PROJECT REPORT
UNIVERSITY ADMIT ELIGIBILITY PREDICTOR
TEAM ID:PNT2022TMID37049

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1.Introduction

1.1 Project Overview

Students are often worried about their chances of admission to University. The aim of this project is to help students in shortlisting universities with their profiles. The predicted output gives them a fair idea about their admission chances in a particular university. This analysis should also help students who are currently preparing or will be preparing to get a better idea.

1.2 Purpose

there are many number of students who want to pursue higher education after engineering or any graduate degree many students want to do master's in abroad Universities. we are focusing on only the students who want to pursue their higher education in abroad universities.Students who want to do masters in Abroad have to write GRE (Graduate Records Examination) and TOEFL (Test of English as a Foreign Language/International English Language) Once they have attended the exams they have to prepare their SOP(statement of purpose) and LOR(letter of reccomendation) which are one of the crucial factors they have to consider.students want to know eligibility chances based on their marks our website will definitely help students to know and Predict the chance Students required to fill the details like GRE, TOEFL, SOP,LOR According to the students marks detail.students may get know to which type of University rating they have chance to get admit.

2.LITERATURE SURVEY

2.1 EXISTING PROBLEM

Students want to know about their chances of getting admission in Universities based on their score on General Record Examination (GRE), command over the English language is judged based on their score in English competency test like Test Of English as a Foreign Language (TOEFL) OR International English Language Testing System (IELTS), their work experience in same or other fields, the quality of the Letters Of Recommendation (LOR) and the Statement Of Purpose documents provided by the student etc. for the prediction process sometimes it seems the data might be invalid if the data entered incorrectly then the prediction process get error then the user's can't able to understand this problem may occurs is the system model is not properly designed and trained well so the user's faces the problem of prediction

2.2 REFERENCES

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4. E. Gottlieb, "Using integer programming to guide college admissions decisions: a preliminary report", Journal of Computing Sciences in Colleges, Volume 17. Issue 2, Pages: 271-279, 2001.

5. J.S. Moore, "An expert system approach to graduate school admission decisions and academic performance prediction". ScienceDirect Volume 26, Issue 5, October 1998, Pages 659-670.

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7. S. Nadi, M.H. Sarace, and A. Bagheri," Hybrid Recommender System for Dynamic Web Users", International Journal Multimedia and Image Processing (UMIP), Vol. 1, Issue 1, March 2011.

8. J. A. Freeman, and D. M. Skapura, "Neural Networks: Algorithms. Applications. And Programming". Addison Wesley Pub (Sd), June 1991.

9. S. Vinnik, and H. Marc, "Decision Support System for Managing Educational Capacity Utilization in Universities", Int. Conf. on Engineering and Computer Education, ICECE05.

10. W. C. Lou, "A Hybrid Model of Tree Classifier and Neural Network for University Admission Recommender System,&quot; Master of Science Thesis, University of Macau, Faculty of Science and Technology, 2008.

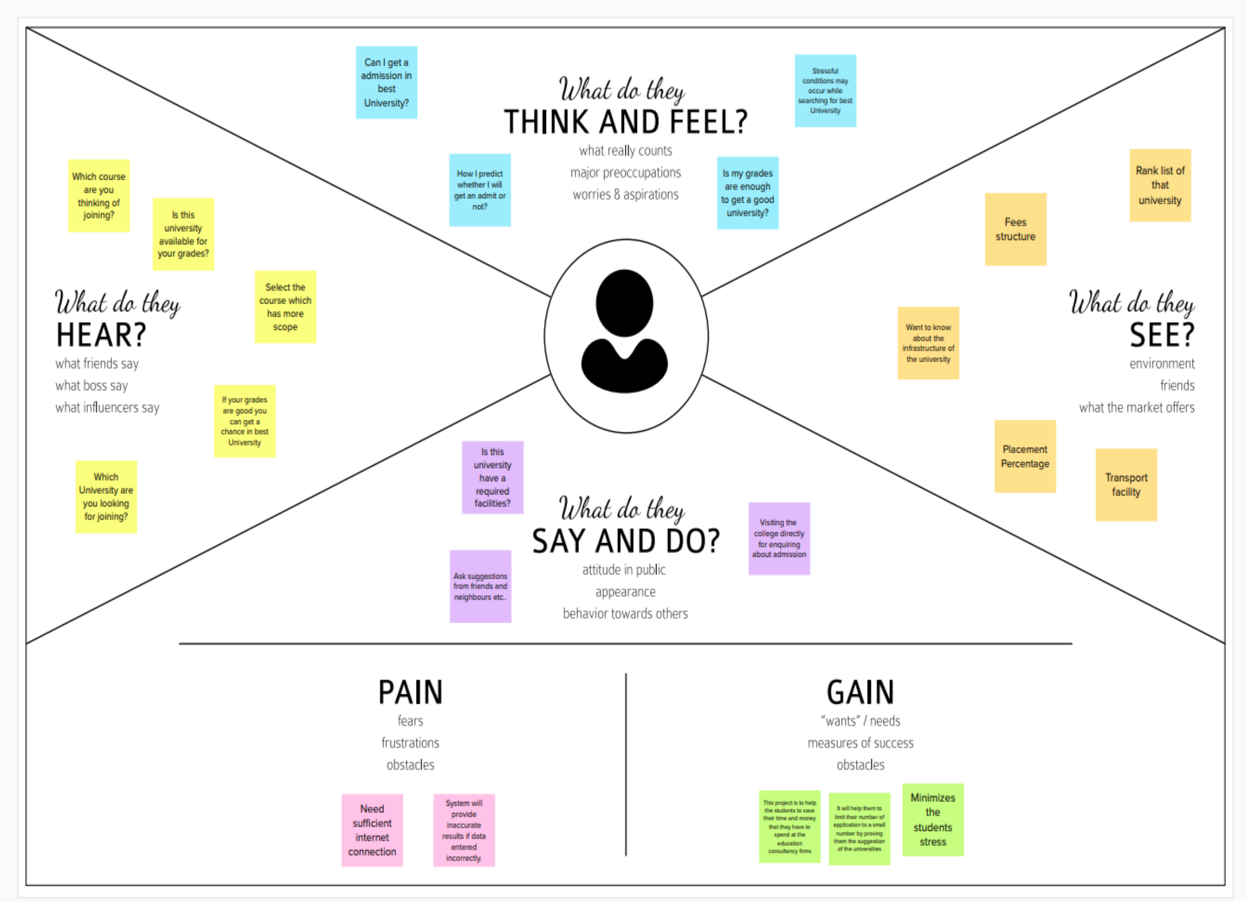
2.3 PROBLEM STATEMENT DEFINITION

I am a Student. I have to get a Admission in University but I don't know is this my marks are capable for get a what rating type of University.For get a admission in university I came to know whether my marks are eligible to get a what type of rating University. Confusion state occurs while knowing about my prediction chances.This system makes me to help and Predict the chance or no chance based on my marks.

3.IDEATION &PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours.It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.



What do they THINK AND FEEL?
what really counts
major preoccupations
worries & aspirations

Can I get a admission in best University?

How I predict whether I will get an admit or not?

Is my grades are enough to get a good university?

Stressful conditions may occur while searching for best University

What do they HEAR?
what friends say
what boss say
what influencers say

Which course are you thinking of joining?

Is this university available for your grades?

Select the course which has more scope

If your grades are good you can get a chance in best University

Which University are you looking for joining?

What do they SEE?
environment
friends
what the market offers

Rank list of that university

Fees structure

Want to know about the infrastructure of the university

Placement Percentage

Transport facility

What do they SAY AND DO?
attitude in public
appearance
behavior towards others

Is this university have a required facilities?

Ask suggestions from friends and neighbours etc..

Visiting the college directly for enquiring about admission

PAIN
fears
frustrations
obstacles

Need sufficient internet connection

System will provide inaccurate results if data entered incorrectly.

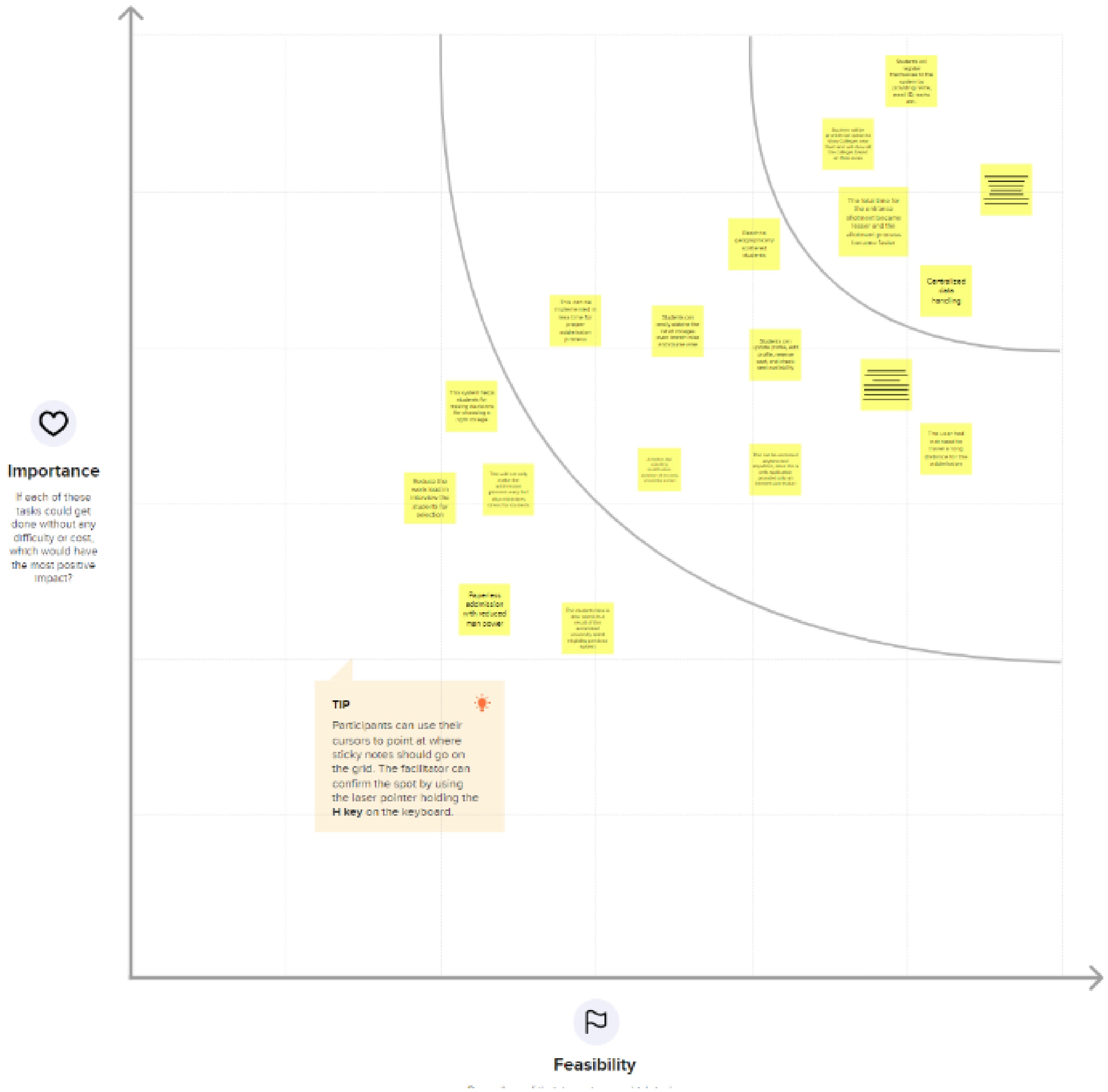
GAIN
"wants" / needs
measures of success
obstacles

This project is to help the students to save their time and money that they have to spend at the education consultancy firms

It will help them to limit their number of application to a small number by proving them the suggestion of the universities

Minimizes the students stress

3.2 IDEATION AND BRAINSTORMING



Importance
Feasibility
Centralized data handling
Paperless admission with reduced man power
Reduce the work load in interview the students for selection
The total time for the entrance allotment became lesser and the allotment process became faster
Students can update profile, edit profile, reserve seat, and check seat availability
This system helps students for making decisions for choosing a right college
The user had not need to travel a long distance for the admission

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

3.3 PROPOSED SOLUTION

For the proposed system, the machine learning algorithm gradient boosting was used to classify the dataset for the application model. The prediction functionality is implemented in the back-end process using the Flask framework and machine learning algorithms are integrated in the front-end and back-end Flask framework.This well structured application helps to predict correct and accurate data, this model avoids error, imprecise data, missing values, this application is user friendly and easy to use

3.4 PROBLEM SOLUTION FIT

1.CUSTOMER SEGMENTS

The customer of this project will be students who have completed their graduate of any degree and aspire to get admitted into the abroad universities

2.JOBS-TO-BE-DONE/PROBLEMS

Students can register their marks details for predicting the admission in university Data collection is probably the most important step in designing the predictor hence it must be ensured that it is done properly Need sufficient internet connection System will provide inaccurate results if data entered incorrectly.

3.TRIGGERS

- The customer can be accessed anytime and anywhere by using this web application
- The prediction process is fair and easy to understandable

4.EMOTIONS BEFORE/AFTER

- This application predicts the best choices for the user, it makes the user confident.
- Trust and worthy application to use

5.AVAILABLE SOLUTIONS

Centralized data handling. It can handle the details ofstudents such as mark details, This students database has been designed taking into account the practical needs to manage a student data.

6. CUSTOMER CONSTRAINTS

The constraints which the customer would face may be the fear of data misuse Lack of network connection and guidance

7. BEHAVIOUR

- Students will fill details themselves to the system by using their scores.
- Activities like updating,modification, deletion of records should be easier.

8.CHANNELS OF BEHAVIOUR

- The customer can Predict theri marks by using the web application.
- it can be accessed by anytime and anywhere.

9.PROBLEM ROOT CAUSE

The reliability of the predictor might be affected if the collected data is found to be inaccurate are considered to judge the Predicting Secondly, customers might stop from using our website they find it to be prone to cyber attacks.

10.YOUR SOLUTION

Design a predictor with the help of the data collected, and ensure that it is accurate. Also make sure that the data collected from the users is safe and secure.

4. REQUIREMENT ANALYSIS

4.1 Functional Requirements

FR NO.	Functional Requirements(Epic)	Sub Requirement (Story/Sub-Task)
FR-1	Users Data Collection	Collecting the TOEFL, GRE scores from the user.
FR-2	User Registration	Registration through Form Registration through Gmail
FR-3	Predicting the Data	Analysing the given data with the previous year cut-off of the universities and then system provides the list ofuniversities based on the student cut-off.
FR-4	Users Preference	Users can select the universities based on their convenient and preference from the predicted list.
FR-5	Output	The Universities are listed based on the Student marks where the universities will be listed in the rankwise, So the predicted output gives them a fair idea about their admission chances in a particular university.

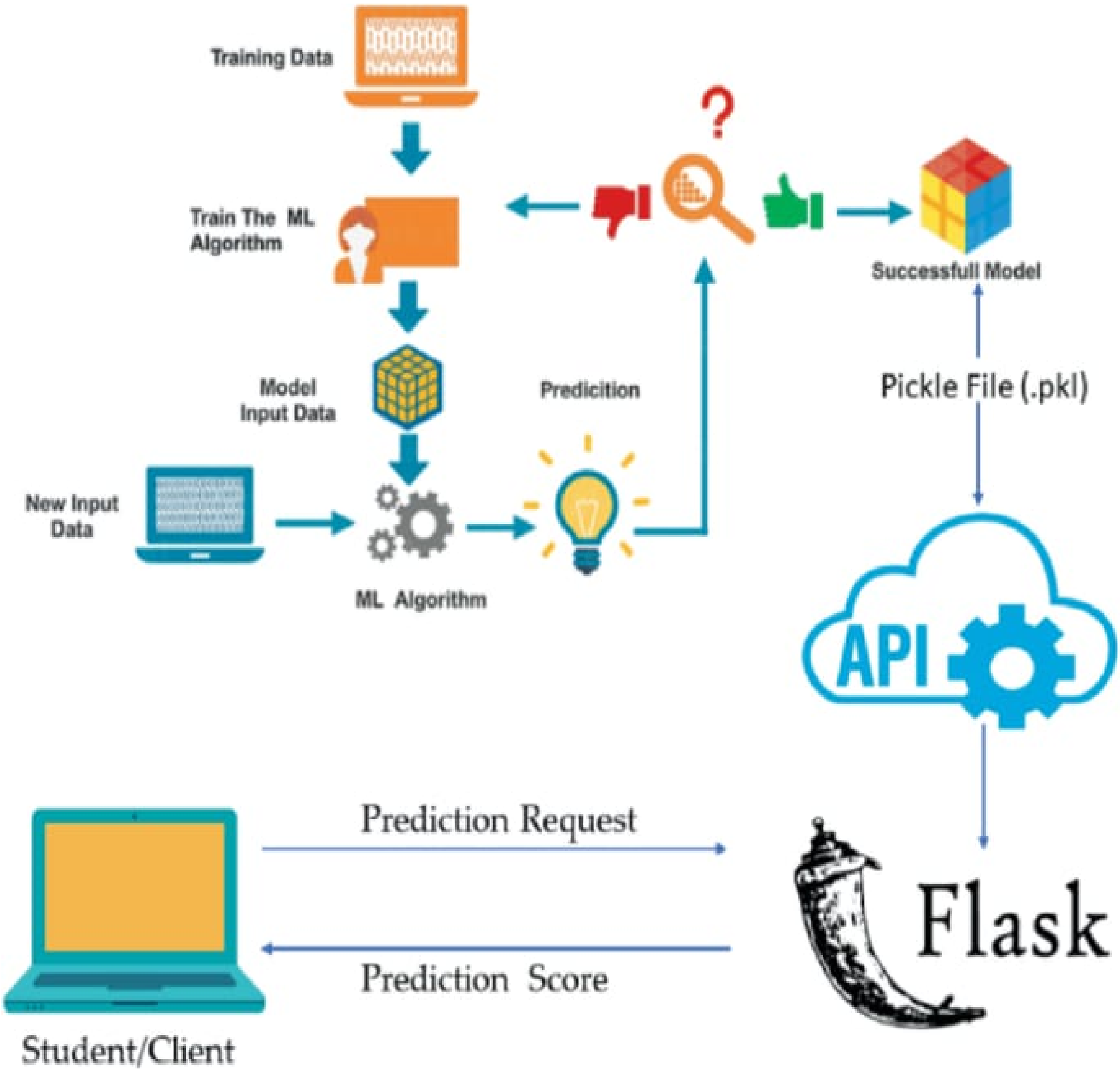
4.2 NON FUNCTIONAL REQUIREMENTS

FR No.	**Non-Functional Requirement**	**Description**
NFR-1	Usability	The predictor platform should provide the capacity to perform the right options for the users based on their profiles.
NFR-2	Security	The student profile and data should be maintained in a secured manner.
NFR-3	Reliability	● The user can find universities based on their preferred locations and results. ● The predictor system should be consistent and the system will give accurate and reliable resource.
NFR-4	Performance	The system can supply any number of users at a time and provides the list of universities, the predictor platform gives the good performance criteria.
NFR-5	Availability	The system predictor will available to users to accessed anytime and anywhere whenever they required.
NFR-6	Scalability	The system must be scalable to support many users at a time.

5.PROJECT DESIGN

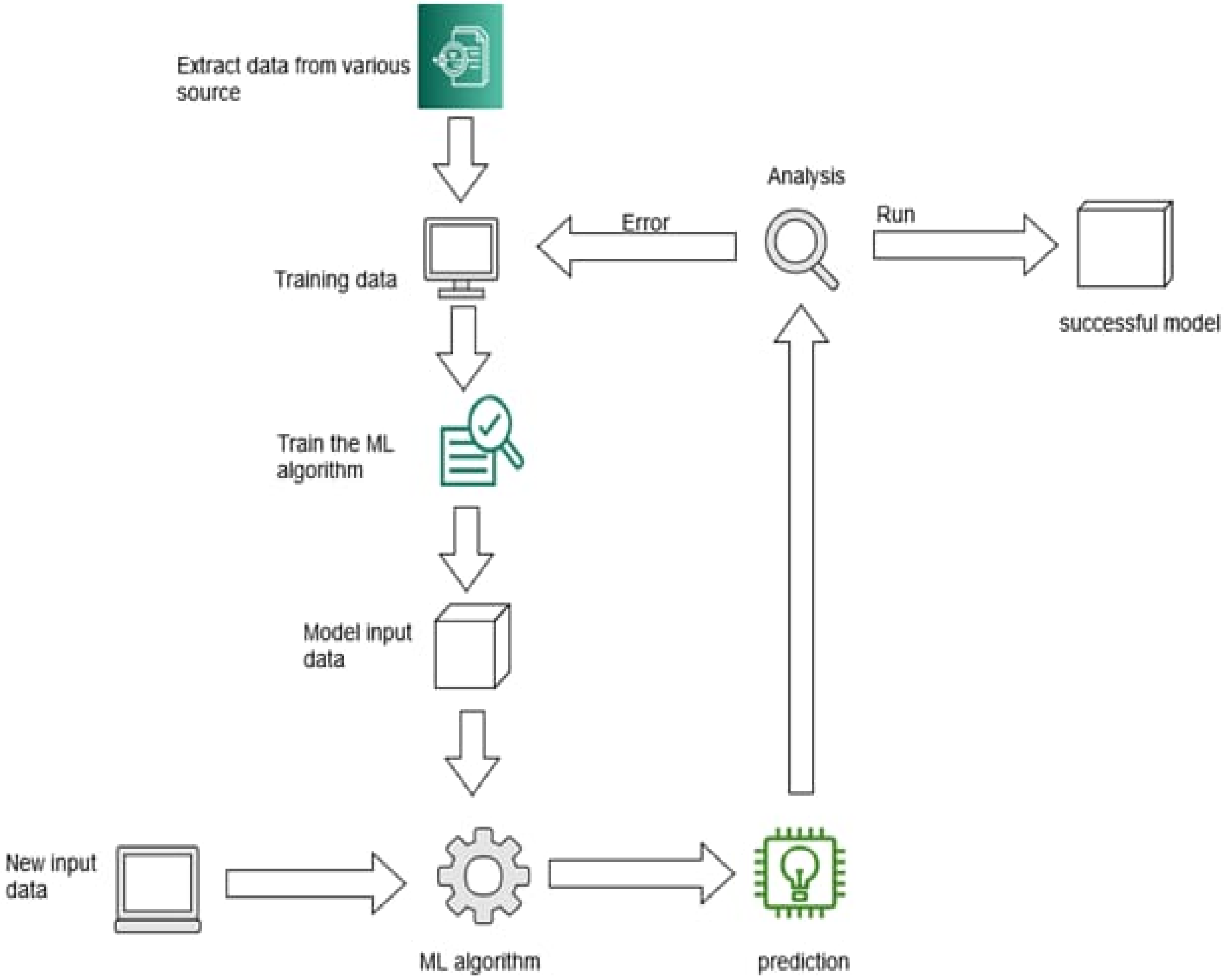
5.1 DATA FLOW DIAGRAM

A data-flow diagram is a way of representing a flow of data through a process or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A data-flow diagram has no control flow-there are no decision rules and no loops.



5.2 SOLUTION AND TECHNICAL ARCHITECTURE

Based on the complexity of the deployment, a solution architecture diagram may actually be a set of diagrams documenting various levels of the architecture. The diagram relates the information that you gather on the environment to both physical and logical choices for your architecture in an easily understood manner.



5.3 USER STORIES

- **Customer**

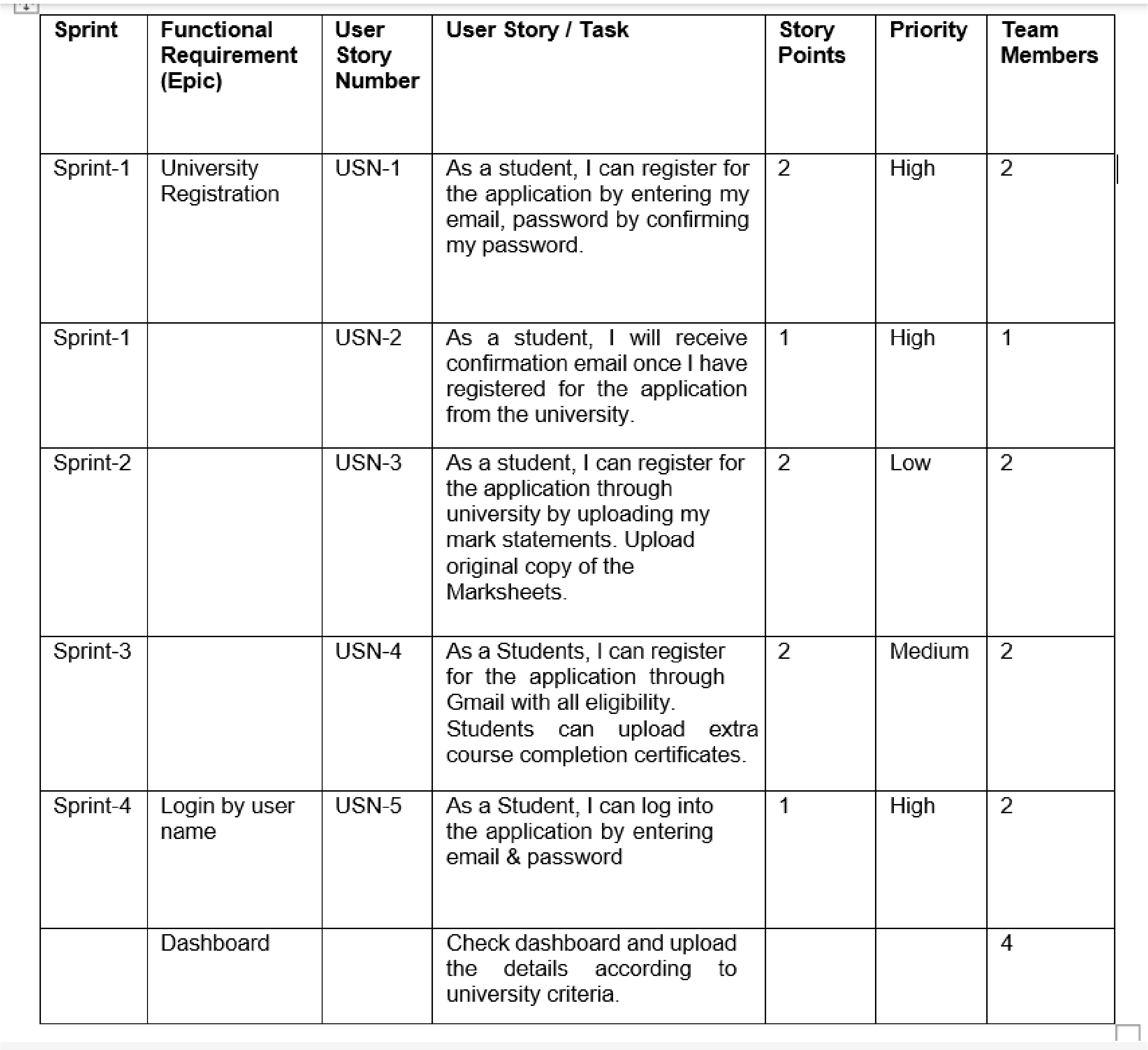
As a user, I can register into the application by setting password and I login through the application by using email id and password after login into the application I entered my mark details finally I click into Predict I came to know whether this scores are eligibility to the what rating type of University.

- **Server**

Performing Data Analysis, Choosing the perfect Algorithm/ model(ML),Checking Error Matrix.The backend process is implemented by the flask framework and machine learning algorithms Integrated frontend and backend by using flask framework.

6.PROJECT PLANNING AND SCHEDULING

6.1 SPRINT PLANNING AND SCHEDULING



Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	University Registration	USN-1	As a student, I can register for the application by entering my email, password by confirming my password.	2	High	2
Sprint-1		USN-2	As a student, I will receive confirmation email once I have registered for the application from the university.	1	High	1
Sprint-2		USN-3	As a student, I can register for the application through university by uploading my mark statements. Upload original copy of the Marksheets.	2	Low	2
Sprint-3		USN-4	As a Students, I can register for the application through Gmail with all eligibility. Students can upload extra course completion certificates.	2	Medium	2
Sprint-4	Login by user name	USN-5	As a Student, I can log into the application by entering email & password	1	High	2
	Dashboard		Check dashboard and upload the details according to university criteria.			4

6.2 Sprint Delivery Schedule

Project Tracker,Velocty & Burndown Chart

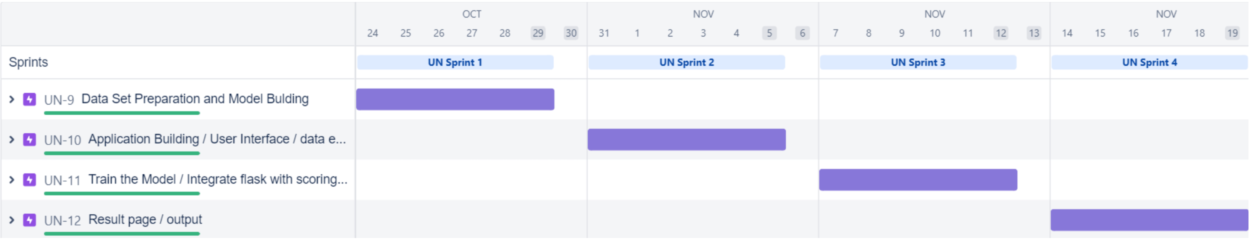
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022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

Velocity:

Imagine we have a 6-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= SPRINT DURATION / VELOCITY = 20/6 =3.33

6.3 REPORTS FROM JIRA

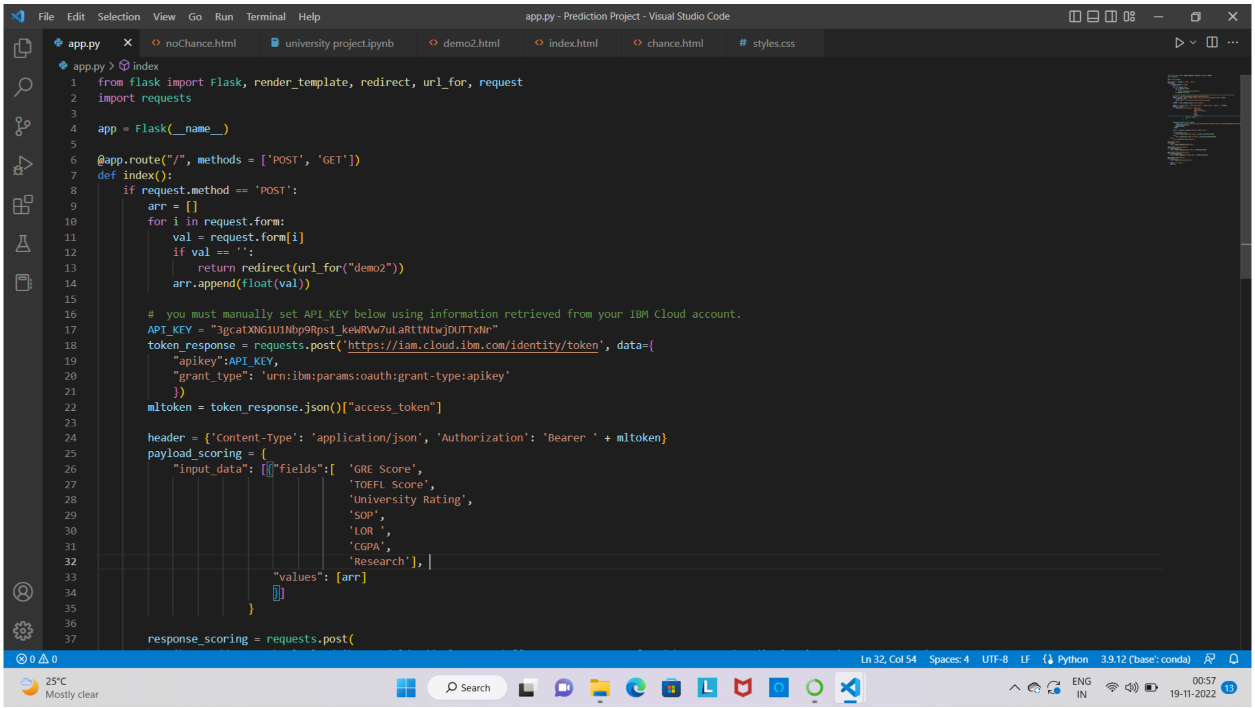

OCT
24 25 26 27 28 29 30
NOV
31 1 2 3 4 5 6
NOV
7 8 9 10 11 12 13
NOV
14 15 16 17 18 19
Sprints
UN Sprint 1
UN Sprint 2
UN Sprint 3
UN Sprint 4
UN-9 Data Set Preparation and Model Bulding
UN-10 Application Building / User Interface / data e...
UN-11 Train the Model / Integrate flask with scoring...
UN-12 Result page / output

BURNDOWN CHART

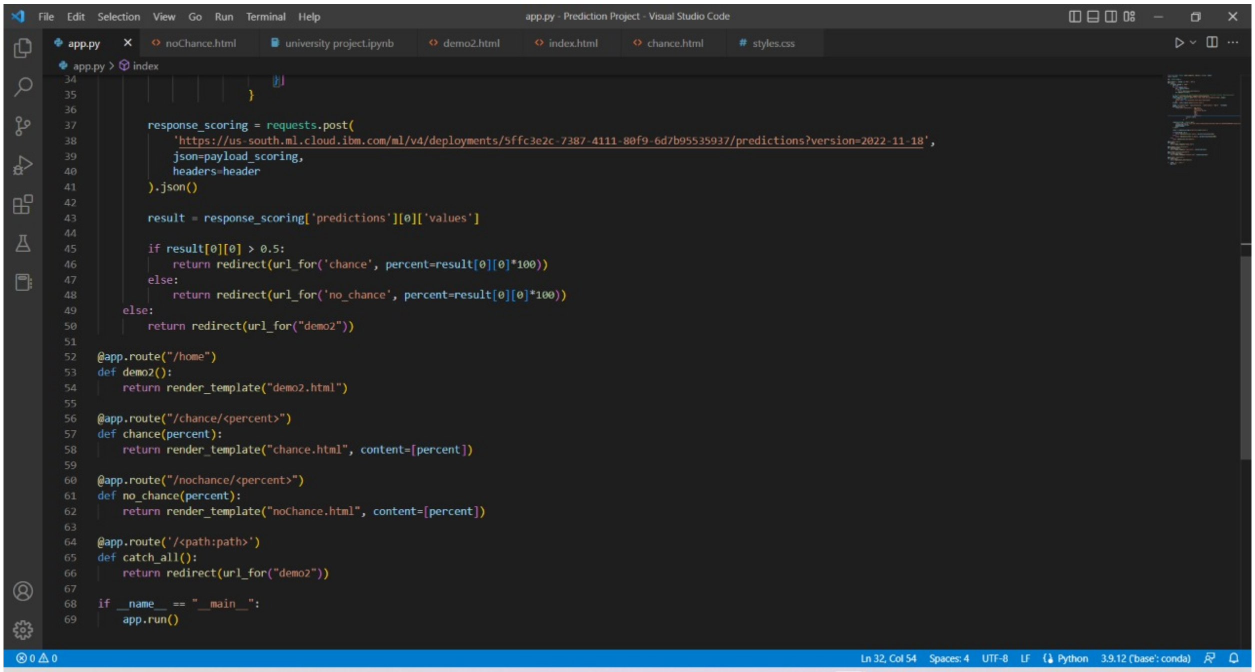
7.CODING AND SOLUTIONING

7.1 FEATURE 1

The following is the flask app coding



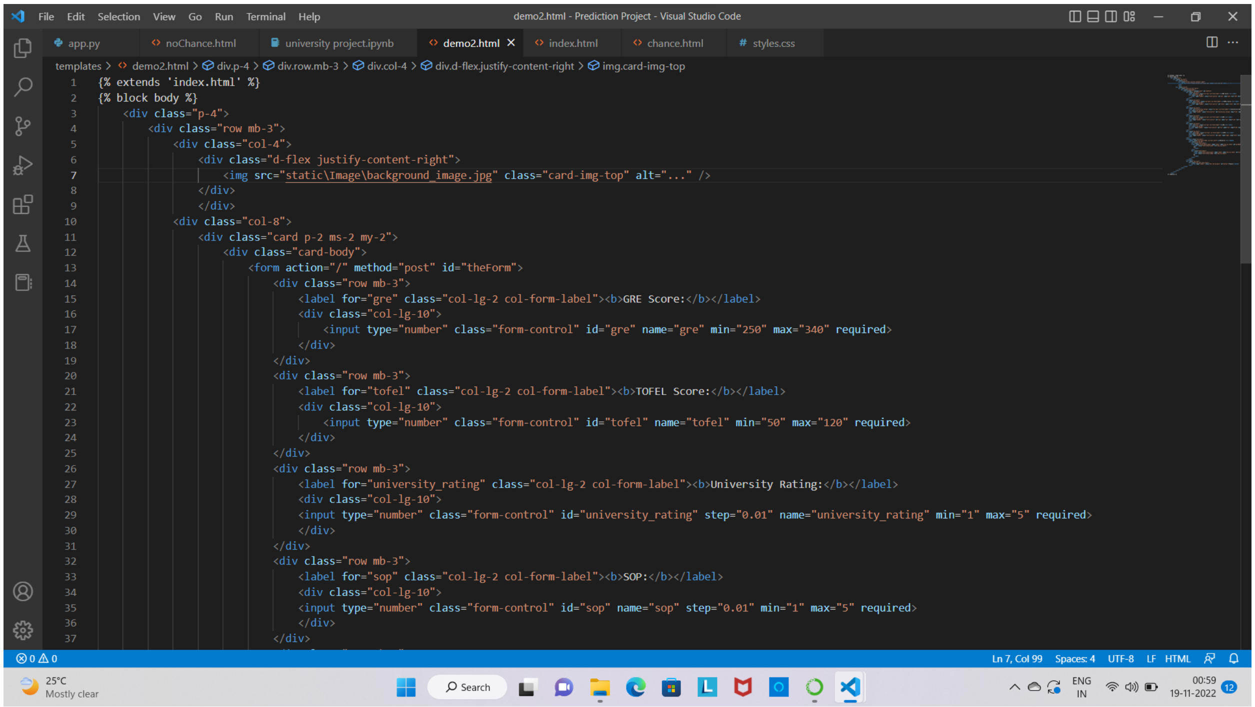
```python
from flask import Flask, render_template, redirect, url_for, request
import requests

app = Flask(__name__)

@app.route("/", methods = ['POST', 'GET'])
def index():
    if request.method == 'POST':
        arr = []
        for i in request.form:
            val = request.form[i]
            if val == '':
                return redirect(url_for("demo2"))
            arr.append(float(val))

        #  you must manually set API_KEY below using information retrieved from your IBM Cloud account.
        API_KEY = "3gcatXNG1U1Nbp9Rps1_keWRVw7uLaRttNtwjDUTTxNr"
        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}
        payload_scoring = {
            "input_data": [{"fields":[  'GRE Score',
                                        'TOEFL Score',
                                        'University Rating',
                                        'SOP',
                                        'LOR ',
                                        'CGPA',
                                        'Research'], 
                            "values": [arr]
                            }]
                        }

        response_scoring = requests.post(
```



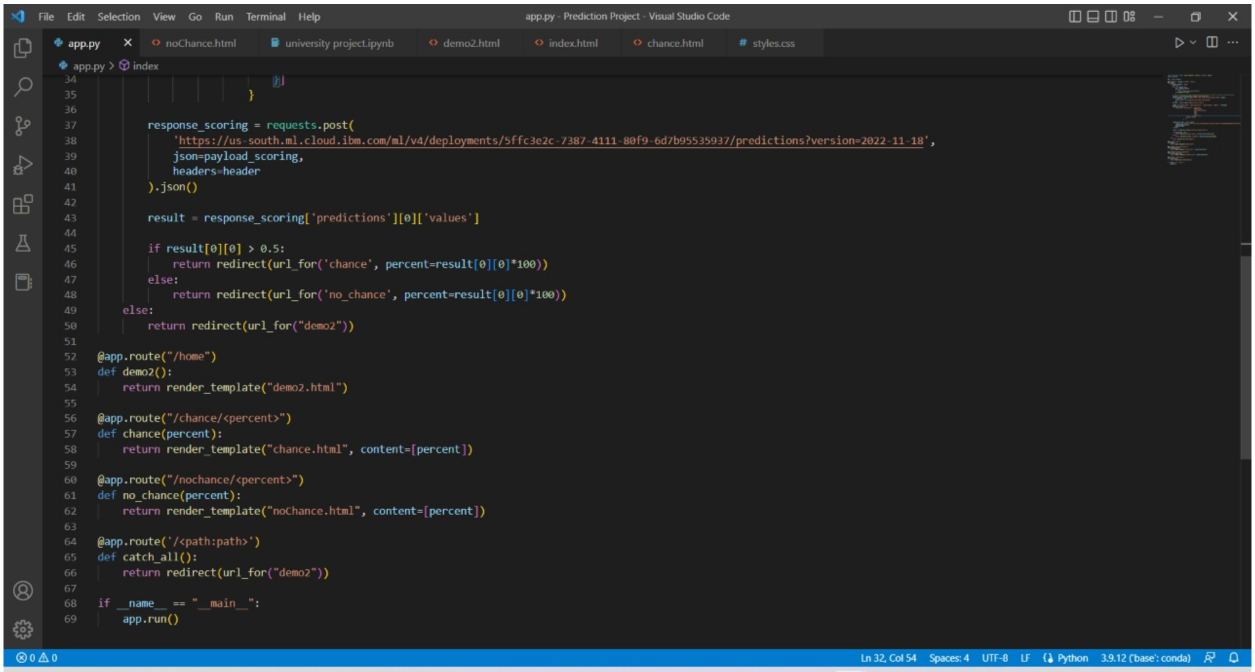
```python
                            }]
                        }

        response_scoring = requests.post(
            'https://us-south.ml.cloud.ibm.com/ml/v4/deployments/5ffc3e2c-7387-4111-80f9-6d7b95535937/predictions?version=2022-11-18',
            json=payload_scoring,
            headers=header
        ).json()

        result = response_scoring['predictions'][0]['values']

        if result[0][0] > 0.5:
            return redirect(url_for('chance', percent=result[0][0]*100))
        else:
            return redirect(url_for('no_chance', percent=result[0][0]*100))
    else:
        return redirect(url_for("demo2"))

@app.route("/home")
def demo2():
    return render_template("demo2.html")

@app.route("/chance/<percent>")
def chance(percent):
    return render_template("chance.html", content=[percent])

@app.route("/nochance/<percent>")
def no_chance(percent):
    return render_template("noChance.html", content=[percent])

@app.route('/<path:path>')
def catch_all():
    return redirect(url_for("demo2"))

if __name__ == "__main__":
    app.run()
```

7.2 FEATURE 2

The Following Code is the Demo2.Html

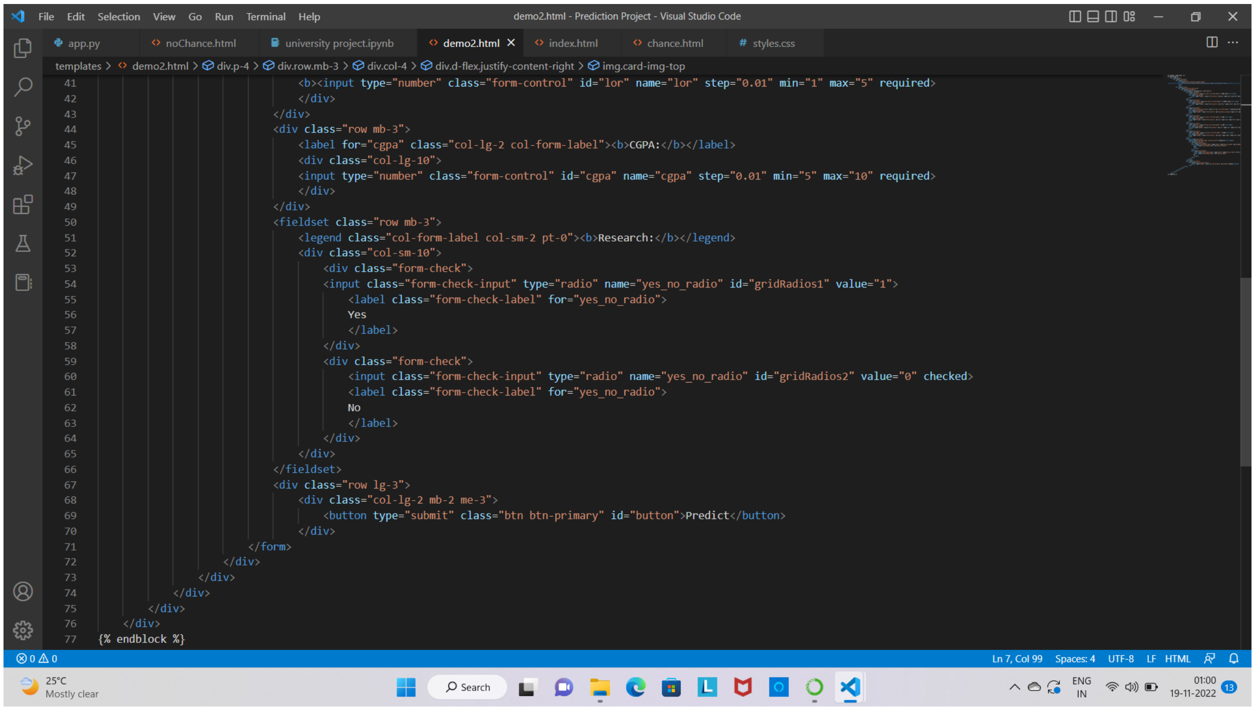

File Edit Selection View Go Run Terminal Help
demo2.html - Prediction Project - Visual Studio Code
app.py
noChance.html
university project.ipynb
demo2.html
index.html
chance.html
styles.css
templates > demo2.html > div.p-4 > div.row.mb-3 > div.col-4 > div.d-flex.justify-content-right > img.card-img-top
0 0
Ln 7, Col 99 Spaces: 4 UTF-8 LF HTML
25°C
Mostly clear
Search
ENG
IN
00:59
19-11-2022

```html
{% extends 'index.html' %}
{% block body %}
    <div class="p-4">
        <div class="row mb-3">
            <div class="col-4">
                <div class="d-flex justify-content-right">
                    <img src="static\Image\background_image.jpg" class="card-img-top" alt="..." />
                </div>
                </div>
            <div class="col-8">
                <div class="card p-2 ms-2 my-2">
                    <div class="card-body">
                        <form action="/" method="post" id="theForm">
                            <div class="row mb-3">
                                <label for="gre" class="col-lg-2 col-form-label"><b>GRE Score:</b></label>
                                <div class="col-lg-10">
                                    <input type="number" class="form-control" id="gre" name="gre" min="250" max="340" required>
                                </div>
                            </div>
                            <div class="row mb-3">
                                <label for="tofel" class="col-lg-2 col-form-label"><b>TOFEL Score:</b></label>
                                <div class="col-lg-10">
                                    <input type="number" class="form-control" id="tofel" name="tofel" min="50" max="120" required>
                                </div>
                            </div>
                            <div class="row mb-3">
                                <label for="university_rating" class="col-lg-2 col-form-label"><b>University Rating:</b></label>
                                <div class="col-lg-10">
                                <input type="number" class="form-control" id="university_rating" step="0.01" name="university_rating" min="1" max="5" required>
                                </div>
                            </div>
                            <div class="row mb-3">
                                <label for="sop" class="col-lg-2 col-form-label"><b>SOP:</b></label>
                                <div class="col-lg-10">
                                <input type="number" class="form-control" id="sop" name="sop" step="0.01" min="1" max="5" required>
                                </div>
                            </div>
```


File Edit Selection View Go Run Terminal Help
app.py - Prediction Project - Visual Studio Code
app.py
noChance.html
university project.ipynb
demo2.html
index.html
chance.html
styles.css
app.py > index
0 0
Ln 32, Col 54 Spaces: 4 UTF-8 LF Python 3.9.12 ('base': conda)

```python
                            }]
                        }

        response_scoring = requests.post(
            'https://us-south.ml.cloud.ibm.com/ml/v4/deployments/5ffc3e2c-7387-4111-80f9-6d7b95535937/predictions?version=2022-11-18',
            json=payload_scoring,
            headers=header
        ).json()

        result = response_scoring['predictions'][0]['values']

        if result[0][0] > 0.5:
            return redirect(url_for('chance', percent=result[0][0]*100))
        else:
            return redirect(url_for('no_chance', percent=result[0][0]*100))
    else:
        return redirect(url_for("demo2"))

@app.route("/home")
def demo2():
    return render_template("demo2.html")

@app.route("/chance/<percent>")
def chance(percent):
    return render_template("chance.html", content=[percent])

@app.route("/nochance/<percent>")
def no_chance(percent):
    return render_template("noChance.html", content=[percent])

@app.route('/<path:path>')
def catch_all():
    return redirect(url_for("demo2"))

if __name__ == "__main__":
    app.run()
```

This Following Code is the Index.html



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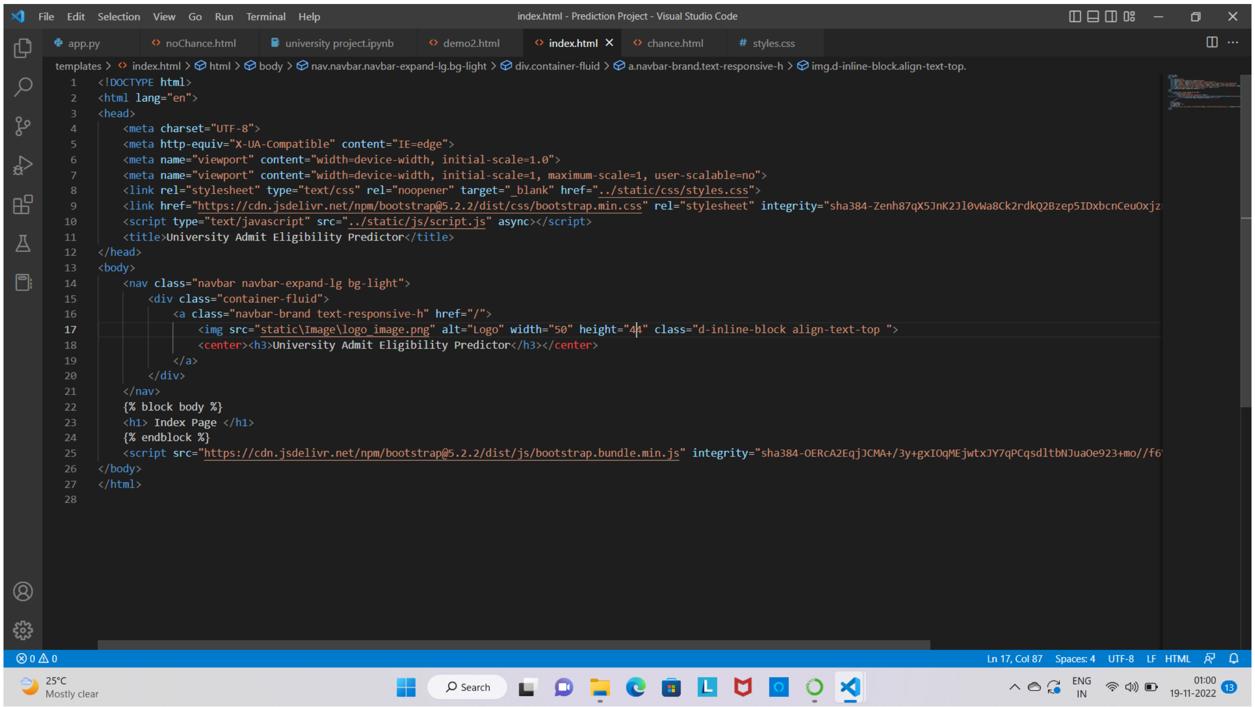
0 0
Ln 7, Col 99 Spaces: 4 UTF-8 LF HTML
25°C Mostly clear
Search
ENG IN
01:00 19-11-2022

```html
                                <b><input type="number" class="form-control" id="lor" name="lor" step="0.01" min="1" max="5" required>
                                </div>
                            </div>
                            <div class="row mb-3">
                                <label for="cgpa" class="col-lg-2 col-form-label"><b>CGPA:</b></label>
                                <div class="col-lg-10">
                                <input type="number" class="form-control" id="cgpa" name="cgpa" step="0.01" min="5" max="10" required>
                                </div>
                            </div>
                            <fieldset class="row mb-3">
                                <legend class="col-form-label col-sm-2 pt-0"><b>Research:</b></legend>
                                <div class="col-sm-10">
                                    <div class="form-check">
                                    <input class="form-check-input" type="radio" name="yes_no_radio" id="gridRadios1" value="1">
                                        <label class="form-check-label" for="yes_no_radio">
                                        Yes
                                        </label>
                                    </div>
                                    <div class="form-check">
                                        <input class="form-check-input" type="radio" name="yes_no_radio" id="gridRadios2" value="0" checked>
                                        <label class="form-check-label" for="yes_no_radio">
                                        No
                                        </label>
                                    </div>
                                </div>
                            </fieldset>
                            <div class="row lg-3">
                                <div class="col-lg-2 mb-2 me-3">
                                    <button type="submit" class="btn btn-primary" id="button">Predict</button>
                                </div>
                        </form>
                    </div>
                </div>
            </div>
        </div>
    </div>
{% endblock %}
```

This Following Code is the Chance.html



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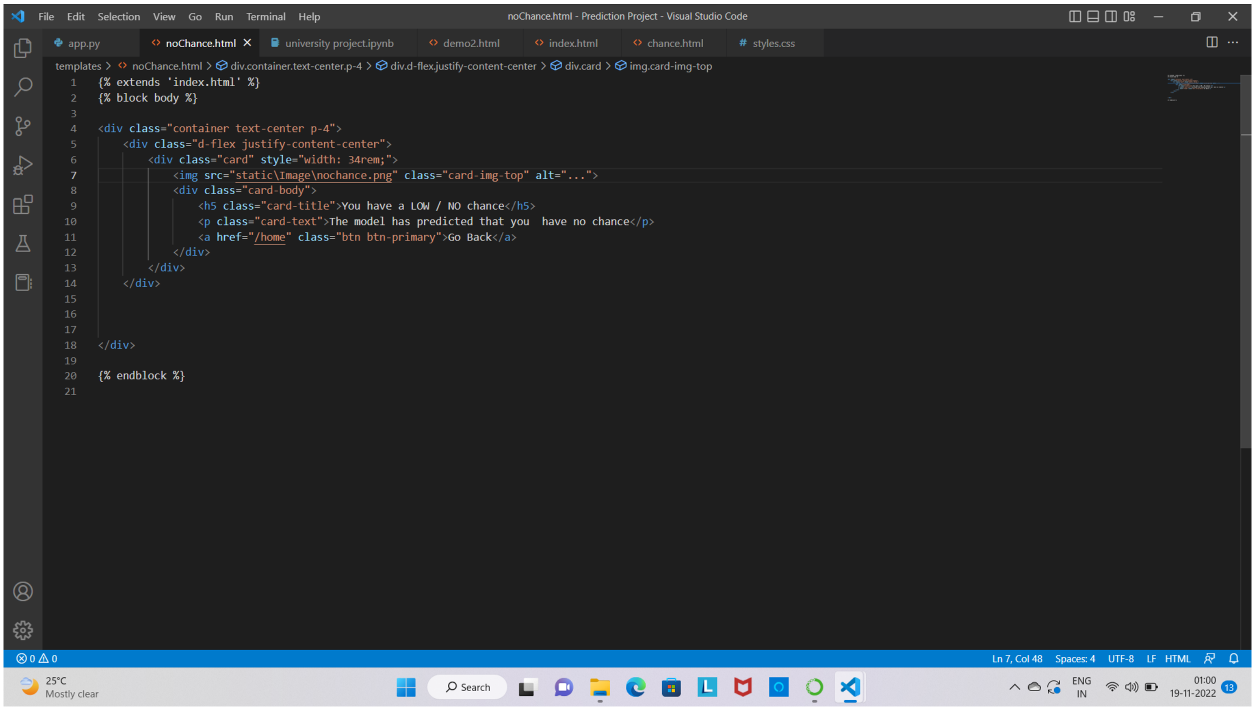
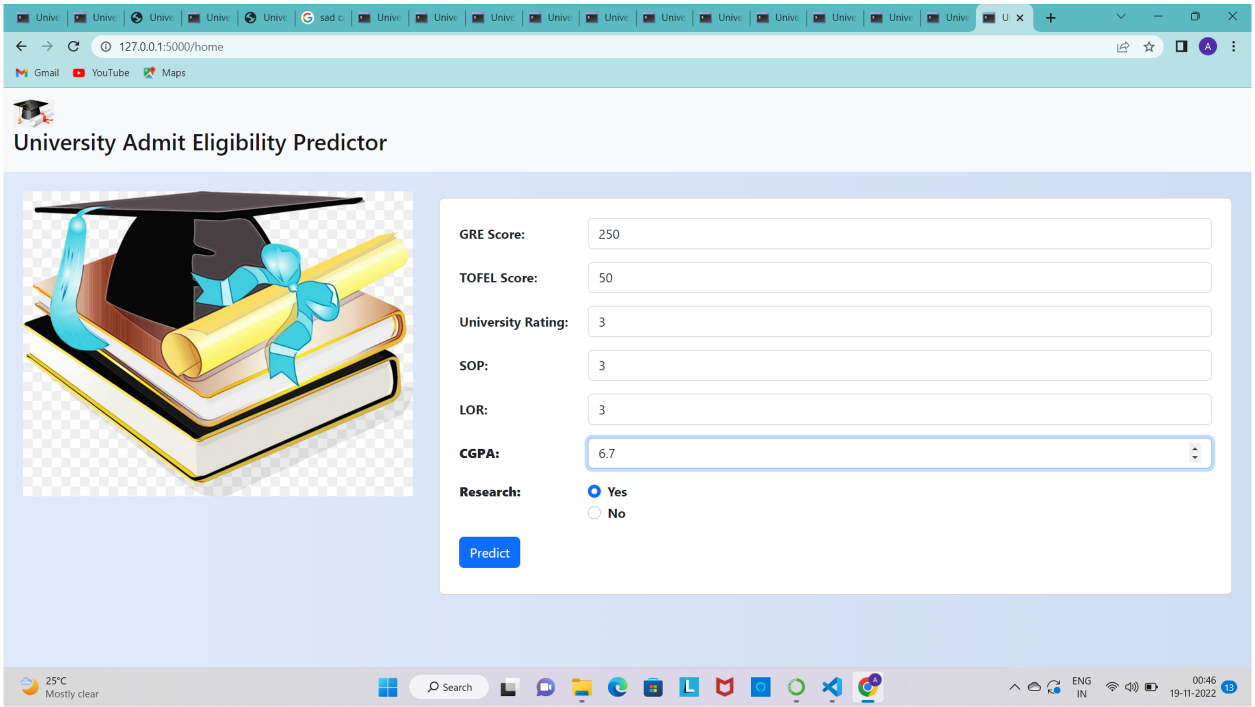
styles.css
templates > index.html > html > body > nav.navbar.navbar-expand-lg.bg-light > div.container-fluid > a.navbar-brand.text-responsive-h > img.d-inline-block.align-text-top.
0 0
Ln 17, Col 87 Spaces: 4 UTF-8 LF HTML
25°C Mostly clear
Search
ENG IN
01:00 19-11-2022

```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">
    <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1, user-scalable=no">
    <link rel="stylesheet" type="text/css" rel="noopener" target="_blank" href="../static/css/styles.css">
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjz
    <script type="text/javascript" src="../static/js/script.js" async></script>
    <title>University Admit Eligibility Predictor</title>
</head>
<body>
    <nav class="navbar navbar-expand-lg bg-light">
        <div class="container-fluid">
            <a class="navbar-brand text-responsive-h" href="/">
                <img src="static\Image\logo_image.png" alt="Logo" width="50" height="44" class="d-inline-block align-text-top ">
                <center><h3>University Admit Eligibility Predictor</h3></center>
            </a>
        </div>
    </nav>
    {% block body %}
    <h1> Index Page </h1>
    {% endblock %}
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle.min.js" integrity="sha384-OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJuaOe923+mo//f6
</body>
</html>
```

The Following Code is the no chance.html



```
{% extends 'index.html' %}
{% block body %}

<div class="container text-center p-4">
    <div class="d-flex justify-content-center">
        <div class="card" style="width: 34rem;">
            <img src="static\Image\nochance.png" class="card-img-top" alt="...">
            <div class="card-body">
                <h5 class="card-title">You have a LOW / NO chance</h5>
                <p class="card-text">The model has predicted that you  have no chance</p>
                <a href="/home" class="btn btn-primary">Go Back</a>
            </div>
        </div>
    </div>



</div>

{% endblock %}

```



University Admit Eligibility Predictor

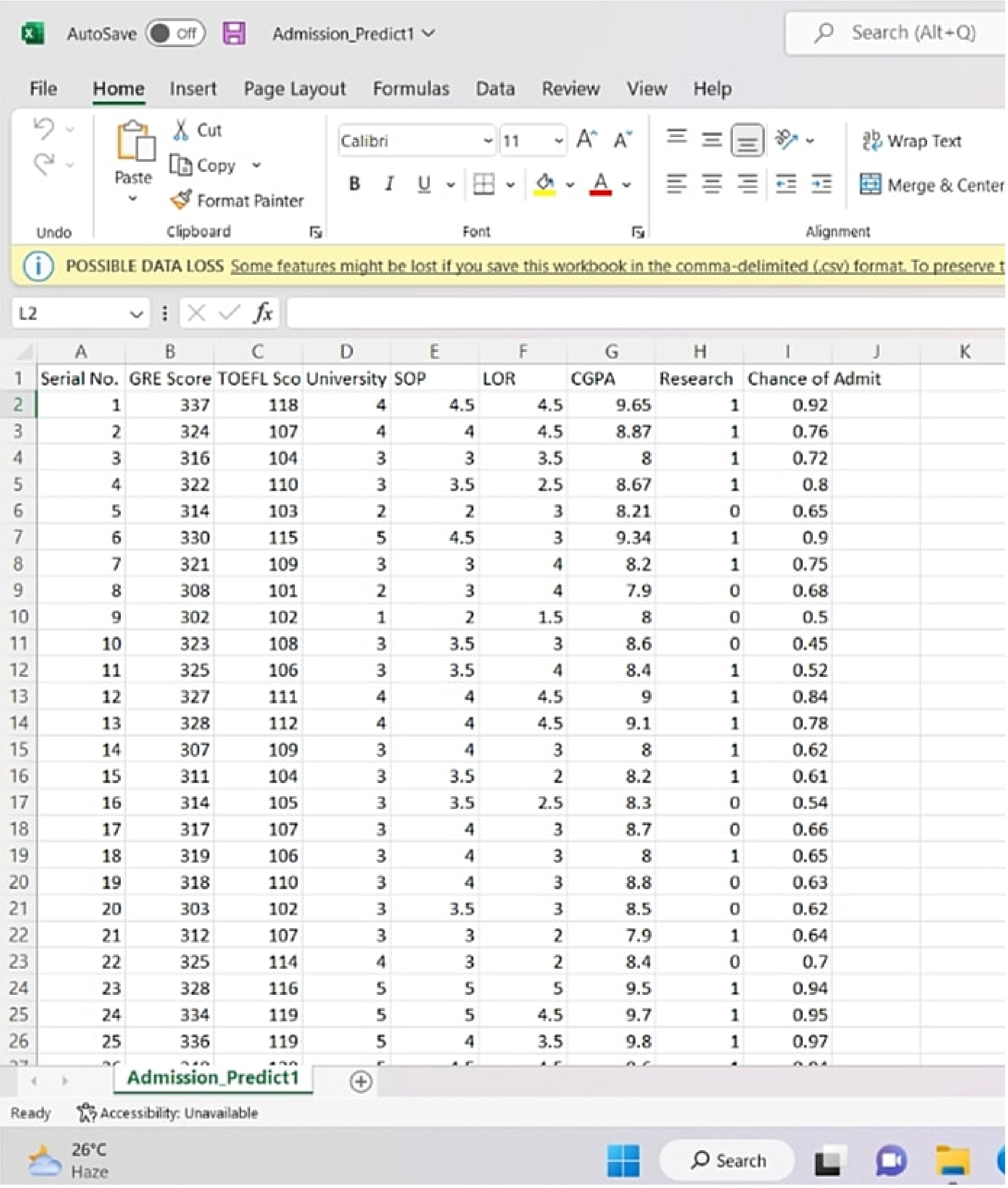
GRE Score:	250
TOFEL Score:	50
University Rating:	3
SOP:	3
LOR:	3
CGPA:	6.7
Research:	● Yes ○ No

Predict

8.TESTING

8.1 TEST CASES

To test and train the datasets



POSSIBLE DATA LOSS Some features might be lost if you save this workbook in the comma-delimited (.csv) format. To preserve t

	A	B	C	D	E	F	G	H	I
1	Serial No.	GRE Score	TOEFL Sco	University	SOP	LOR	CGPA	Research	Chance of Admit
2	1	337	118	4	4.5	4.5	9.65	1	0.92
3	2	324	107	4	4	4.5	8.87	1	0.76
4	3	316	104	3	3	3.5	8	1	0.72
5	4	322	110	3	3.5	2.5	8.67	1	0.8
6	5	314	103	2	2	3	8.21	0	0.65
7	6	330	115	5	4.5	3	9.34	1	0.9
8	7	321	109	3	3	4	8.2	1	0.75
9	8	308	101	2	3	4	7.9	0	0.68
10	9	302	102	1	2	1.5	8	0	0.5
11	10	323	108	3	3.5	3	8.6	0	0.45
12	11	325	106	3	3.5	4	8.4	1	0.52
13	12	327	111	4	4	4.5	9	1	0.84
14	13	328	112	4	4	4.5	9.1	1	0.78
15	14	307	109	3	4	3	8	1	0.62
16	15	311	104	3	3.5	2	8.2	1	0.61
17	16	314	105	3	3.5	2.5	8.3	0	0.54
18	17	317	107	3	4	3	8.7	0	0.66
19	18	319	106	3	4	3	8	1	0.65
20	19	318	110	3	4	3	8.8	0	0.63
21	20	303	102	3	3.5	3	8.5	0	0.62
22	21	312	107	3	3	2	7.9	1	0.64
23	22	325	114	4	3	2	8.4	0	0.7
24	23	328	116	5	5	5	9.5	1	0.94
25	24	334	119	5	5	4.5	9.7	1	0.95
26	25	336	119	5	4	3.5	9.8	1	0.97

8.2 USER ACCEPTANCE TESTING

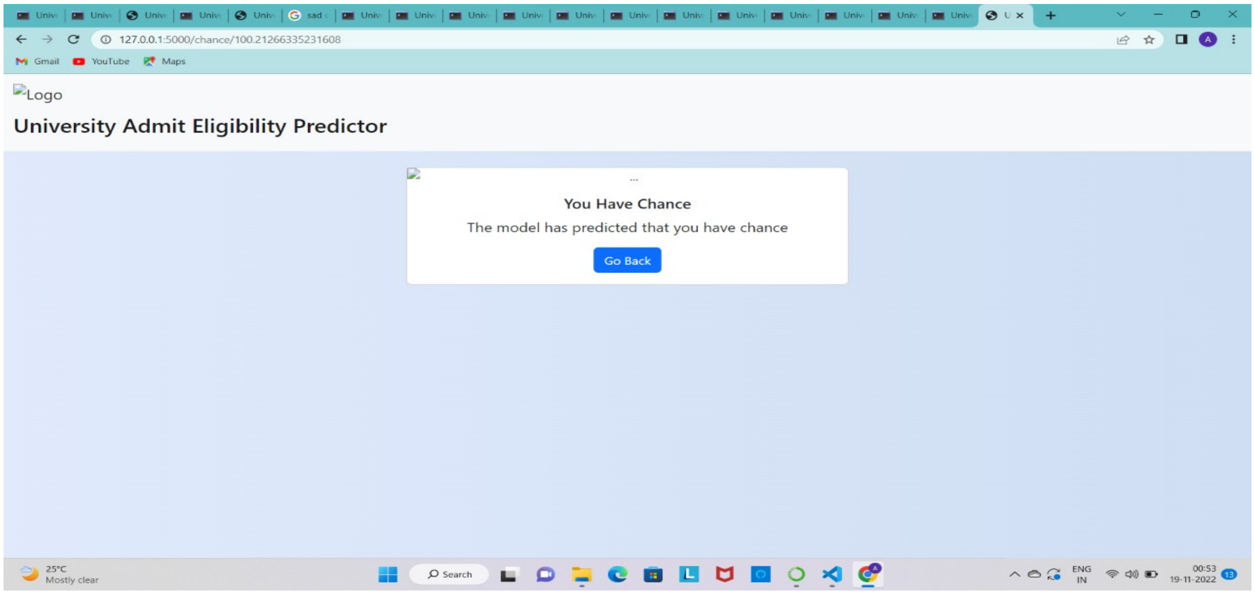
User acceptance testing (UAT), also called application testing or end-user testing, is a phase of software development in which the software is tested in the real world by its intended audience.UAT is often the last phase of the software testing process and is performed before the tested software is released to its intended market. The goal of UAT is to ensure software can handle real-world tasks and perform up to development specifications.

UAT, users are given the opportunity to interact with the software before its official release to see if any features have been overlooked or if it contains any bugs. UAT can be done in-house with volunteers, by paid test subjects using the software or by making the test version available for download as a free trial. The results from the early testers are forwarded to the developers, who make final changes before releasing the software commercially.UAT is effective for ensuring quality in terms of time and software cost, while also increasing transparency with users.

9.RESULTS

9.1 PERFORMANCE METRICS

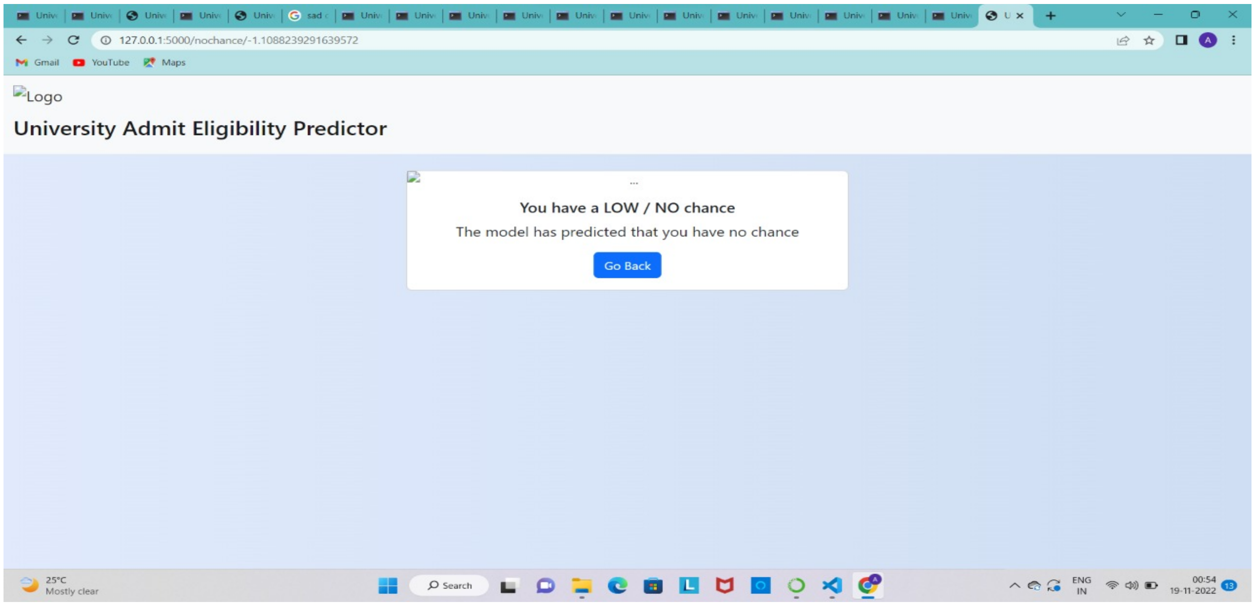
The Performance is the Accuracy of the model trained
The Training accuracy of the model is 98.2126633523
The Testing accuracy of the model is 87.99628300



University Admit Eligibility Predictor

You Have Chance

The model has predicted that you have chance



University Admit Eligibility Predictor

You have a LOW / NO chance

The model has predicted that you have no chance

10.ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

- This system helps the student for making the prediction for chance/no chance
- Avoids data redundancy and inconsistency
- Chance of occurence of error is less
- User friendly to use
- Maintain the proper datasets
- easy accessibility of data

DISADVANTAGES

- Security Concerns
- Need Sufficient Internet Connection
- System will provide inaccurate results if data entered incorrectly
- If there are no proper internet connection sometimes it seems the data might be invalid

11 CONCLUSION

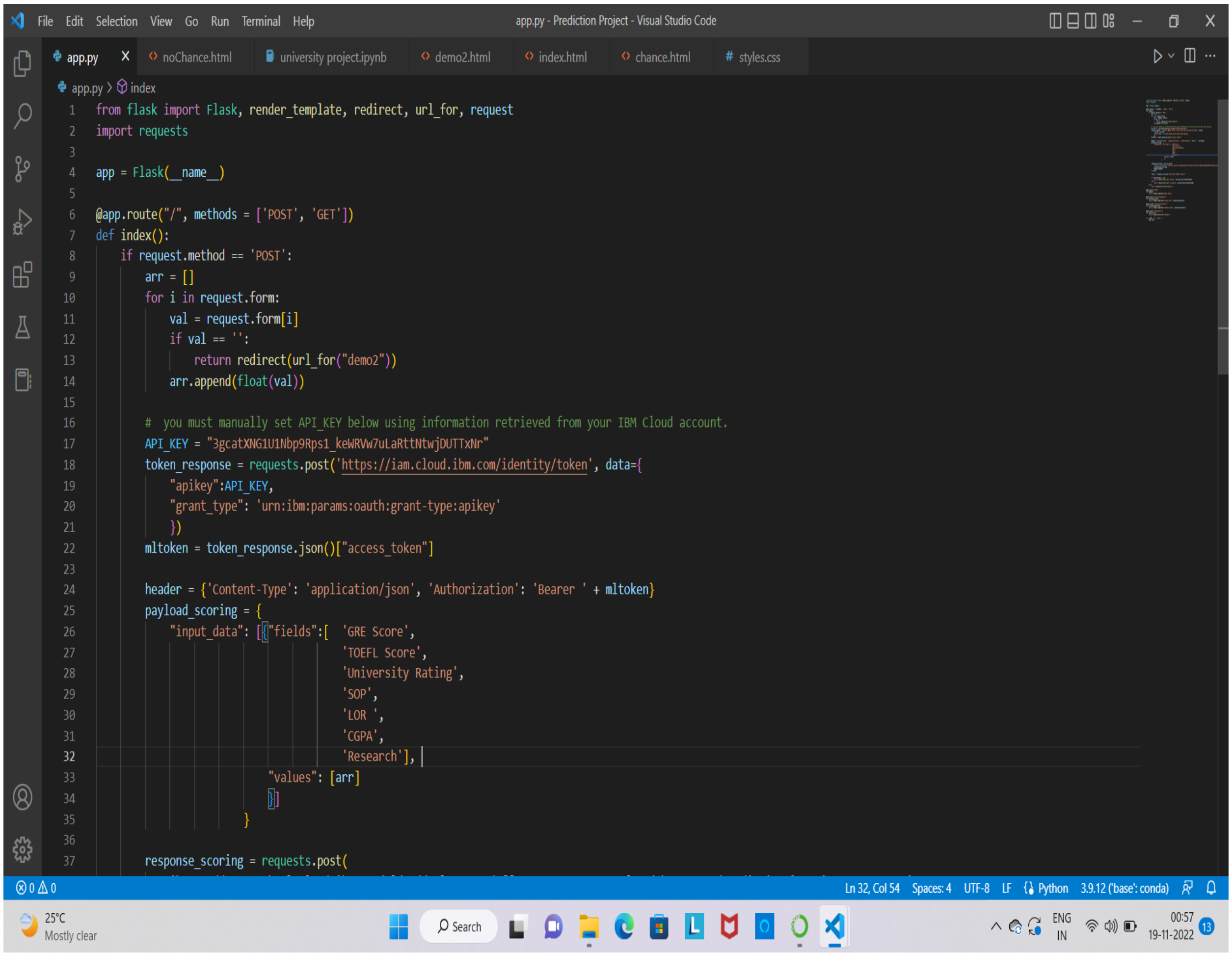
The prediction model web application is developed by using the machine learning algorithm.The backend process is implemented by using the Python flask.front end well designed by using HTML, CSS Integrated the front end and backend by using flask finally the web application designed and developed successfully the user can easily get to know about the prediction of chances.

12.Future Scope

Further enhancement can be made by secure the datasets in a proper manner.considering the existing model this system has been developed for the user's convenient. In future this model web application has develop by adding extra features by using the upcoming technology.

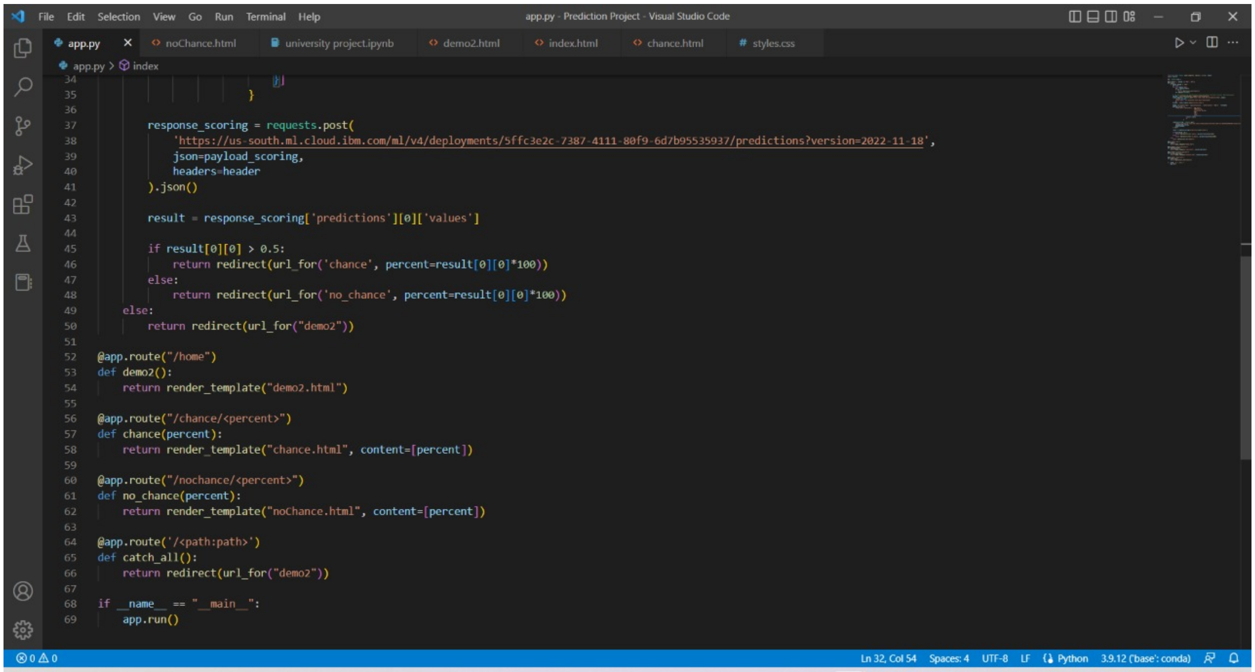
13.APPENDIX

SOURCE CODE



File Edit Selection View Go Run Terminal Help
app.py - Prediction Project - Visual Studio Code
app.py
noChance.html
university project.ipynb
demo2.html
index.html
chance.html
styles.css
app.py > index
Ln 32, Col 54 Spaces: 4 UTF-8 LF Python 3.9.12 ('base': conda)
25°C
Mostly clear
Search
ENG
IN
00:57
19-11-2022

```python
from flask import Flask, render_template, redirect, url_for, request
import requests

app = Flask(__name__)

@app.route("/", methods = ['POST', 'GET'])
def index():
    if request.method == 'POST':
        arr = []
        for i in request.form:
            val = request.form[i]
            if val == '':
                return redirect(url_for("demo2"))
            arr.append(float(val))

        #  you must manually set API_KEY below using information retrieved from your IBM Cloud account.
        API_KEY = "3gcatXNG1U1Nbp9Rps1_keWRVw7uLaRttNtwjDUTTxNr"
        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}
        payload_scoring = {
            "input_data": [{"fields":[  'GRE Score',
                                        'TOEFL Score',
                                        'University Rating',
                                        'SOP',
                                        'LOR ',
                                        'CGPA',
                                        'Research'], 
                            "values": [arr]
                            }]
                        }

        response_scoring = requests.post(
```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demo2.html
index.html
chance.html
styles.css
app.py > index
0 0
Ln 32, Col 54 Spaces: 4 UTF-8 LF Python 3.9.12 ('base': conda)

```
                            }]
                        }

        response_scoring = requests.post(
            'https://us-south.ml.cloud.ibm.com/ml/v4/deployments/5ffc3e2c-7387-4111-80f9-6d7b95535937/predictions?version=2022-11-18',
            json=payload_scoring,
            headers=header
        ).json()

        result = response_scoring['predictions'][0]['values']

        if result[0][0] > 0.5:
            return redirect(url_for('chance', percent=result[0][0]*100))
        else:
            return redirect(url_for('no_chance', percent=result[0][0]*100))
    else:
        return redirect(url_for("demo2"))

@app.route("/home")
def demo2():
    return render_template("demo2.html")

@app.route("/chance/<percent>")
def chance(percent):
    return render_template("chance.html", content=[percent])

@app.route("/nochance/<percent>")
def no_chance(percent):
    return render_template("noChance.html", content=[percent])

@app.route('/<path:path>')
def catch_all():
    return redirect(url_for("demo2"))

if __name__ == "__main__":
    app.run()
```

GITHUB LINK :

IBM-EPBL/**IBM-Project-43914-1660720604**

PROJECT DEMO LINK: https://youtube.be/XNvmds-IWQo