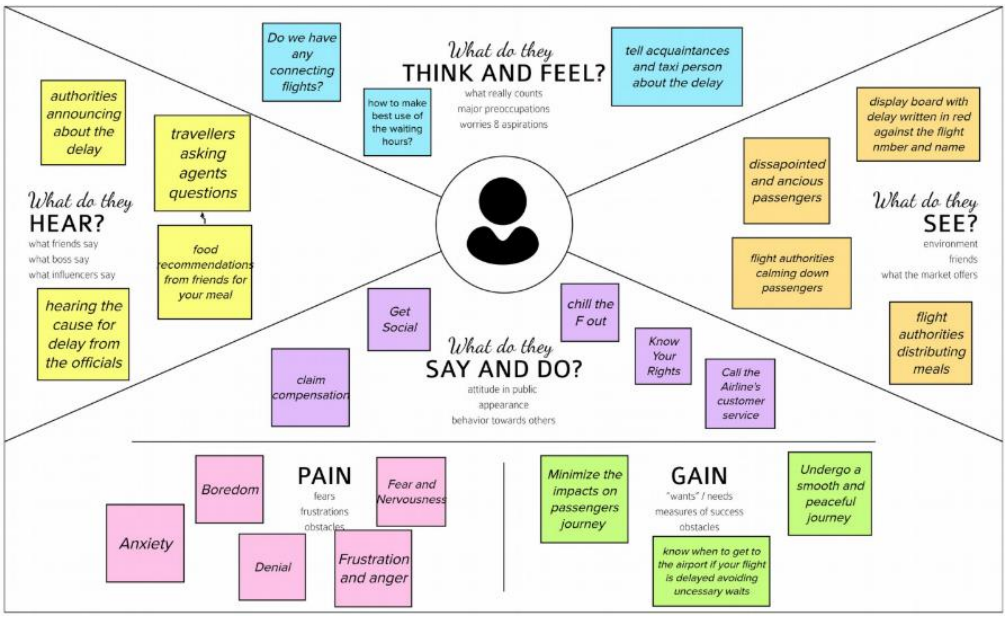
Developing a Flight Delay Prediction Model using Machine Learning



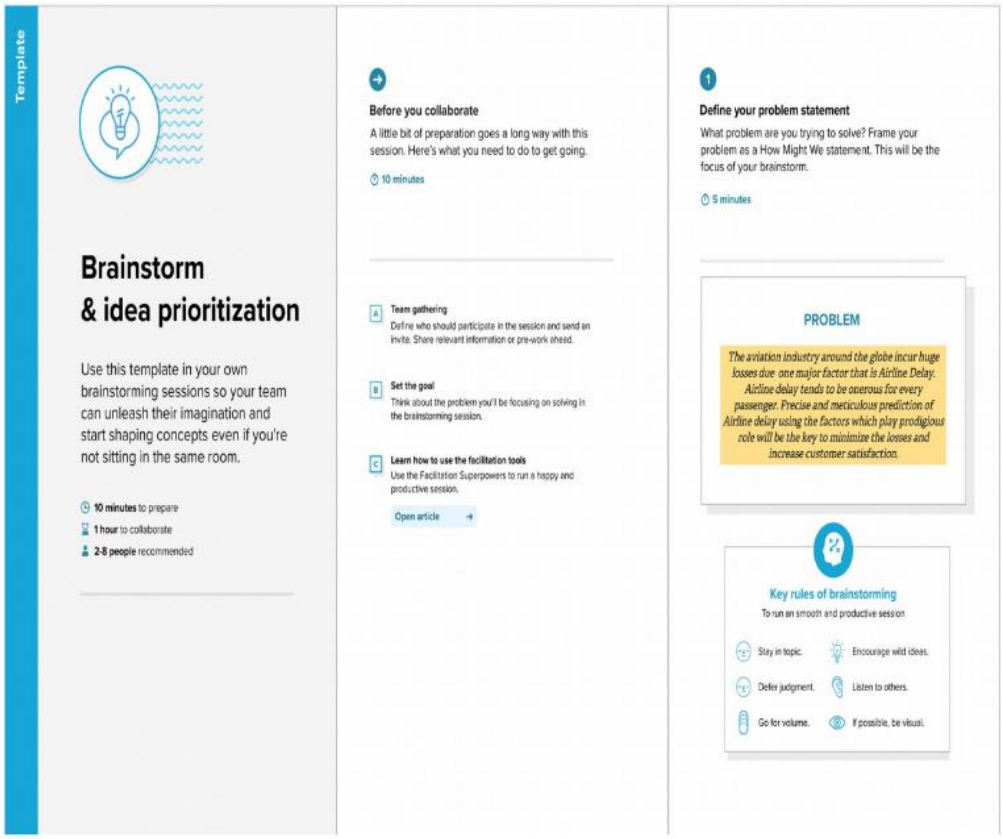
Problem Statement (PS)	I am	I'm trying to	But	Because	Which makes me feel
PS-1	A passenger	Board the flight on time	There is no prior information known in case of any delay	There is no platform to interact with the passengers about the delay	Frustrated and tensed

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

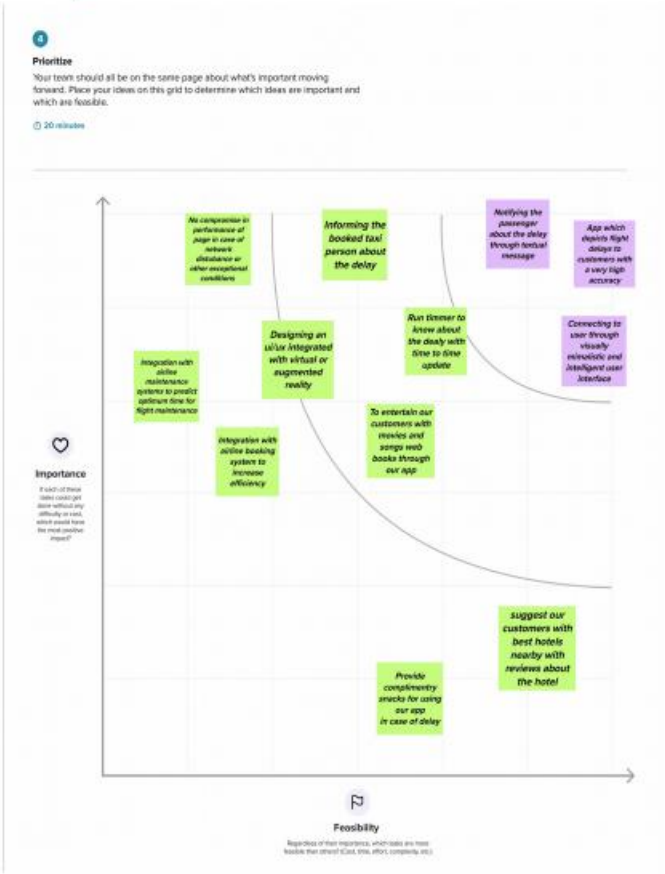


3.2 Ideation & Brainstorming



Step-2: Brainstorm, Idea Listing and Grouping

Step-3: Idea Prioritization



3.3 Proposed Solution

S.no	Parameter	Description
•	Problem Statement	In recent years there is an increase in growth in air traffic and on the ground. An increase in air traffic growth has also resulted in massive levels of aircraft delays on the ground and in the air. These delays are responsible for large economic and environmental losses. The main objective of the model is to predict flight delays accurately in order to optimize flight and minimize delay.
•	Idea / Solution description	Using a machine learning model, we can predict flight arrival delays. The input to our algorithm is rows of feature vector like departure

		date, departure delay, distance between the two airports, scheduled arrival time etc. We then use decision tree classifier to predict if the flight arrival will be delayed or not. A flight is considered to be delayed when difference between scheduled and actual arrival times is greater than 15 minutes. Furthermore, we compare decision tree classifier with logistic regression and a simple neural network for various figures of merit.
•	Novelty / Uniqueness	Creating a mobile/web app which depicts flight weather delays to customers with a very high accuracy.Connecting to user through visually mimalistic and intelligent and friendly user interface.Integration with airline booking system to increase efficiency.Notifying the passenger about the delay through textual message. Informing the booked taxi person about the delay.
•	Social Impact / Customer Satisfaction	Passenger groups include business people,tourists,civilians etc .Customers who are dissatisfied or disengaged

		inevitably result in fewer passengers and less money. By predicting flight delay customer experience is improved and customers will have a peaceful journey. It can help customer to *avoid spending time waiting for flight *Provide complimentary snacks for using our app in case of delay. *Suggest customers with the best nearby hotel with reviews about the hotel. *Entertain customers with movies and songs through our app.
•	Business Model (Revenue Model)	Through our application the revenue for the company will be in the form of ads.Makes the user know about what are all the good things and trending ways to invest money safely and securely.
•	Scalability of the Solution	The system can handle a large number of users. The scalability of this project includes incorporating a larger dataset.The above methodology can be performed on the data collected for the recent years, owing to the population rise in recent years leading to increase in the number of flights. To obtain a detailed analysis, a more thorough localized search and scrutiny must be conducted to accurately determine the arrival or departure delay.Integration with airline booking systems to increase efficiency.

3.4 Problem Solution fit

4. **REQUIREMENT ANALYSIS**

4.1 Functional requirement

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Login	● Registration through UserID/Password ● Registration through Gmail ● Registration through Phone number
FR-2	User Confirmation	● Confirmation via Email ● Confirmation via OTP
FR-3	User Login	● Login with UserID/Password ● Login with gmail ● Login with phone number/OTP
FR-4	Search Flight	● Get the entered flight details
FR-5	Predict Delay Time	● Feed the details to the model and find prediction ● Display the received prediction
FR-6	Predict Delay Accuracy	● Get the accuracy of delay ● Display the accuracy
FR-7	Notify the user	● Send prediction results to mail ● Notify 30 minutes before flight arrival/departure
FR-8	Get feedback	● Get descriptive feedback ● Get ratings from user
FR-9	User Logout	● Logout of the application

4.2 Non-Functional requirements

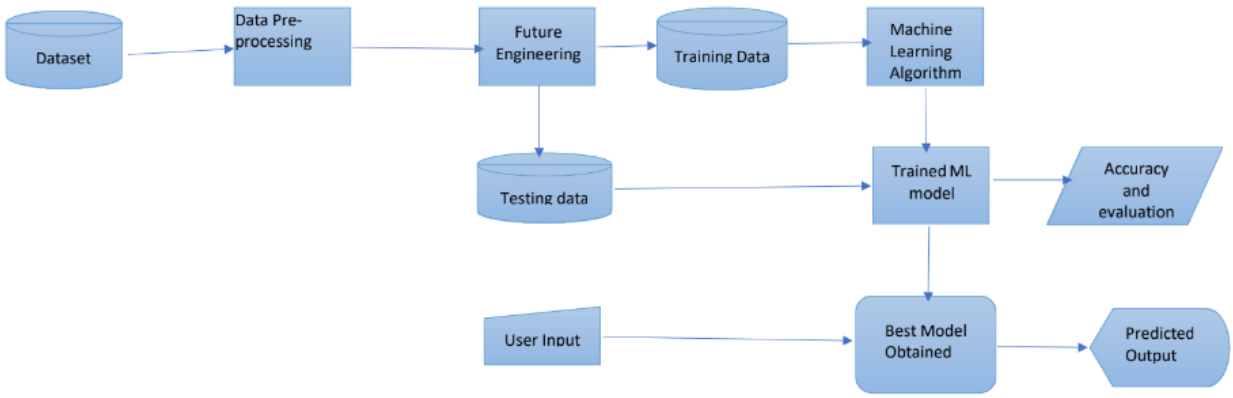
FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	● An app tour would be shown to the users.

		• To guide new users who search flights, in the search box where the user needs to type the flight details • a message such as Try "BOM MAA" or "Mumbai Chennai" will be displayed.
NFR-2	**Security**	• During registration, a 2 factor authentication through mail would confirm if the user is reliable. • The user would be able to login to the app only with his credentials. • He would be allowed to change the password only after a 2-factor authentication and a notification would also be sent to his mailbox to indicate the change.
NFR-3	**Reliability**	• There is a 75 percent chance under optimal condition that the application won't experience critical failure • There is 80 percent restoring capability even if the system fails.
NFR-4	**Performance**	• The application load time would take 3 seconds or less with a WiFi/LTE connection. • Time taken to predict the delay would be no more than 5 seconds.
NFR-5	**Availability**	• During any new update/maintenance, a message would be displayed in the application 48 hours before the scheduled time regarding the same. • The functional requirement 'Search flight' function may not be available when all the flights are canceled as in case of pandemic or in war stricken areas. • The user gets the prediction result through mail. • If there is any problem with the model, the user would receive an alert that there is an issue in the prediction and the system would get back within 10 mins. • The system would be available to use during the other times.
NFR-6	**Scalability**	• Though it is out of scope keeping our implementation in mind, the system can be made scalable enough to support 1,000,000 visits at the same time while maintaining optimal performance. • It can also be scaled to predict delays with international flights and delays due to weather by training the model with appropriate data, given that it must be available.

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.



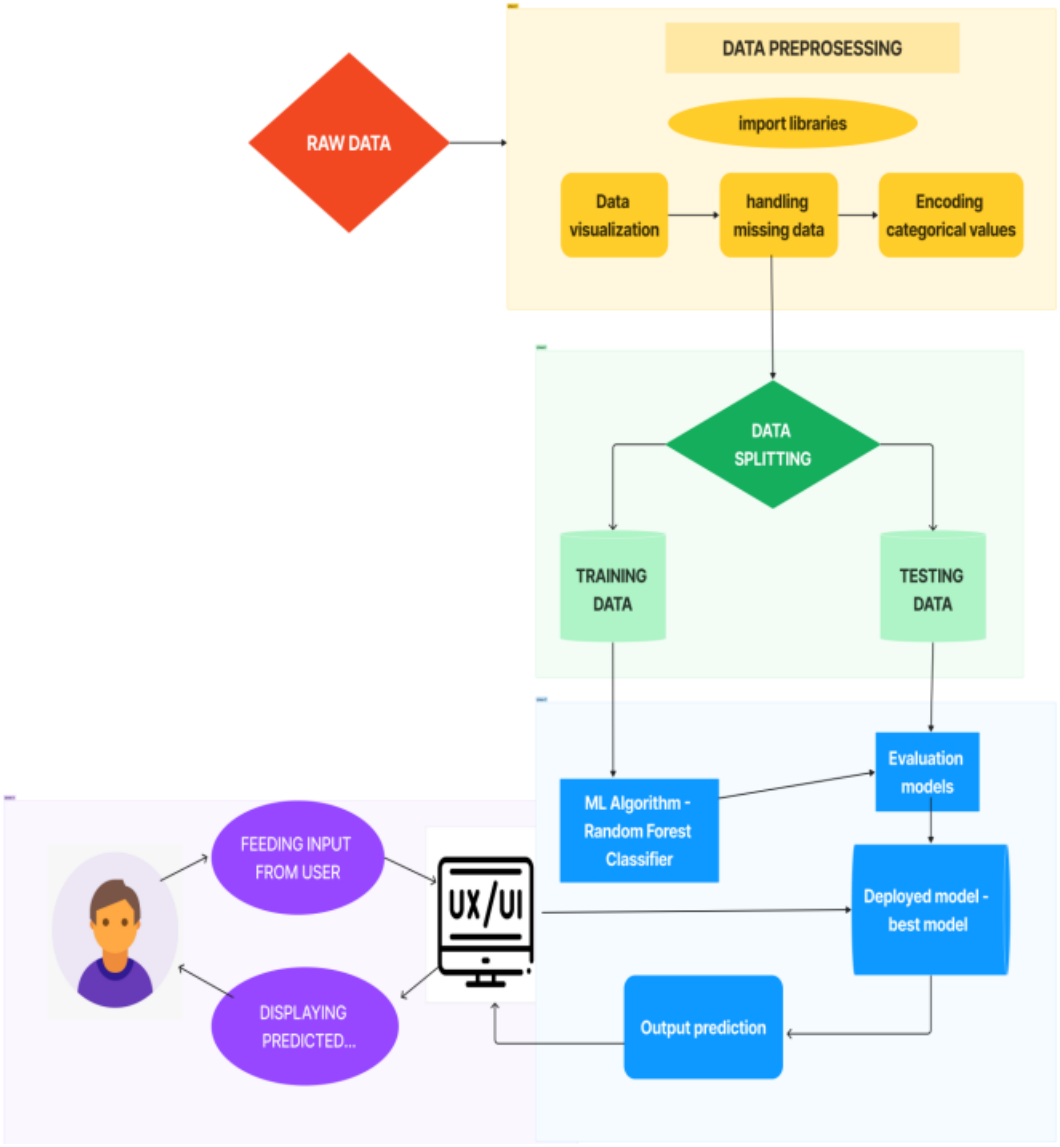
5.2 Solution & Technical Architecture

USER VIEW

1. Client enters flight subtleties in the UI
2. Entered input is shipped off the classifier model deployed through IBM Watson.
3. The model predicts the assessed takeoff time/arrival delay and sends it to the UI.
4. The predicted value is then displayed in the UI to the client.

MODEL VIEW

1. The dataset is preprocessed for taking care of missing/categorical values.
2. Spatial and different features are removed.
3. The features are parted into training and test set.
4. A Random Forest classifier is built and is trained with the training data.
5. The model is assessed utilizing the testing data
6. The trained model is deployed in IBM Watson.



5.3 User Stories

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Web user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		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 Gmail	I can register and login by providing Gmail with access permissions	Medium	Sprint-2
	Login	USN-4	As a user, I can log into the application by entering email & password	I can login using my registered email and password(login credentials)	High	Sprint-1
	Dashboard	USN-5	As a user, I can access my dashboard which give way to provide data to predict flight delay	I can provide valid Input data	High	Sprint-2
	Logout	USN-6	As a user, I can logout by clicking logout button	I can logout my account from website	High	Sprint-1
	Prediction	USN-7	As a user, I can prediction result through dashboard by integrated ML Model	I can get prediction by giving valid input	High	Sprint-3
Customer Care / support	Query/ complaint raise	USN-8	As a user, I can raise Query or complaint about technical issues	If raised query valid or true then resolve and response, else explain the missing understanding	Medium	Sprint-4
	Feedback/ rating	USN-9	As a user, I can give feedback and rating to the application	Support team accept the feedback , try to improve application	Medium	Sprint-4
Administrator	Maintain	USN-10	Administrator maintain the database and overall application	Punctual maintenance	High	Sprint-4
Developer	Testing	USN-11	As a developer, I test the application which I have developed	I test the application for checking errors and rectify it	High	Sprint-1,2,3,4

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection and Preprocessing	USN-1	As a user, I am unable to engage with anything.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S
Sprint-1	Build frontend	USN-2	As a user, I can view the web pages to enter flight details.	1	Medium	Tejasvi J Sindhu priya T Shanmathi S Thrisha S
Sprint-2	Build Python Pages	USN-3	As a user, I am unable to engage with anything.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S
Sprint-2	Execute And Test Your Model	USN-4	As a user, I can predict flight delays using the best created ML models.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S

Sprint-3	Train The ML Model	USN-6	As a user, I can predict flight delays using the best created ML models.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S
Sprint-3	Integrate Flask with Model	USN-5	As a user, I can predict flight delays using the user interface.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S
Sprint-4	Model Deployment on IBM Cloud using IBM Watson	USN-8	As a user, I can use the model by requesting the deployed model on Cloud.	2	High	Tejasvi J Sindhu priya T Shanmathi S Thrisha S

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	2 Oct 2022	09 Nov 2022	20	09 Nov 2022
Sprint-3	20	6 Days	09 Nov 2022	14 Nov 2022	20	14 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

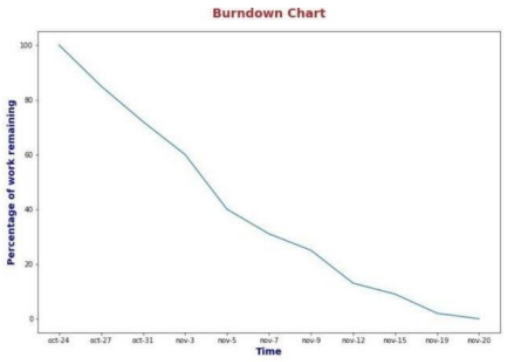
Velocity:

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



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

We completed four sprints—Sprint 1, Sprint 2, Sprint 3 and Sprint 4—during the project development phase. A sprint is a predetermined amount of time in Agile product development during which particular tasks must be finished and prepared for review.

7.1 Sprint 1

The dataset has been downloaded. The features are analysed and visualized and data has been cleaned and pre-processed using techniques like encoding. The independent and dependent

variables are then identified and the dataset is split into train and test sets. Several machine learning algorithms have been applied for classification like logistic regression, decision tree classifier, KNN classifier, random forest classifier and it is found that logistic regression gives the highest accuracy, so it is used for deployment. The model is then dumped into a pickle file

7.2 Sprint 2

We had done building HTML files, writing Python code, and running the application during Sprint 2. The source code is attached in the appendix for reference.

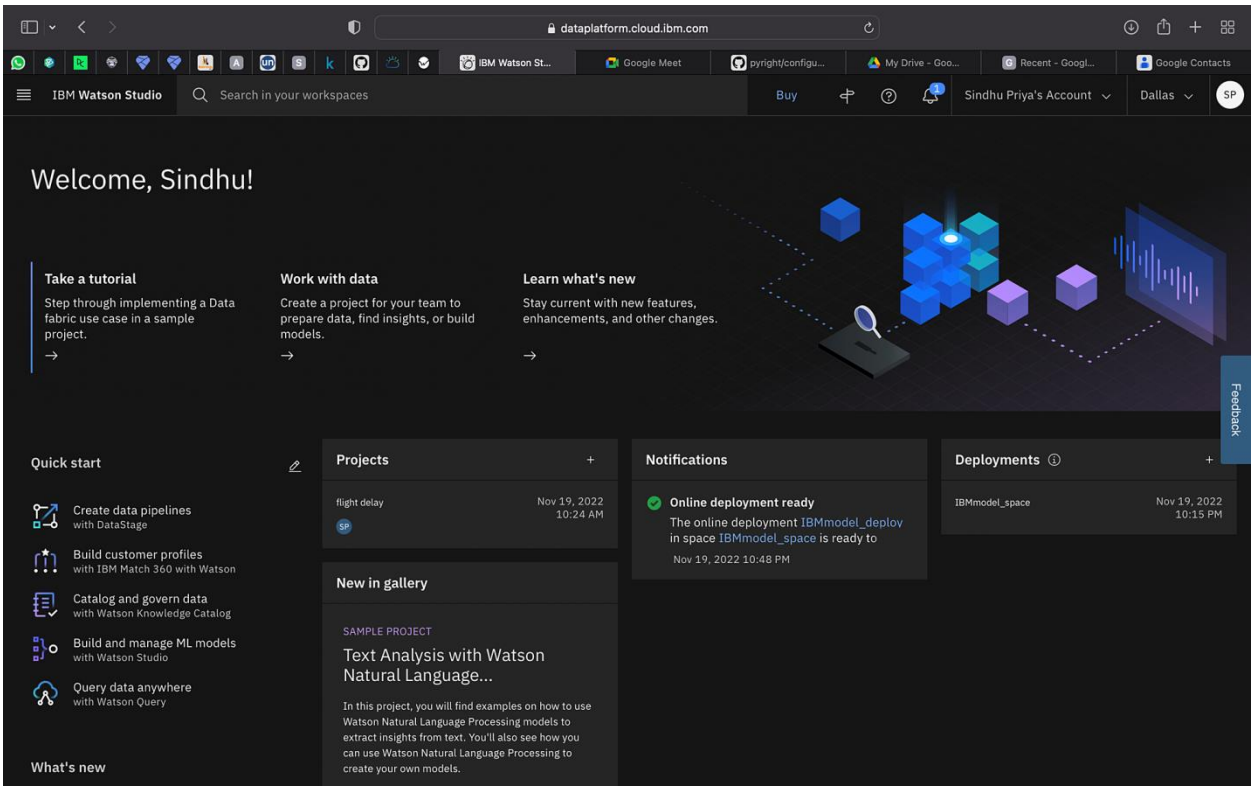
7.3 Sprint 3

We then asked users to enter numerical and selection data and tested for many inputs and checked the correctness of the result during sprint 3.

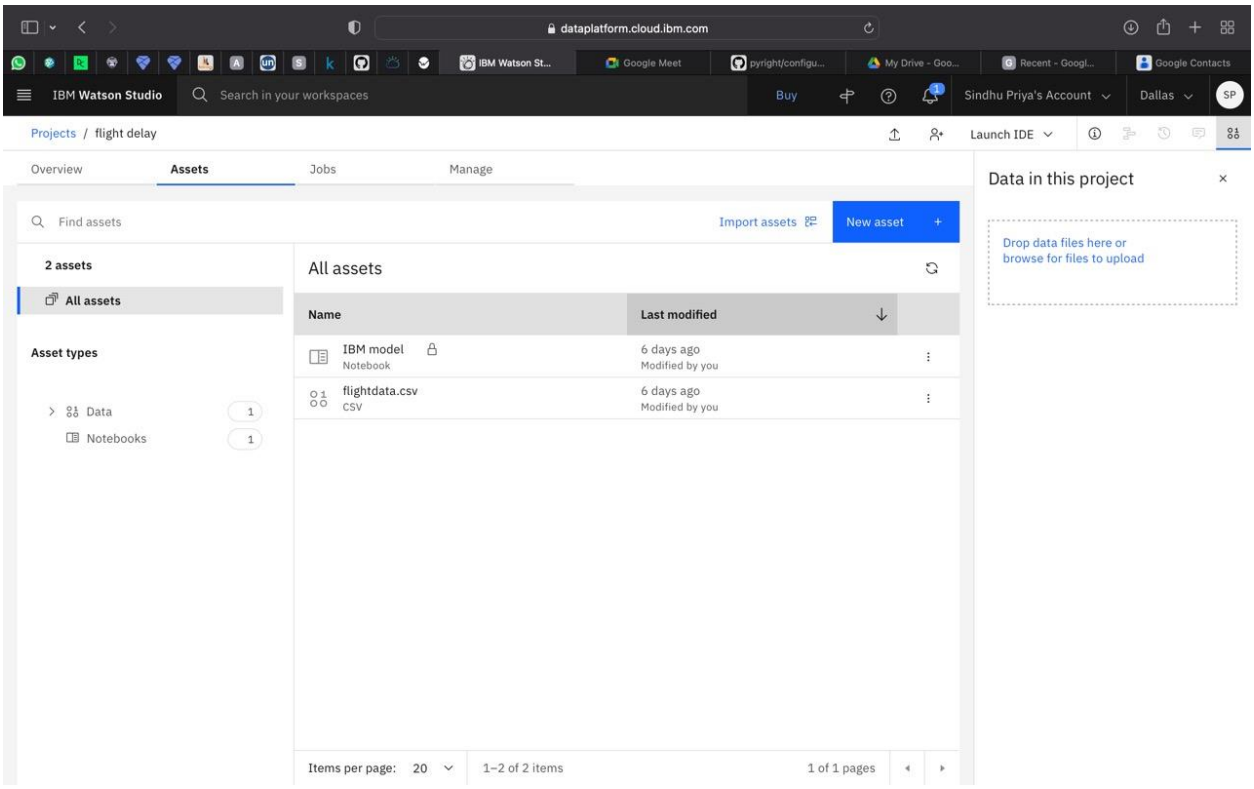
7.4 Sprint 4

We trained the model on IBM where we will register for IBM cloud, train the ML model on IBM and integrate flask with scoring end point. Registered on IBM cloud and activated Watson machine learning, cloud storage and Watson studio then trained the ML model on IBM using API KEY during sprint 4

WATSON STUDIO



ASSETS OF PROJECT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IBM Watson Studio
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Dallas
Projects / flight delay
Launch IDE
Overview
Assets
Jobs
Manage
Find assets
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Notebook
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Modified by you
flightdata.csv
CSV
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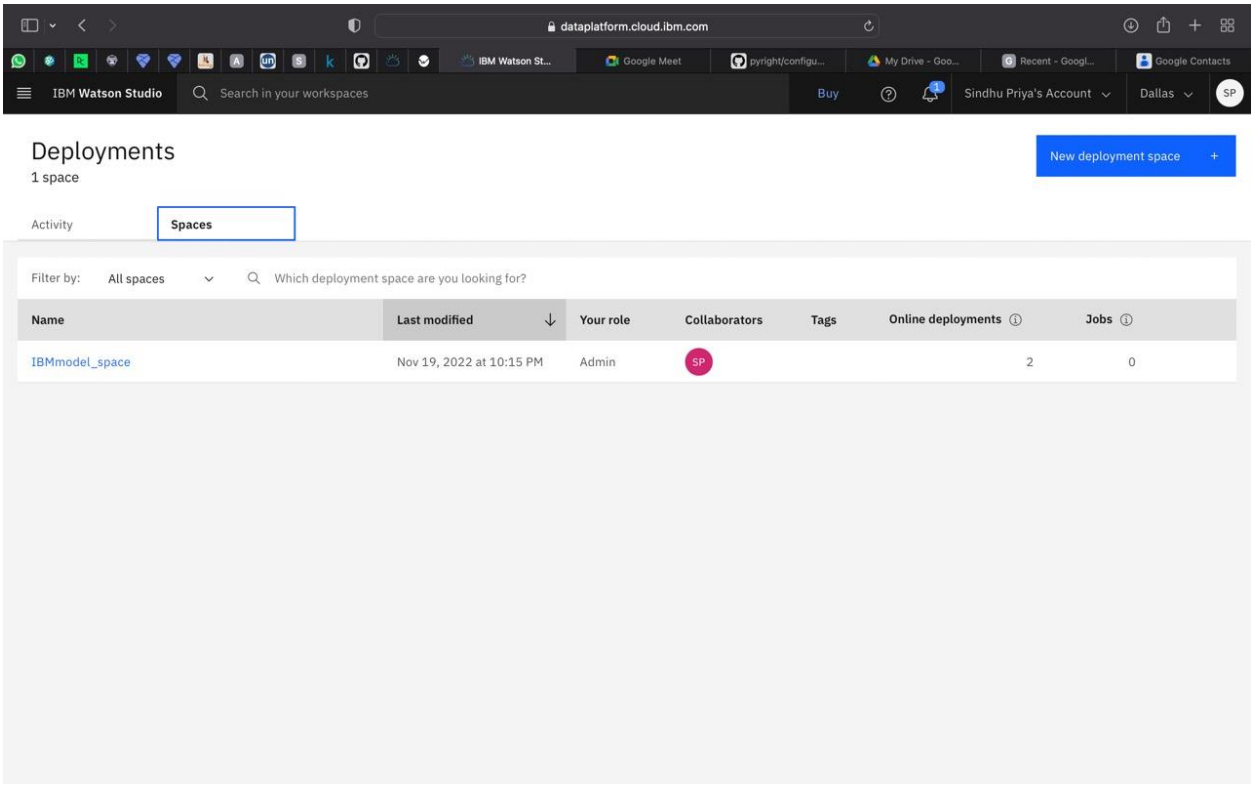
Items per page: 20
1–2 of 2 items
1 of 1 pages
Data in this project
Drop data files here or
browse for files to upload

DEPLOYMENT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IBM Watson Studio
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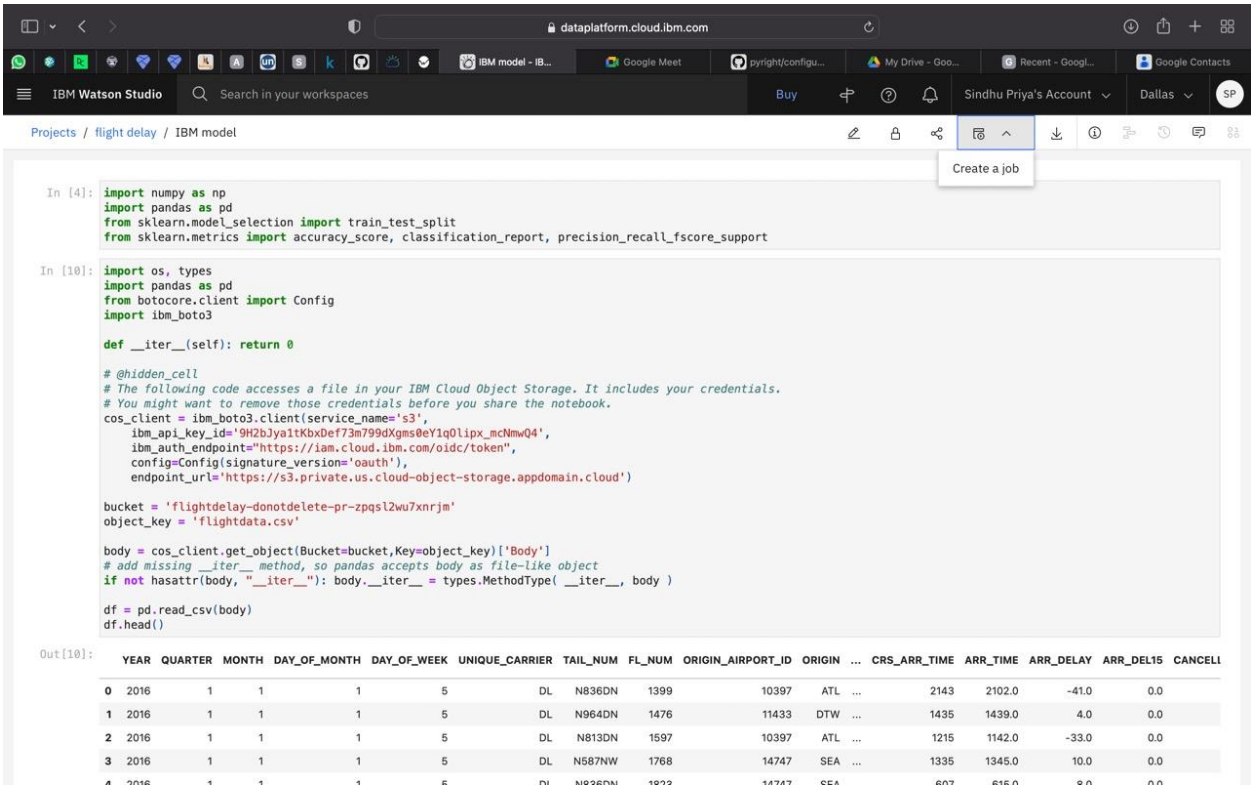
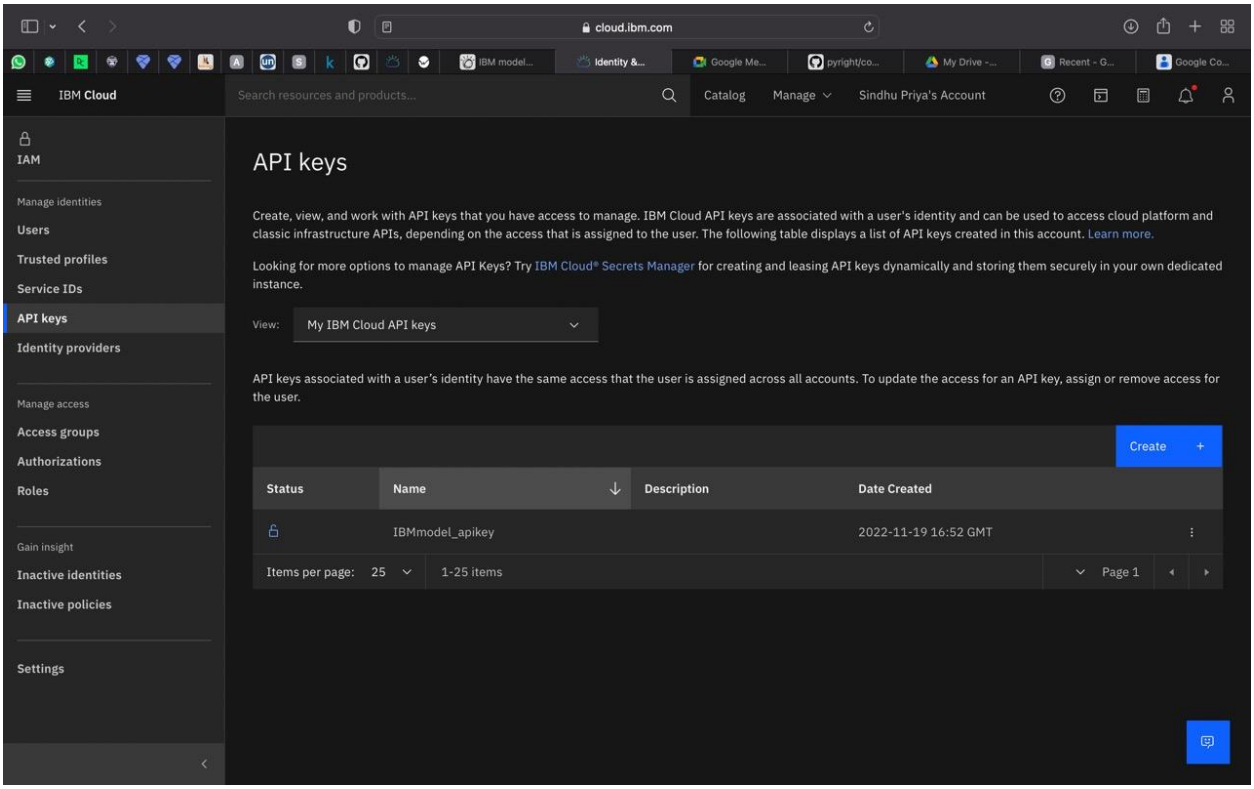
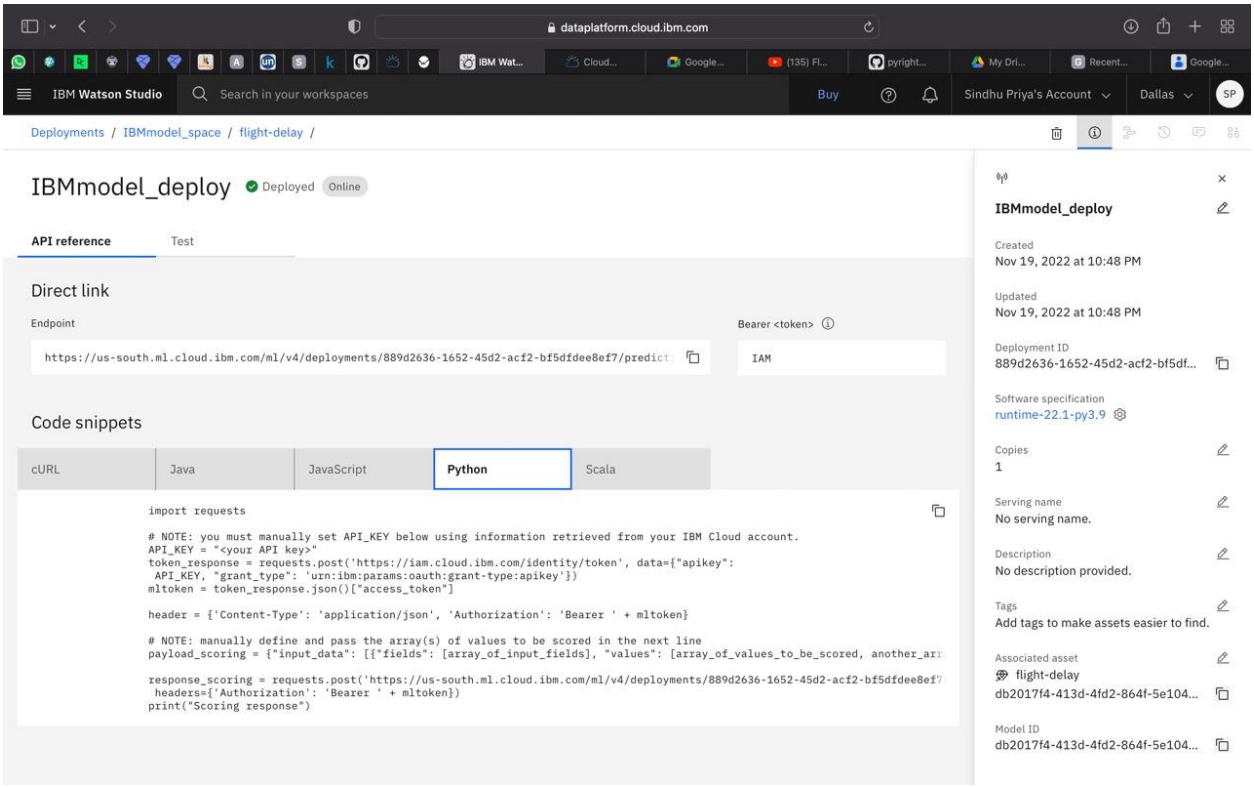
MODEL DEVELOPMENT



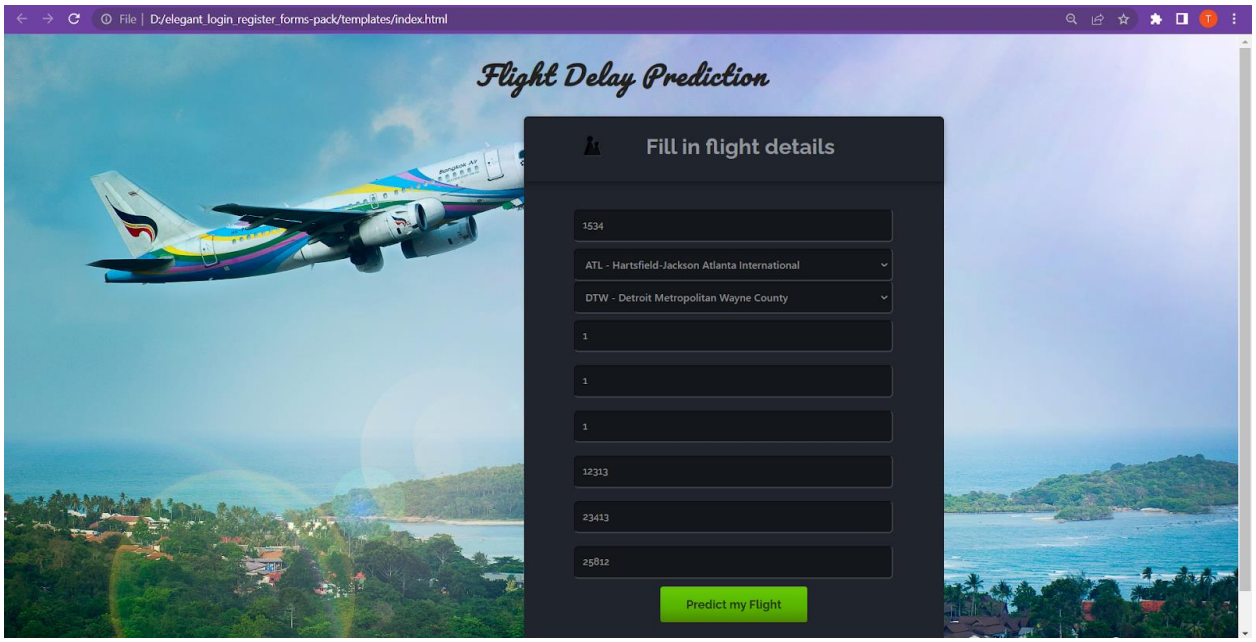
API KEYS

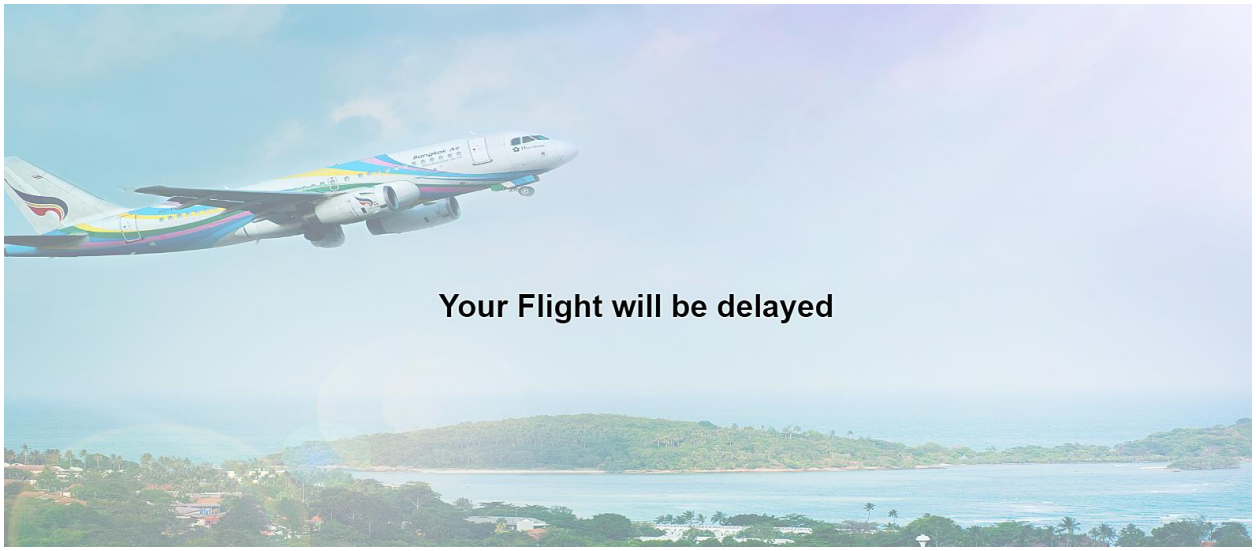


API REFERENCE FOR DEPLOYMENT



8. RESULTS





8. ADVANTAGES & DISADVANTAGES

ADVANTAGES

- Machine learning can predict flight delays with a high degree of accuracy.
- Machine learning can help identify causes of flight delays.
- Machine learning can help reduce the number of flight delays.
- Machine learning can help improve the efficiency of airport operations.

DISADVANTAGES

- Machine learning models can be complex and difficult to understand.
- Machine learning models require a large amount of data to train and can be time-consuming to develop.
- Machine learning models can be prone to overfitting, meaning they may not generalize well to new data.
- Machine learning models can be expensive to develop and maintain.

9. CONCLUSION

In this project, we use flight data, weather, and demand data to predict flight departure delay. Our result shows that the Random Forest method yields the best performance compared to the SVM model. Somehow the SVM model is very time consuming and does not necessarily produce better results. In the end, our model correctly predicts 91% of the non-delayed flights. However, the delayed flights are only correctly predicted 41% of time. As a result, there can be additional features related to the causes of flight delay that are not yet discovered using our existing data sources. In the second part of the project, we can see that it is possible to predict flight delay patterns from just the volume of concurrently published tweets, and their sentiment and objectivity. This is not unreasonable; people tend to post about airport delays on Twitter; it

stands to reason that these posts would become more frequent, and more profoundly emotional, as the delays get worse. Without more data, we cannot make a robust model and find out the role of related factors and chance on these results. However, as a proof of concept, there is potential for these results. It may be possible to routinely use tweets to ascertain an understanding of concurrent airline delays and traffic patterns, which could be useful in a variety of circumstances.

10. FUTURE SCOPE

In the future, the application can be included with an user authentication model. Apart from checking if the flight would get delayed or not, their search history can be maintained and personalized flight recommendations can be done. A section where the users can give their feedback can also be implemented.Expanding the scope of this project, we can also add the flight data from international flights and not just restrict our self to the domestic flights. The future work of this project includes incorporating a larger dataset.

11. APPENDIX

Source Code

Flask file:

———————————-

```
from flask import Flask, render_template, request
import csv, pickle
import pandas as pd
import joblib
import numpy as np

import requests

# NOTE: you must manually set API_KEY below using information retrieved from
    your IBM Cloud account.
        API_KEY = "bpzhtz7ZDMEHKaBuTVMbw77JrwrV8GFQiva92li5yShz"

token_response = requests.post('https://iam.cloud.ibm.com/identity/token',
    data={"apikey":
API_KEY, "grant_type": 'urn:ibm:params:oauth:grant-type:apikey'})
mltoken = token_response.json()["access_token"]

header = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + mltoken}
```

```
app = Flask(__name__)

@app.route('/')
def home():
    return render_template('index.html')

@app.route('/result', methods = ['POST'])
def predict():
    fl_num = int(request.form.get('fno'))
    month = int(request.form.get('month'))
    dayofmonth = int(request.form.get('daym'))
    dayofweek = int(request.form.get('dayw'))
    sdeptime = request.form.get('sdt')
    adeptime = request.form.get('adt')
    arrtime = int(request.form.get('sat'))
    depdelay = int(adeptime) - int(sdeptime)
    inputs = list()
    inputs.append(fl_num)
    inputs.append(month)
    inputs.append(dayofmonth)
                inputs.append(dayofweek)

if (depdelay < 15):
        inputs.append(0)
    else:
        inputs.append(1)
    inputs.append(arrtime)
    origin = str(request.form.get("org"))
    dest = str(request.form.get("dest"))
    if(origin=="ATL"):
        a=[1,0,0,0,0]
        inputs.extend(a)
    elif(origin=="DTW"):
```

```
    a=[0,1,0,0,0]
    inputs.extend(a)
elif(origin=="JFK"):
    a=[0,0,1,0,0]
    inputs.extend(a)
elif(origin=="MSP"):
    a=[0,0,0,1,0]
    inputs.extend(a)
elif(origin=="SEA"):
    a=[0,0,0,0,1]
    inputs.extend(a)

if(dest=="ATL"):
    b=[1,0,0,0,0]
    inputs.extend(b)
elif(dest=="DTW"):
    b=[0,1,0,0,0]
    inputs.extend(b)
elif(dest=="JFK"):
    b=[0,0,1,0,0]
    inputs.extend(b)
elif(dest=="MSP"):
    b=[0,0,0,1,0]
    inputs.extend(b)
elif(dest=="SEA"):
    b=[0,0,0,0,1]
    inputs.extend(b)

# NOTE: manually define and pass the array(s) of values to be scored in the next line
        payload_scoring = {"input_data": [{"fields": [['f0', 'f1', 'f2', 'f3', 'f4', 'f5',
    'f6', 'f7', 'f8', 'f9', 'f10', 'f11', 'f12', 'f13', 'f14', 'f15']], "values": [inputs]}]}
```

```
response_scoring = requests.post('https://us-south.ml.cloud.ibm.com/ml/v4/deployments/889d2636-1652-45d2-acf2-bf5dfdee8ef7/predictions?version=2022-11-19', json=payload_scoring, headers={'Authorization': 'Bearer ' + mltoken})
    print("Scoring response")
    predictions = response_scoring.json()
    print(response_scoring.json())

    predict = predictions['predictions'][0]['values'][0][0]
    print(predict)
            return render_template('/result.html', prediction = predict)

if __name__ == '__main__':
            app.run(debug=True)
```

HTML JS and CSS files:
INDEX.HTML

```
<!DOCTYPE html>
<html>
    <head>
        <title>Register-login-form Website Template | Home :: w3layouts</title>
        <link rel="stylesheet" href="../static/styles/style.css">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <script type="application/x-javascript"> addEventListener("load", function() {
    setTimeout(hideURLbar, 0); }, false); function hideURLbar(){
    window.scrollTo(0,1); }function myFunction() {
            alert("form submitted");
        } </script>
        <!--webfonts-->
        <link
    href='http://fonts.googleapis.com/css?family=Lobster|Pacifico:400,700,300|Roboto:400,100,100italic,300,300italic,400italic,500italic,500' ' rel='stylesheet'
    type='text/css'>
```

```
    <link
href='http://fonts.googleapis.com/css?family=Raleway:400,100,500,600,700,3
00' rel='stylesheet' type='text/css'>
    <link                                                    rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.4.1/dist/css/bootstrap.min.css"
integrity="sha384-
Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9If
jh" crossorigin="anonymous">
    <!--webfonts-->
</head>
<body>

<!--start-login-form-->
          <div class="main">
             <div class="login-head">
                <h1>Flight Delay Prediction</h1>
             </div>
             <div  class="wrap">
                  <div class="Regisration">
                    <div class="Regisration-head">
                       <h2><span></span><i  class="bi  bi-airplane"></i>Fill  in
flight details</h2>
                     </div>
                    <form  name="flightForm"  action="/result"  method="POST"
target="_blank">
                       <input type="number" id="fno" name="fno" value="Flight
Number" onfocus="this.value = '';" onblur="if (this.value == '') {this.value = 'Flight
Number';}" >
                        <select name="org" id="org">
                          <option value="Origin">---Origin---</option>
                        <option  value="ATL">ATL  -  Hartsfield-Jackson  Atlanta
International</option>
```

```
                        <option value="DTW">DTW - Detroit Metropolitan
Wayne County</option>
                        <option value="SEA">SEA - Seattle-Tacoma
International</option>
                        <option value="MSP">MSP - Minneapolis-Saint Paul
International</option>
                        <option value="JFK">JFK - John F. Kennedy
International</option>
                    </select>

                    <select name="dest" id="dest">
                      <option value="Origin">---Destination---</option>
                      <option value="ATL">ATL - Hartsfield-Jackson Atlanta
International</option>
                      <option value="DTM">DTW - Detroit Metropolitan
Wayne County</option>
                      <option value="SEA">SEA - Seattle-Tacoma
International</option>
                      <option value="MSP">MSP - Minneapolis-Saint Paul
International</option>
                      <option value="JFK">JFK - John F. Kennedy
International</option>
                    </select>

                  <input type="number" id="month" name="month"
value="Month" onfocus="this.value = '';" onblur="if (this.value == '') {this.value =
'Month';}" >
                    <input type="number" id="daym" name="daym"
value="Day of Month" onfocus="this.value = '';" onblur="if (this.value == '')
{this.value = 'Day of Month';}" >
                  <input type="number" id="dayw" name="dayw"
value="Day of Week" onfocus="this.value = '';" onblur="if (this.value == '')
{this.value = 'Day of Week';}" >
```

```
                        <input type="number" id="sdt" name="sdt"
    value="Scheduled Departure Time" onfocus="this.value = '';" onblur="if (this.value
    == '') {this.value = 'Actual Departure Time';}" >
                        <input type="number" id="adt" name="adt" value="Actual
    Departure Time" onfocus="this.value = '';" onblur="if (this.value == '') {this.value =
    'Actual Departure Time';}" >
                        <input type="number" id="sat" name="sat"
value="Scheduled Arrival Time" onfocus="this.value = '';" onblur="if (this.value == '')
{this.value = 'Scheduled Arrival Time';}" >
<div class="Remember-me">

                        <div class="submit">
                            <input type="submit" onclick="myFunction()"
    value="Predict my Flight" >
                        </div>
                            <div class="clear"> </div>
                        </div>

                    </form>
                </div>

            </div>
                <!--//End-login-form-->

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

RESULT.HTML

```
<!doctype html>
<html>
```

```
<head>
    <title>Flight Delay Prediction - Result</title>
    <link rel="stylesheet" href="../static/styles/result.css">
</head>
<body>
    <img src="../static/styles/images/flight.jpg" id="bgimg">
    {% if prediction == 0.0 %}
    <div class="pred_result" id="result_0">Your flight will likely be on time</div>
    {% endif %}
    {% if prediction == 1.0 %}
    <div class="pred_result" id="result_1">Your flight is likely to be delayed</div>
    {% endif %}
</body>
</html>
```

STYLE.CSS

———————-

```
html,body,div,span,applet,object,iframe,h1,h2,h3,h4,h5,h6,p,blockquote,pre,
a,abbr,acronym,address,big,cite,code,del,dfn,em,img,ins,kbd,q,s,samp,small,s
trike,strong,sub,sup,tt,var,b,u,i,dl,dt,dd,ol,nav ul,nav
li,fieldset,form,label,legend,table,caption,tbody,tfoot,thead,tr,th,td,article,asi
de,canvas,details,embed,figure,figcaption,footer,header,hgroup,menu,nav,out
put,ruby,section,summary,time,mark,audio,video{margin:0;padding:0;border
:0;font-size:100%;font:inherit;vertical-align:baseline;}
article, aside, details, figcaption, figure,footer, header, hgroup, menu, nav,
section {display: block;}
ol,ul{list-style:none;margin:0px;padding:0px;}
blockquote,q{quotes:none;}

blockquote:before,blockquote:after,q:before,q:after{content:'';content:none;}
table{border-collapse:collapse;border-spacing:0;}
/* start editing from here */
a{text-decoration:none;}
.txt-rt{text-align:right;}/* text align right */
```

```
.txt-lt{text-align:left;}/* text align left */
.txt-center{text-align:center;}/* text align center */
.float-rt{float:right;}/* float right */
.float-lt{float:left;}/* float left */
.clear{clear:both;}/* clear float */
.pos-relative{position:relative;}/* Position Relative */
.pos-absolute{position:absolute;}/* Position Absolute */
.vertical-base{ vertical-align:baseline;}/* vertical align baseline */
.vertical-top{  vertical-align:top;}/* vertical align top */
nav.vertical ul li{ display:block;}/* vertical menu */
nav.horizontal ul li{   display: inline-block;}/* horizontal menu */
img{max-width:100%;}
/*end reset*/
body{
    background:url(./images/flight.jpg)  no-repeatcenterfixed;
    -webkit-background-size: cover;
    -moz-background-size: cover;
    -o-background-size: cover;
    background-size: cover;
    font-family: 'Raleway', sans-serif;
}

.main {
    text-align: center;
    margin-top:2% ;
    margin-bottom:3%;
}
/*--start-wrap--*/
.content {
    width:80%;
    margin:0 auto;
}

.login-head h1{
```

```
        font-family: 'Pacifico', cursive;
        color: #222;
        font-size: 2.5em;
        font-weight: 600;
        margin-bottom:1em;
        font-style: italic;
        text-align: center;
        letter-spacing: 2px;
}

    .Regisration {
        width: 34%;
        text-align:center;
        margin: 0 0 0 800px;
        background:#20252D;
        border-radius:7px;
        -webkit-border-radius:7px;
        -moz-border-radius:7px;
        -o-border-radius:7px;
        padding-bottom: 3px;
}

    .Regisration-head {
         border-top-left-radius:7px;
        -webkit-border-top-left-radius:7px;
        -moz-border-top-left-radius:7px;
        -o-border-top-left-radius:7px;
        border-top-right-radius:7px;
        -webkit-border-top-right-radius:7px;
        -moz-border-top-right-radius:7px;
        -o-border-top-right-radius:7px;
        text-align: center;
        padding:1.6em 0;
        border: 1px solid rgba(0, 0, 0, 0.37);
```

```
    box-shadow: 0px 4px 10px 0px rgba(1, 3, 12, 0.33);
    -webkit-box-shadow: 0px 4px 10px 0px rgba(1, 3, 12, 0.33);
    -o- box-shadow: 0px 4px 10px 0px rgba(1, 3, 12, 0.33);
    -moz-box-shadow: 0px 4px 10px 0px rgba(1, 3, 12, 0.33);
    position: relative;
}

    .Regisration-head span{
    background: url(./images/user-icon.png) no-repeat -5px -6px;
    position: absolute;
    top: 25%;
    left: 13%;
    height: 40px;
    width: 80px;
}

    .Regisration-head h2{
    color: #94969d;
    font-size: 33px;
    font-weight: 700;
    margin-left:20px;
    font-family: 'Raleway', sans-serif;
    }
    .Regisration form {
    text-align: center;
    margin:5% 0%;
    position:relative;

}

    .Regisration form input[type="text"],.Regisration form input[type="number"],
    select {
    font-size: 15px;
    outline: none;
```

```
    font-weight: 600;
    color:#8D8E8F;
    padding: 12px 12px;
    width:76%;
    border-top:1px solid #090B0D;
    border-right:2px solid #424549;
    border-bottom:2px solid #424549;
    border-left:1px solid #090B0D;
    margin: 10px 1em;
    border-radius:7px;
    -webkit-border-radius:7px;
    -moz-border-radius:7px;
    -o-border-radius:7px;
    background: #13161B;
    box-shadow: inset 0px 3px 0px 0px rgba(5, 5, 5, 0.15);
    -webkit-box-shadow: inset 0px 3px 0px 0px rgba(5, 5, 5, 0.15);
    -o-box-shadow: inset 0px 3px 0px 0px rgba(5, 5, 5, 0.15);
    -moz-box-shadow: inset 0px 3px 0px 0px rgba(5, 5, 5, 0.15);
    font-family: 'Raleway', sans-serif;

}

    .Regisration form input[type="text"]:hover,.Regisration form
    input[type="number"]:hover{
    box-shadow: 0 0 1em #56AF00;
    -webkit-box-shadow: 0 0 1em #56AF00;
    -o-box-shadow: 0 0 1em #56AF00;
    -moz-box-shadow: 0 0 1em #56AF00;
    }
    form span{
    background: url(./images/tick.png) no-repeat -1px -2px;
    position: absolute;
    top: -4%;
    right: -12%;
```

```
        height: 50px;
        width: 50px;
    }
    /*--start-check-box--*/
    .p-container {
        padding: 10px 39px;
    }
    .p-container  .checkbox input {
        position: absolute;
        left: -9999px;
}

    .p-container.checkbox i {
        border-color: #fff;
        transition: border-color 0.3s;
        -o-transition: border-color 0.3s;
        -ms-transition: border-color 0.3s;
        -moz-transition: border-color 0.3s;
        -webkit-transition: border-color 0.3s;

    }
    .p-container.checkbox i:hover {
        border-color:red;

    }
    .p-container  i:before {
        background-color: #2da5da;
}

    .p-container  .rating label {
        color: #ccc;
        transition: color 0.3s;
        -o-transition: color 0.3s;
        -ms-transition: color 0.3s;
```

```
    -moz-transition: color 0.3s;
    -webkit-transition: color 0.3s;
}

.p-container  .checkbox input + i:after {
    position: absolute;
    opacity: 0;
    transition: opacity 0.1s;
    -o-transition: opacity 0.1s;
    -ms-transition: opacity 0.1s;
    -moz-transition: opacity 0.1s;
    -webkit-transition: opacity 0.1s;
}

.p-container .checkbox input + i:after {
    content: url(./images/ch-tick.png) no-repeat 7px 1px;
    top: -2px;
    left: -2px;
    width: 15px;
    height: 15px;
}
.p-container  .checkbox {
    float: left;
    margin-right: 30px;
}

.p-container .checkbox {
    margin-bottom: 4px;
    padding-left: 52px;
    font-size: 14px;
    line-height: 5px;
    color: #8D8E8F;
    cursor: pointer;
    font-family: 'Raleway', sans-serif;
```

```
        font-weight: 600;
    }
    .p-container .checkbox:hover {
        text-decoration: underline;
}

    p-container  .checkbox {
        position: relative;
        display: block;
        float: left;
    }
    .p-container  .checkbox i {
        position: absolute;
        top: -6px;
        left:22px;
        display: block;
        width: 16px;
        height: 16px;
        outline: none;
        border: 1px solid #0A0B0D;
        background:#13161B;
        border-radius:3px;
        -webkit-border-radius:3px;
        -moz-border-radius:3px;
        -o-border-radius:3px;

}

    .p-container  .checkbox input + i:after {
        position: absolute;
        opacity: 0;
        transition: opacity 0.1s;
        -o-transition: opacity 0.1s;
        -ms-transition: opacity 0.1s;
```

```
        -moz-transition: opacity 0.1s;
        -webkit-transition: opacity 0.1s;
    }
    .p-container .checkbox input + i:after {
        color: #2da5da;
    }
    .p-container .checkbox input:checked + i,
    .p-container . input:checked + i {
        border-color: #2da5da;
}

    .p-container .rating input:checked ~ label {
        color: #2da5da;
    }

    .p-container .checkbox input:checked + i:after {
        opacity: 1;
    }
    /*** radio buttons**/
    .checkbox-grid .radio{
        position:relative;
        display:block;
    }
    .checkbox-grid .radio{
        margin: 18px 0;
        padding-left:38%;
        cursor: pointer;
        font-size: 18px;
        color: #686565;
        font-weight:500;
        font-family: 'Raleway', sans-serif;
}

    .checkbox-grid .radio input {
```

```
        position: absolute;
        left: -9999px;
    }
    .checkbox-grid .radio i{
        position: absolute;
        top: -1px;
        left: 117px;
        display: block;
        width:18px;
        height:18px;
        outline: none;
        border-width: 2px;
        border-style: solid;
    }
    .checkbox-grid .radio i {
        border-radius: 1em;
        -webkit-border-radius: 1em;
        -moz-border-radius: 1em;
        -o-border-radius: 1em;
}

    .checkbox-grid .inline-group:after {
        content: '';
        display: table;
        clear: both;
    }
    .checkbox-grid .inline-group .radio,
    .checkbox-grid .inline-group .checkbox {
        float:left;
    }
    /*** normal state ***/
    .checkbox-grid .radio i,
    .checkbox-grid .icon-append,
```

```
.checkbox-grid .icon-prepend {
    border-color: #040b1a;
    transition: border-color 0.3s;
    -o-transition: border-color 0.3s;
    -ms-transition: border-color 0.3s;
    -moz-transition: border-color 0.3s;
    -webkit-transition: border-color 0.3s;
}

.checkbox-grid .radio .green i{
    background:#040b1a;
}
.checkbox-grid .radio i, .checkbox-grid .icon-append, .checkbox-grid .icon-prepend {
    border-color: #C4C4C4;
    transition: border-color 0.3s;
    -o-transition: border-color 0.3s;
    -ms-transition: border-color 0.3s;
    -moz-transition: border-color 0.3s;
    -webkit-transition: border-color 0.3s;
}

/*** hover state ***/
.checkbox-grid .orange .radio:hover i ,.checkbox-grid .radio .orange input:checked + i,.orange input:focus + i{
    border-color:#C4C4C4;
    background: #ff6633;
    background: -moz-linear-gradient(left, #ff6633 0%, #cc3300 0%, #ff6633 100%, #ff6633 100%, #cc4518 100%, #ff6633 100%);
    background: -webkit-gradient(linear, lefttop, righttop, color-stop(0%,#ff6633), color-stop(0%,#cc3300), color-stop(100%,#ff6633), color-stop(100%,#ff6633), color-stop(100%,#cc4518), color-stop(100%,#ff6633));
```

```
    background: -webkit-linear-gradient(left, #ff6633 0%,#cc3300 0%,#ff6633 100%,#ff6633 100%,#cc4518 100%,#ff6633 100%);
    background: -o-linear-gradient(left, #ff6633 0%,#cc3300 0%,#ff6633 100%,#ff6633 100%,#cc4518 100%,#ff6633 100%);
    background: -ms-linear-gradient(left, #ff6633 0%,#cc3300 0%,#ff6633 100%,#ff6633 100%,#cc4518 100%,#ff6633 100%);
    background: linear-gradient(to right, #ff6633 0%,#cc3300 0%,#ff6633 100%,#ff6633 100%,#cc4518 100%,#ff6633 100%);
    filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#ff6633', endColorstr='#ff6633',GradientType=1 );
}

.checkbox-grid .green .radio:hover i,.checkbox-grid .radio .green input:checked + i, .green input:focus + i {
    content: url(./images/dot.png) no-repeat 7px 1px;
    height:18px;
    width:18px;
}
/************************/
.submit {
    text-align: center;
    margin: 2px 0;
}
.submit input[type="submit"]{
    color: #203500;
    cursor: pointer;
    border: none;
    font-weight: 900;
    outline: none;
    font-family: 'Raleway', sans-serif;
    padding: 14px 0px;
    width: 35%;
    font-size: 18px;
```

```
    transition: border-color 0.3s;
    -o-transition: border-color 0.3s;
    -ms-transition: border-color 0.3s;
    -moz-transition: border-color 0.3s;
    -webkit-transition: border-color 0.3s;
    border-radius: 4px;
    -webkit-border-radius: 4px;
    -o-border-radius: 4px;
    -moz-border-radius: 4px;
    background: rgb(113,209,26); /* Old browsers */
    background: -moz-linear-gradient(top, rgba(113,209,26,1) 0%, rgba(96,193,8,1) 3%, rgba(101,199,7,1) 8%, rgba(87,177,0,1) 62%, rgba(75,136,0,1) 100%); /* FF3.6+ */
    background: -webkit-gradient(linear, lefttop, leftbottom, color-stop(0%,rgba(113,209,26,1)), color-stop(3%,rgba(96,193,8,1)), color-stop(8%,rgba(101,199,7,1)), color-stop(62%,rgba(87,177,0,1)), color-stop(100%,rgba(75,136,0,1))); /* Chrome,Safari4+ */
    background: -webkit-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* Chrome10+,Safari5.1+ */
  background: -o-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* Opera 11.10+ */
    background: -ms-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* IE10+ */
    background: linear-gradient(to bottom, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* W3C */
```

```
    filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#71d11a', endColorstr='#4b8800',GradientType=0 ); /* IE6-9 */
}
.submit-button input[type="submit"]{
    color: #203500;
    cursor: pointer;
    border: none;
    font-weight: 900;
    outline: none;
    font-family: 'Raleway', sans-serif;
    padding: 14px 0px;
    width: 35%;
    font-size: 18px;
    border-radius: 4px;
    -webkit-border-radius: 4px;
    -o-border-radius: 4px;
    -moz-border-radius: 4px;
    transition: border-color 0.3s;
    -o-transition: border-color 0.3s;
    -ms-transition: border-color 0.3s;
    -moz-transition: border-color 0.3s;
    -webkit-transition: border-color 0.3s;
    background: rgb(113,209,26); /* Old browsers */
    background: -moz-linear-gradient(top, rgba(113,209,26,1) 0%, rgba(96,193,8,1) 3%, rgba(101,199,7,1) 8%, rgba(87,177,0,1) 62%, rgba(75,136,0,1) 100%); /* FF3.6+ */
    background: -webkit-gradient(linear, lefttop, leftbottom, color-stop(0%,rgba(113,209,26,1)), color-stop(3%,rgba(96,193,8,1)), color-stop(8%,rgba(101,199,7,1)), color-stop(62%,rgba(87,177,0,1)), color-stop(100%,rgba(75,136,0,1))); /* Chrome,Safari4+ */
```

```
    background: -webkit-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* Chrome10+,Safari5.1+ */
    background: -o-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* Opera 11.10+ */
    background: -ms-linear-gradient(top, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* IE10+ */
    background: linear-gradient(to bottom, rgba(113,209,26,1) 0%,rgba(96,193,8,1) 3%,rgba(101,199,7,1) 8%,rgba(87,177,0,1) 62%,rgba(75,136,0,1) 100%); /* W3C */
  filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#71d11a', endColorstr='#4b8800',GradientType=0 ); /* IE6-9 */

  }
  .submit input[type="submit"]:hover,.submit-button input[type="submit"]:hover{
    background: rgb(75,136,0); /* Old browsers */
    background: -moz-linear-gradient(top, rgba(75,136,0,1) 0%, rgba(87,177,0,1) 38%, rgba(101,199,7,1) 92%, rgba(96,193,8,1) 97%, rgba(113,209,26,1) 100%); /* FF3.6+ */
    background: -webkit-gradient(linear, lefttop, leftbottom, color-stop(0%,rgba(75,136,0,1)), color-stop(38%,rgba(87,177,0,1)), color-stop(92%,rgba(101,199,7,1)), color-stop(97%,rgba(96,193,8,1)), color-stop(100%,rgba(113,209,26,1))); /* Chrome,Safari4+ */
    background: -webkit-linear-gradient(top, rgba(75,136,0,1) 0%,rgba(87,177,0,1) 38%,rgba(101,199,7,1) 92%,rgba(96,193,8,1) 97%,rgba(113,209,26,1) 100%); /* Chrome10+,Safari5.1+ */
    background: -o-linear-gradient(top, rgba(75,136,0,1) 0%,rgba(87,177,0,1) 38%,rgba(101,199,7,1) 92%,rgba(96,193,8,1) 97%,rgba(113,209,26,1) 100%); /* Opera 11.10+ */
```

```
    background: -ms-linear-gradient(top, rgba(75,136,0,1) 0%,rgba(87,177,0,1) 38%,rgba(101,199,7,1) 92%,rgba(96,193,8,1) 97%,rgba(113,209,26,1) 100%); /* IE10+ */
    background: linear-gradient(to bottom, rgba(75,136,0,1) 0%,rgba(87,177,0,1) 38%,rgba(101,199,7,1) 92%,rgba(96,193,8,1) 97%,rgba(113,209,26,1) 100%); /* W3C */
    filter: progid:DXImageTransform.Microsoft.gradient( startColorstr='#4b8800', endColorstr='#71d11a',GradientType=0 ); /* IE6-9 */

}

    /*--//End-login-form--*/
    /*-----start-responsive-design------*/
    @media (max-width:1440px){
    form span {
    top: -4%;
    right: -12%;
    }
    }
    @media (max-width:1280px){
    .Regisration {
    width: 38%;
    }
    .checkbox-grid .radio i{
    left: 108px;
    }
    .checkbox-grid .radio {
    padding-left: 43%;
    }
    form span {
    top: -4%;
    right: -12%;
    }
```

```
}
        @media (max-width:1024px){
            .Regisration {
                width:50%;
            }

            form span {
            top: -4%;
            right: -12%;
            }
            .checkbox-grid .radio i {
                top: 0px;
                left: 139px;
            }
        }
        @media (max-width:768px){
            .Regisration {
                width: 59%;
            }

            form span {
            top: -4%;
        right: -12%;
            }
            .checkbox-grid .radio i {
                top: 0px;
                left: 127px;
            }
}

        @media (max-width:640px){
            .Regisration {
```

```
        width:70%;
        }
        form span {
        top: -4%;
    right: -12%;
        }
        .checkbox-grid .radio i {
            top: 0px;
            left: 112px;
        }
}

    @media (max-width:480px){
        .Regisration {
        width:89%;
        }
        .Login {
        width:83%;
   }

    form span {
        top: 35%;
        right: -19%;
        }
        .checkbox-grid .radio i {
            top: 0px;
            left: 33px;
        }
        .submit input[type="submit"] {
            width: 47%;
        }
        .submit-button input[type="submit"] {
        width:48%;
        }
```

```
        .submit-button input[type="submit"] {
        width:70%;
        }
        .checkbox-grid .radio {
            padding-left: 28%;
        }
}

    @media (max-width:320px){
        .Regisration {
        width: 93%;
        }
        .Login {
        width: 93%;
        }
        .login-head h1 {
        font-size: 2em;
        }
        .Regisration-head span {
            left: 16%;
    }

        .Regisration form input[type="text"], .Regisration form
        input[type="password"] {
            font-size: 13px;
            width: 72%;
        }
        .Regisration-head h2 {
            font-size: 32px;
            margin-left: 36px;
        }
        .p-container {
        padding: 10px 5px;
    }
```

```
.Login form input[type="text"], .Login form input[type="password"] {
    width: 81%;
    }
    .p-container .checkbox {
    padding-left: 37px;
    font-size: 13px;
    line-height: 22px;
    }
    .p-container .checkbox i {
        top: 2px;
        left: 33px;
}

    .Login-head h3 {
        font-size: 1.8em;
    }
    form span {
    top: 37%;
    right: -24%;
    }
    .checkbox-grid .radio {
        padding-left: 14%;
    }
    .checkbox-grid .radio i {
    top: -1px;
    left:-4%;
    }
}
```

RESULT.CSS

———————-

```
#bgimg {
    position: fixed;
    z-index: -1;
```

```
        opacity: 0.5;
        width: 100%;
        height: 100%;
        padding: 0;
        margin: 0;
        top: 0;
    }

    body {
        font-family: Arial, Helvetica, sans-serif;
        margin: 0;
        display: flex;
        justify-content: center;
        align-items: center;
        height: 100vh;
    }
    div {
        display: flex;
        align-items: center;
  justify-content: center;

    font-size: 82px;
        font-weight: 700;
        margin: 0;
        height: 100vh;
}
```

SCORING END POINT

```
    import requests

    # NOTE: you must manually set API_KEY below using information retrieved
    from your IBM Cloud account.
    API_KEY = "bpzhtz7ZDMEHKaBuTVMbw77JrwrV8GFQiva92li5yShz"
```

```
token_response = requests.post('https://iam.cloud.ibm.com/identity/token', data={"apikey":
API_KEY, "grant_type": 'urn:ibm:params:oauth:grant-type:apikey'})
mltoken = token_response.json()["access_token"]

header = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + mltoken}

# NOTE: manually define and pass the array(s) of values to be scored in the next line
payload_scoring = {"input_data": [{"fields": [array_of_input_fields], "values": [array_of_values_to_be_scored, another_array_of_values_to_be_scored]}]}

response_scoring = requests.post('https://us-south.ml.cloud.ibm.com/ml/v4/deployments/889d2636-1652-45d2-acf2-bf5dfdee8ef7/predictions?version=2022-11-19', json=payload_scoring,
headers={'Authorization': 'Bearer ' + mltoken})
print("Scoring response")
print(response_scoring.json())
```

GitHub & Project Demo Link

GitHut

https://github.com/IBM-EPBL/IBM-Project-33873-1660228306.git

Demo

https://drive.google.com/file/d/1OVeftrYz4s2bYLkSXm3wXWc2sul22S9j/view?usp=share_link