

Project report on

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

TEAM ID:PNT2022TMID40252

Prepared by

P.SENTHIL KUMAR -B.Tech-[512719205026]

P.DINESH -B.Tech-[512719205004]

M.LOKESH -B.Tech-[512719205302]

G.THAMIZHMAGAN -B.Tech-[512719205027]

S.JAYAKUMAR -B.Tech-[512719205009]

CONTENTS

1. INTRODUCTION

- 1.1 Project Overview
- 1.2 Purpose

2. LITERATURE SURVEY

- 2.1 Existing problem
- 2.2 References
- 2.3 Problem Statement Definition

3. IDEATION & PROPOSED SOLUTION

- 3.1 Empathy Map Canvas
- 3.2 Ideation & Brainstorming
- 3.3 Proposed Solution
- 3.4 Problem Solution fit

4. REQUIREMENT ANALYSIS

- 4.1 Functional requirement
- 4.2 Non-Functional requirements

5. PROJECT DESIGN

- 5.1 Data Flow Diagrams
- 5.2 Solution & Technical Architecture
- 5.3 User Stories

6. PROJECT PLANNING & SCHEDULING

- 6.1 Sprint Planning & Estimation
- 6.2 Sprint Delivery Schedule
- 6.3 Reports from JIRA

7. CODING & SOLUTIONING

- 7.1 Data Dictionary
- 7.2 Libraries Used
- 7.3 Technologies Used
- 7.4 Evaluation Metric
- 7.5 Initial Approach
- 7.6 Advanced Models

8. TESTING

8.1 Test Cases

8.2 User Acceptance Testing

9. RESULTS

9.1 Performance Metrics

10. ADVANTAGES & DISADVANTAGES

11. APPLICATIONS

12. CONCLUSION

13. FUTURE SCOPE

14. APPENDIX

Source Code

Output Screenshots

GitHub & Project Demo Link

1. INTRODUCTION

1.1 OVERVIEW

The project is implemented using a Machine-Learning model that predicts whether the user is eligible for an admission in the selected rated universities with provided details such as marks and others. The algorithm works in such a way that when the user provides the details such as (GRE Score, TOEFL Score, University Rating, SOP, LOR, CGPA, Research) the percentage of chance of admit is displayed. The user is provided with a UI (Web based application) in which the user can enter the details mentioned above for prediction. The main advantage of this is that the user can avoid long process of having to check the eligibility of a university admission by himself and make use of this application to predict the eligibility / chance of admit.

1.2 PURPOSE

The purpose of this project is to make the prediction of eligibility of an admission to a rated university with ease using a UI with the provided user details (GRE Score, TOEFL Score, University Rating, SOP, LOR, CGPA, Research). This also eliminates the possibility of human errors.

2. LITERATURE SURVEY

2.1 Existing problem

Previous research done in this area used Naive Bayes algorithm which will evaluate the success probability of student application into a respective university but the main drawback is they didn't consider all the factors which will contribute in the student admission process like TOEFL/IELTS, SOP, LOR and under graduate score. Bayesian Networks Algorithm have been used to create a decision support network for evaluating the application submitted by foreign students of the university. This model was developed to forecast the progress of prospective students by comparing the score of students currently studying at university. The model thus predicted whether the aspiring student should be admitted to university on the basis of various scores of students. Since the comparisons are made only with students who got admission into the universities but not with students who got their admission rejected so this method will not be that much accurate.

2.2 References

- M. S. Acharya, A. Armaan, and A. S. Antony, "A Comparison of Regression Models for WrĜĚŝcŦŽn of Graduate Admissions," Kaggle, 2018.
- M. N. Injadat, A. Moubayed, A. B. Nassif, and A. Shami, "ΛyĚĜmĂŦc ensemble model ĚĜŭĜcŦŽn approach for ĜĚZcĂŦŽnĂŭ data mining," Knowledge-Based Syst., vol. 200, p. 105992, Jul. 2020.
- M. S. Acharya, A. Armaan, and A. S. Antony, "A comparison of regression models for ĐrĜĚŝcŦŽn of graduate admissions," ICCIDS 2019 - 2nd Int. Conf. Comput. Intell. Data Sci. Proc., pp. 1–5, 2019.
- N. Chakrabarty, S. Chowdhury, and S. Rana, "A ^ĬĂŦĚŦcĂŭ Approach to Graduate Admissions' Chance WrĜĚŝcŦŽn," no. March, pp. 145– 154, 2020.
- S. Sujay, "Supervised Machine Learning Modelling & Analysis for Graduate Admission WrĜĚŝcŦŽn," vol. 7, no. 4, pp. 5–7, 2020.

2.3 Problem Statement Definition

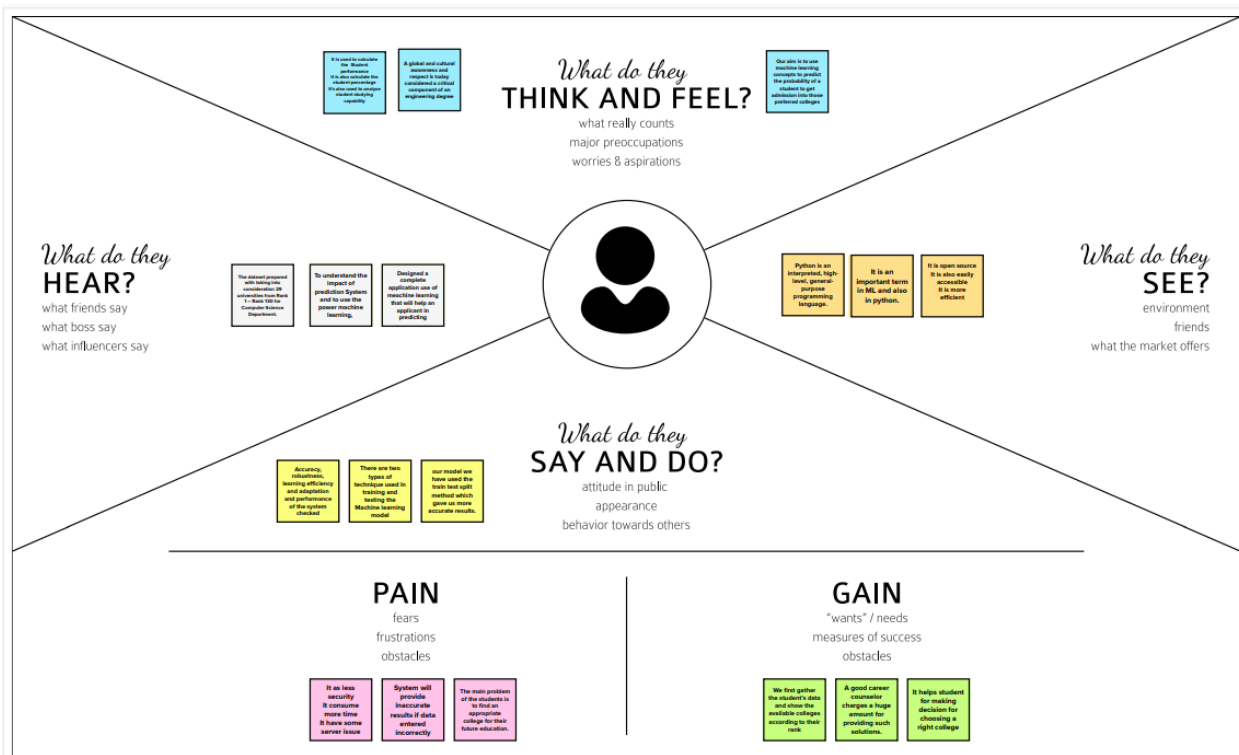
The main problem of the students is to find an appropriate college for their future education. It is a tough decision to make for many students as to which college they should apply to. We have built a system that compares the student's data with past admission data and suggests colleges in a sequence of their preference.

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas

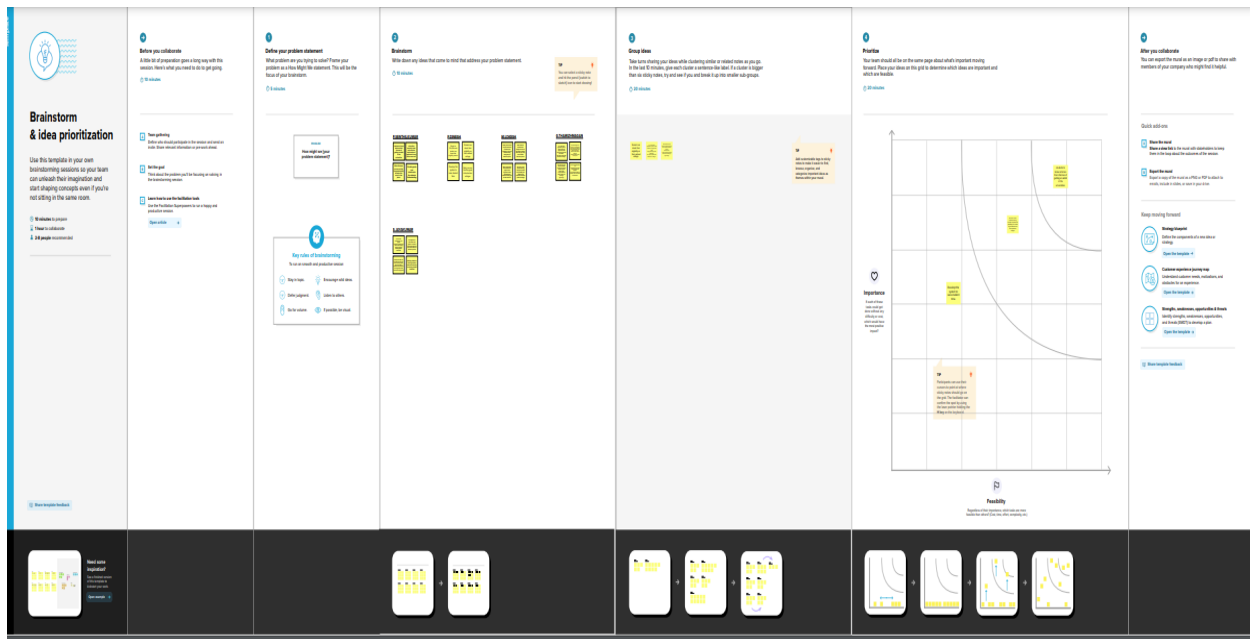
An empathy map is a collaborative visualization used to articulate what we know about a particular type of user. It externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision making.

Traditional empathy maps are split into 4 quadrants (Says, Thinks, Does, and Feels), with the user or persona in the middle. Empathy maps provide a glance into who a user is as a whole and are not chronological or sequential.



3.2 Ideation & Brainstorming

Brainstorming is a method design teams use to generate ideas to solve clearly defined design problems. In controlled conditions and a free-thinking environment, teams approach a problem by such means as "How Might We" questions. They produce a vast array of ideas and draw links between them to find potential solutions.



3.3 Proposed Solution

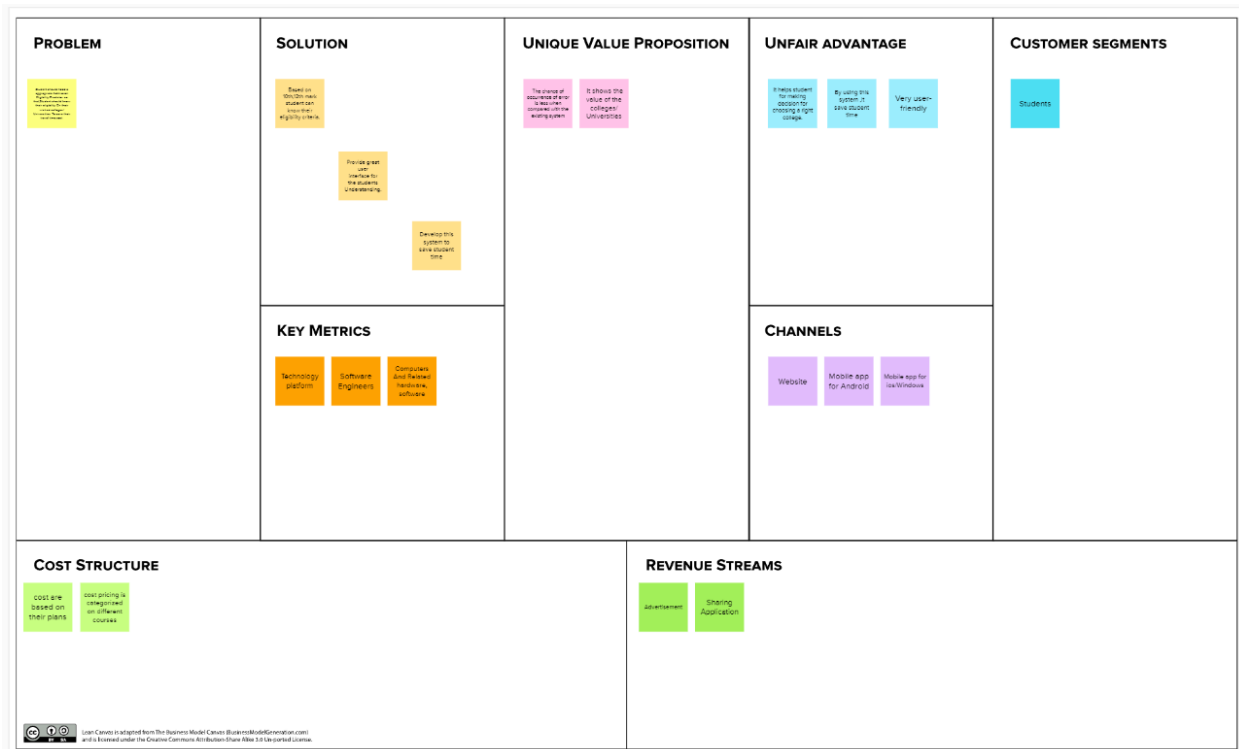
The aim of the proposed system is to address the limitations of the current system. The requirements for the system have been gathered from the defects recorded in the past and also based on the feedback from users of previous metrics tools. Following are the objectives of the proposed system:

- Reach to geographically scattered student.
- Reducing time in activities
- Paperless admission with reduced man power
- Operational efficiency

S.NO	PARAMETER	DESCRIPTION
1.	Problem statement	To predict the universities for the students to who is going to higher studies.
2.	Idea/Solution description	It will help the students to get admission for under graduate degrees from the top universities and well infrastructure laboratories. This analysis is helpful who is unaware of choosing UG degrees after secondary education. It will predict the students admission to the respected universities based on their secondary education marks.
3.	Novelty/Uniqueness	This website has to predict the universities inside India And also give various information about the universities. Also list the universities in the ranking list.
4.	Social Impact/Customer satisfaction	This website reduce the panic and unawareness among the students. It will reduce our time, travel and cost. It will give the exact approximate prediction based on students secondary education marks.
5.	Business Model (Revenue Model)	Universities shall find the website in order to maintain it. This website will predict and display the exact results to the students.
6.	Scalability of the Solution	A future update shall have chat space comprising faculty, current students and alumni. It can be scaled for universities all around the world.

3.4 Problem Solution fit

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem.



4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Functional requirements may involve calculations, technical details, data manipulation and processing, and other specific functionality that define what a system is supposed to accomplish. Behavioral requirements describe all the cases where the system uses the functional requirements, these are captured in use cases.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Details	Submit the documents <ul style="list-style-type: none"> • GRE or/and TOEFL scoresheet • Curriculum Vitae (CV) • Statement of Purpose (SoP) • Letter of Recommendation
FR-4	User Requirements	<ul style="list-style-type: none"> • Upload all the relevant documents in the appropriate location in the website • Based on the uploads, the system would scrape all the necessary information • The list of all possible university for the candidate would be displayed based on the scraped information

4.2 Non-Functional requirements

In systems engineering and requirements engineering, a non-functional requirement (NFR) is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviours.

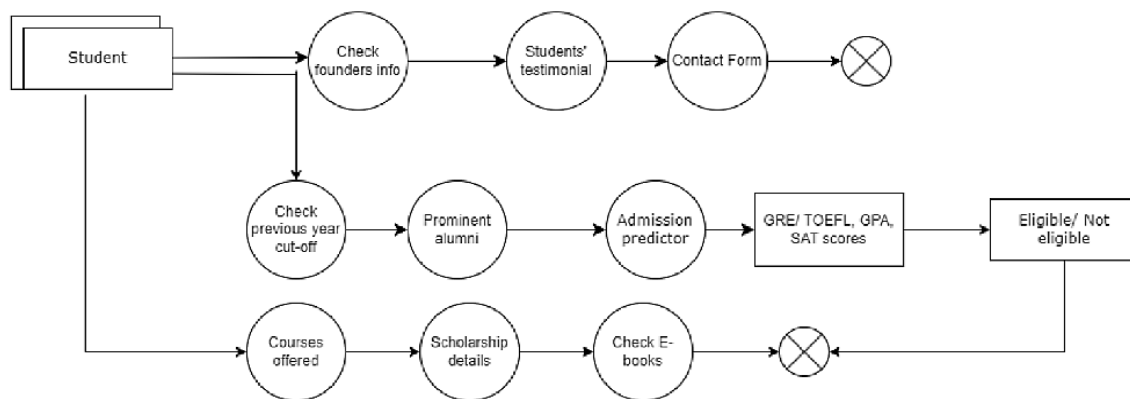
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	<ul style="list-style-type: none"> • The system doesn't expect any technical pre-requisite from the user i.e.; even the naïve user can access it • The UI would focus on recognize over recall • User friendly • Reduced focus on Short Term memory load Focus on Internal Locus of Control • The page would not take a lot of time to load the content and display them (< 30 seconds) • The fields in the site would be self-explanatory
NFR-2	Security	<ul style="list-style-type: none"> • Only the authenticated user would be able to utilize the services of the site. • Database should be backed up every hour

		<ul style="list-style-type: none"> Under any error, the system should be able to come back to normal operation in under an hour.
NFR-3	Reliability	<ul style="list-style-type: none"> The system would always strive for maximum reliability due to the importance of data and damages that could be caused by incomplete and incorrect data The system will run 7 days a week, 24 hours a day
NFR-4	Performance	<ul style="list-style-type: none"> The website can efficiently handle the traffic by serving the request as soon as possible Viewing this webpage using a 56-kbps modem connection would not exceed 30 seconds (quantitatively, the mean time)
NFR-5	Availability	<ul style="list-style-type: none"> Minimal data redundancy Less prone to errors Fast and efficient The system will run 7 days a week, 24 hours a day
NFR-6	Scalability	<ul style="list-style-type: none"> Since an academic portal is crucial to the courses that use it, it is crucial that a sizable number of users be able to access the system at the same time. The admission season is probably when the system will be under the most strain. It must therefore be able to manage numerous concurrent users.

5. PROJECT DESIGN

5.1 Data Flow Diagrams

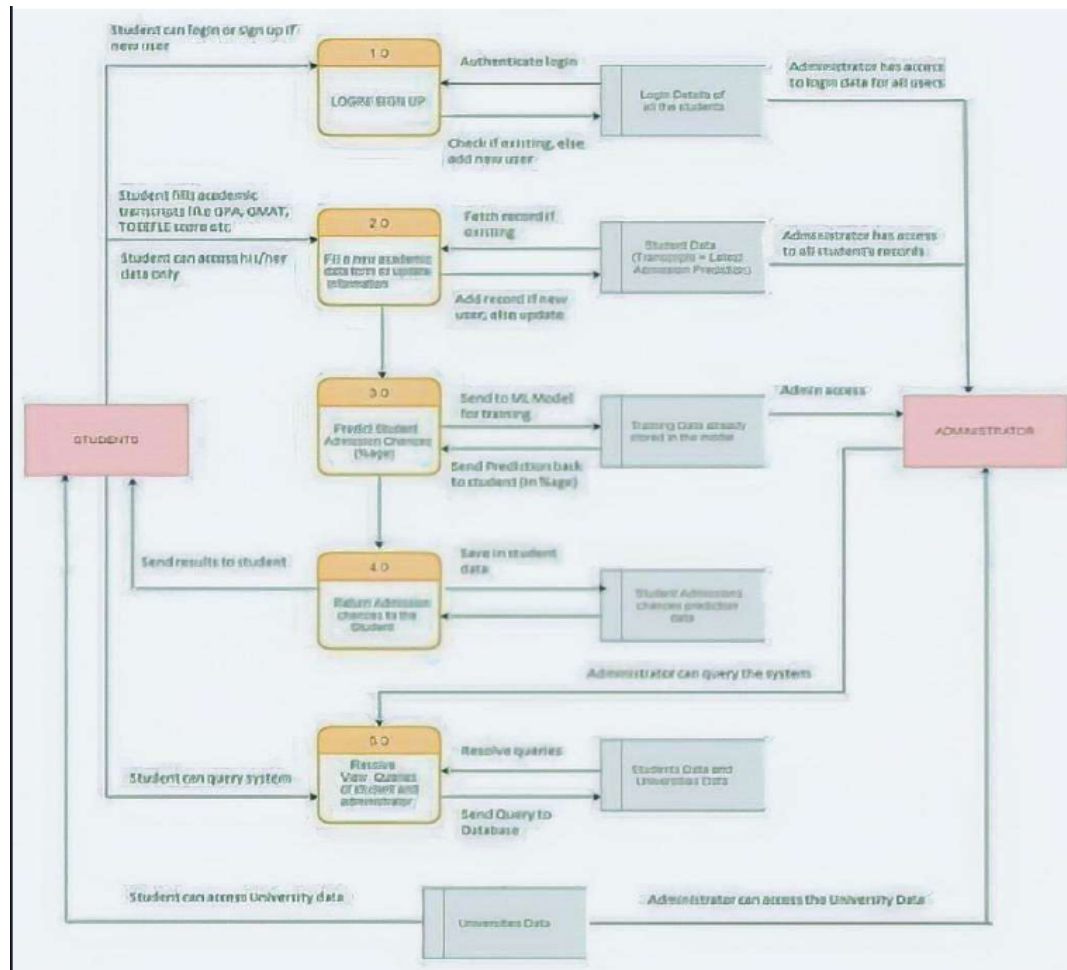
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



5.2 Solution & Technical Architecture

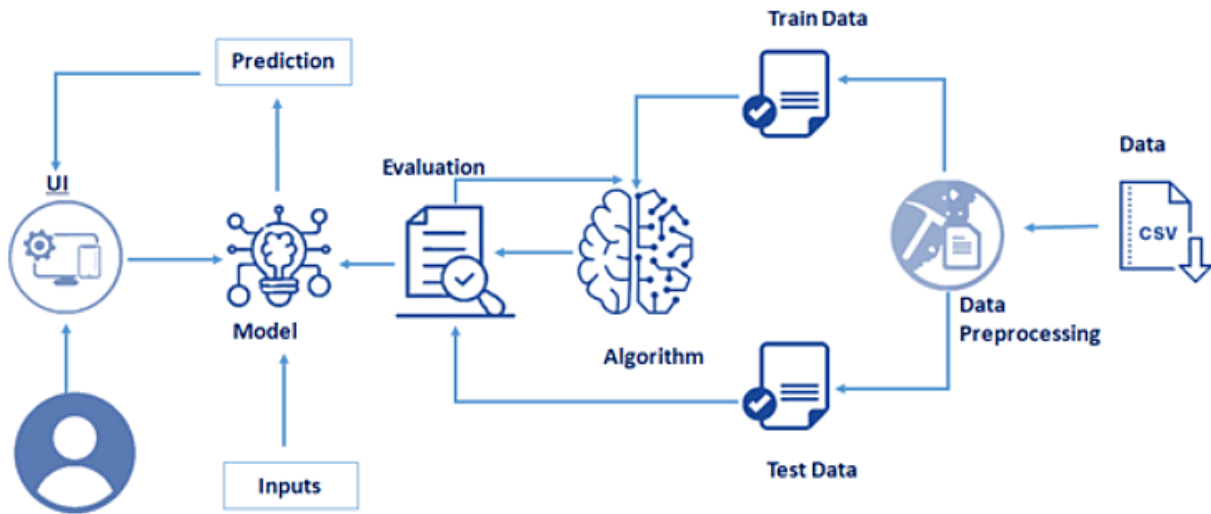
Solution Architecture:

A solution architecture (SA) is an architectural description of a specific solution. SAs combine guidance from different enterprise architecture viewpoints (business, information and technical), as well as from the enterprise solution architecture (ESA).



Technical Architecture:

Technical Architecture (TA) is a form of IT architecture that is used to design computer systems. It involves the development of a technical blueprint with regard to the arrangement, interaction, and interdependence of all elements so that system-relevant requirements are met.



5.3 User Stories

A user story is an informal, general explanation of a software feature written from the perspective of the end user or customer. The purpose of a user story is to articulate how a piece of work will deliver a particular value back to the customer.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Landing page	USN-1	As a user, I can view the details about the university	I can access the university landing page	Medium	Sprint-1
		USN-2	As a user, I can view the latest news about the university	I can access the latest news	Medium	Sprint-1
		USN-3	As a user, I can fill the contact form for queries	I can fill and submit the contact form	Low	Sprint-2
		USN-4	As a user, I can see the social media profiles of the university	I can reach out to them via social media	Medium	Sprint-1
		USN-5	As a user, I can see testimonials of students who graduated from the university	I can access the testimonials	Medium	Sprint-1
	Admissions	USN-6	As a user, I can see the previous year cut-off marks	I can download the previous year cut-off details	High	Sprint-2
		USN-7	As a user, I can read about proud alumni of the university	I can access the details of alumni of the university	Medium	Sprint-2
		USN-8	As a user, I can predict my eligibility for admission at the university	I can get result as either eligible/not eligible	High	Sprint-2
	Courses offered	USN-9	As a user, I can see the courses offered by the university for PG students	I can access the course details	Medium	Sprint-3
	Events	USN-10	As a user, I can check various technical events about to happen in the university	I can register for the events	Low	Sprint-3
	E-books	USN-11	As a user, I can download and read e-books relating to visa formalities	I can download the e-books	High	Sprint-3

	Scholarship	USN-12	As a user, I shall find resources regarding scholarship availability	I can access scholarship resources	High	Sprint-4
	Test prep materials	USN-13	As a user, I can download and read GRE,TOEFL test preparation materials	I can download test preparation materials	Medium	Sprint-4
Administrator	Landing page	USN-14	As an administrator, I shall update the news about the university	I can check if the update is reflected or not	Medium	Sprint-4
	Events	USN-15	As an administrator, I can update the list of activities to be hosted	I can check if the update is reflected or not	Medium	Sprint-4

6. PROJECT PLANNING & SCHEDULING

6.1 Sprint Planning & Estimation

In Scrum Projects, Estimation is done by the entire team during Sprint Planning Meeting. The objective of the Estimation would be to consider the User Stories for the Sprint by Priority and by the Ability of the team to deliver during the Time Box of the Sprint.

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Landing page	USN 1	As a user, I can view the details about the university	2	Medium	Senthil kumar
Sprint-1		USN-2	As a user, I will view the latest news about the university	1	Medium	Dinesh
Sprint-2		USN-3	As a user, I can fill the contact form for queries	2	Low	Lokesh
Sprint-1		USN-4	As a user, I can see the social media profiles of the university	2	Medium	Thamizhmagan
Sprint-1		USN-5	As a user, I can see testimonials of students who graduated from the university	1	Medium	Jayakumar
Sprint-2	Admission	USN-6	As a user, I can see the previous year cut off marks	2	High	Senthil kumar
Sprint-2		USN-7	As a user, I can read about proud alumni of the university	1	Medium	Dinesh
Sprint-2		USN-8	As a user, I can predict my eligibility for admission at the university	2	High	Lokesh
Sprint-3	Courses offered	USN-9	As a user, I can see the courses offered by the university for PG students	1	Medium	Thamizhmagan
Sprint-3	Events	USN-10	As a user, I can check various technical events about to happen in the university	2	Low	Jayakumar

Sprint-3	E-books	USN-11	As a user, I can download and read ebooks relating to visa formalities	2	High	Senthil kumar
Sprint-4	Scholarship	USN-12	As a user, I shall find resources regarding scholarship availability	1	High	Dinesh
Sprint-4	Test prep materials	USN-13	As a user, I can download and read GRE,TOEFL test preparation materials	1	Medium	Lokesh
Sprint-4	Landing page	USN-14	As an administrator, I shall update the news about the university	30	Medium	Thamizhmagan
Sprint-4	Events	USN-15	As an administrator, I can update the list of activities to be hosted	15	Medium	Jayakumar

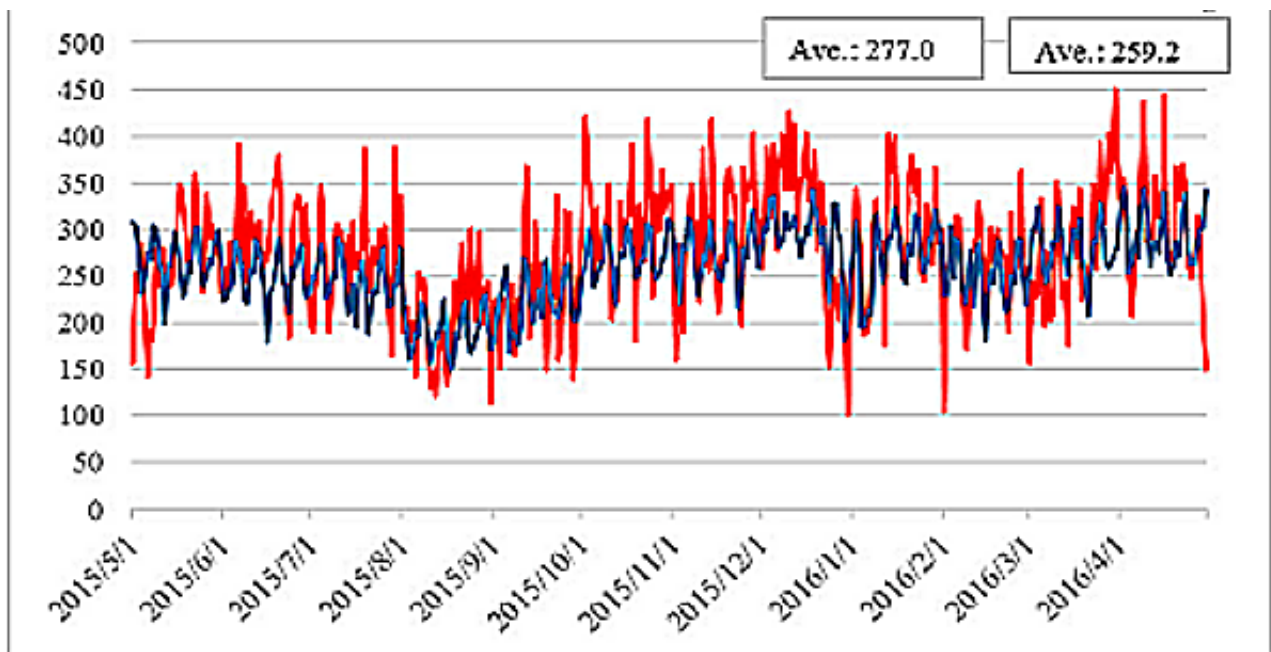
6.2 Sprint Delivery Schedule

A sprint schedule is a document that outlines sprint planning from end to end. It's one of the first steps in the agile sprint planning process—and something that requires adequate research, planning, and communication.

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	15	
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		

6.3 Reports From JIRA

Jira helps teams plan, assign, track, report, and manage work and brings teams together for everything from agile software development and customer support to startups and enterprises. Software teams build better with Jira Software, the #1 tool for agile teams.



7. CODING & SOLUTIONING

7.1 Data Dictionary

Serial No.	GRE Score	TOEFL Score	University Rating	SOP	LOR	CGPA	Research	Chance of Admit
1	337	118	4	4.5	4.5	9.65	1	0.92
2	324	107	4	4	4.5	8.87	1	0.76
3	316	104	3	3	3.5	8	1	0.72
4	322	110	3	3.5	2.5	8.67	1	0.8
5	314	103	2	2	3	8.21	0	0.65
6	330	115	5	4.5	3	9.34	1	0.9
7	321	109	3	3	4	8.2	1	0.75
8	308	101	2	3	4	7.9	0	0.68
9	302	102	1	2	1.5	8	0	0.5
10	323	108	3	3.5	3	8.6	0	0.45

7.2 Libraries Used

Pandas, numpy, scikit learn, matplotlib, seaborn.

7.3 Technologies Used

Software

- Python
- Anaconda
- Jupyter Notebook
- Windows 7 or higher
- XAMP Server

Hardware

Processor – Dual Core or higher

Hard Disk – 50 GB

Memory – 1GB RAM

7.4 Evaluation Metric

The evaluation metric for this competition is $100 \times \text{RMSLE}$ where RMSLE is Root of Mean Squared Logarithmic Error across all entries in the test set.

7.5 Initial Approach

- Simple Linear Regression model without any feature engineering and data transformation which gave a RMSE : 196.402
- Without feature engineering and data transformation, the model did not perform well and could'nt give a good score.
- Post applying feature engineering and data transformation (log and log1p transformation), Linear Regression model gave a RMSLE score of 0.734.

7.6 Advanced Models

- With improvised feature engineering, built advanced models using Ensemble techniques and other Regressor algorithms.
- Decision Tree Regressors performed well on the model which gave much reduced RMSLE.
- With proper hyper-parameter tuning, Decision Tree Regressor performed well on the model and gave the lease RMSLE of 0.5237.

8. TESTING

8.1 Test Cases

Test case ID	Feature Type	Component	Test Scenario
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button
LoginPage_TC_OO2	UI	Home Page/Demo2	Verify the UI elements in home page
LoginPage_TC_OO3	Functional	Chance	Verify that the Candidate Having chance to Admit/Not
LoginPage_TC_OO4	Functional	NoChance	Verify that the Candidate Having chance to Admit/Not

Pre-Requisite	Steps To Execute	Test Data
	1.Enter URL and click go 2.Enter the details of the student 3.Click the predict button	http://127.0.0.1:5000/home
	1.Enter URL and click go 2.Enter the details of the student 3.Click the predict button	
	1.As per the Entered Model Value. 2.Getting above 50%. 3.You have a Chance will Display	http://127.0.0.1:5000/chance/90.1742255758468
	1.As per the Entered Model Value. 2.Getting below 50% 3.You have a Low/Nochance will Display	http://127.0.0.1:5000/nochance/41.52682121752442

Expected Result	Actual Result	Status	Comments
Working as expected	Working as expected	Pass	
Working as expected	Working as expected	Pass	
Working as expected	Working as expected	Pass	
Working as expected	Working as expected	Pass	

8.2 User Acceptance Testing

Defect Analysis:

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity1	Severity2	Severity3	Severity4	Subtotal
By Design	7	3	2	3	15
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	7	3	2	17	29
Not Reproduced	0	0	1	0	1
Skipped	0	0	1	1	2
Won'tFix	0	3	2	1	6
Totals	17	12	11	23	63

TestCase Analysis:

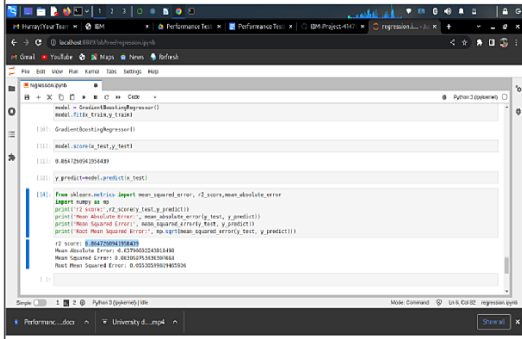
This report shows the number of test cases that have passed, failed, and untested


Section	TotalCases	Not Tested	Fail	Pass
PrintEngine	7	0	0	7
ClientApplication	51	0	0	51
Security	2	0	0	2
OutsourceShipping	3	0	0	3

ExceptionReporting	9	0	0	9
FinalReportOutput	4	0	0	4
VersionControl	2	0	0	2

9. RESULTS

9.1 Performance Metrics

S.No.	Parameter	Values	Screenshot
1.	Metrics	<p>Regression Model: MAE –0.03790692243018498, MSE –0.003058753436307664, RMSE – 0.05530599819465936, R2 score – 0.8647260941958439</p> <p>Classification Model: Confusion Matrix - , Accuracy Score- & Classification Report -</p>	 The screenshot shows a Jupyter Notebook interface with a code cell. The code defines a Gradient Boosting Regressor model, fits it to training data, and evaluates it on test data. It prints out the Mean Absolute Error (MAE), Mean Squared Error (MSE), Root Mean Squared Error (RMSE), and the R-squared score. Below the code, the output of these metrics is displayed: MAE: 0.03790692243018498, MSE: 0.003058753436307664, RMSE: 0.05530599819465936, and R2 score: 0.8647260941958439. The notebook also shows a classification report and a confusion matrix, though they are not fully visible in the screenshot.

2.	Tune the Model	Hyperparameter Tuning 0.9166666666666666	
----	----------------	---	--

10. ADVANTAGES & DISADVANTAGES

Advantages:

- It helps student for making decision for choosing a right college.
- Here the chance of occurrence of error is less when compared with the existing system.
- Avoids data redundancy and inconsistency.
- It is fast, efficient and reliable.

Disadvantages:

- Machine errors are unavoidable when occurred. (Hardware failure, network failure, others).
- The predictions made are not 100% accurate but accurate to an acceptable value.

11. APPLICATIONS

- Reach to geographically scattered student.
- Reducing time in activities
- Paperless admission with reduced man power
- Operational efficiency

12. CONCLUSION

The project uses a Random forest regressor to predict the output and a web application is built to make the UI more accessible and easy using various technologies such as python, HTML5, CSS, Flask, Scikit, Matplot, Numpy, Pandas, Seaborn and other libraries. After the deployment of the web application, it can be accessed from anywhere with internet connection. This project reduces the long hours of analysis to predict the eligibility of the admission to a rated university.

13. FUTURE SCOPE

The future scope of this project is very broad. Few of them are:

- This can be implemented in less time for proper admission process.
- This can be accessed anytime anywhere, since it is a web application provided only an internet connection.
- The user had not need to travel a long distance for the admission and his/her time is also saved as a result of this automated system.

14. APPENDIX

SOURCE CODE:

```
<!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-
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous">
  <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="/" style="font-weight:bold;">
        
          University Admission Eligibility Predictor
        </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//f6V8Qbsw3"
crossorigin="anonymous"></script>
</body>
</html>

```

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;">
      
      <div class="card-body">
        <h5 class="card-title" style="font-weight:bold;">You Have Chance</h5>
        <p class="card-text">The model has predicted that you have
<strong>{{content[0]}}%</strong> chance</p>
        <a href="/home" class="btn btn-primary">Go Back</a>
      </div>
    </div>
  </div>

```

```

        </div>
    </div>
</div>

```

```
{% endblock %}
```

Nochance.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;">
            
            <div class="card-body">
                <h5 class="card-title" style="font-weight:bold;">You have a LOW / NO
chance</h5>
                <p class="card-text">The model has predicted that you only have
<strong>{{content[0]}}%</strong> chance</p>
                <a href="/home" class="btn btn-primary">Go Back</a>
            </div>
        </div>
    </div>
</div>

```

```
{% endblock %}
```

app.py

```

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))

```

```

# deepcode ignore HardcodedNonCryptoSecret: <please specify a reason of
ignoring this>
API_KEY = "wf8mge_OQdwVO8ao2kmWCtfxOfLWI8442SH44V85v2Ls"
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(
    'https://us-south.ml.cloud.ibm.com/ml/v4/deployments/8308fd4c-24a5-46ab-96fa-263657ae4ad0/predictions?version=2022-10-18',
    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('nochance', 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(debug=True)
```

Output Screenshots:

The screenshot shows a web browser window with the title "University Admit Eligibility Predictor". The address bar shows the URL "127.0.0.1:5000/home". The page has a green header with a graduation cap icon and the title. The main content area is divided into two columns. The left column has a green background and contains the text: "Enter your details and get probability of your admission", "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.", and a small image of a brick wall with the text "A problem is a chance for you to do your best". The right column has a white background and contains the form titled "Enter the details". The form has input fields for GRE Score (337), TOFEL Score (118), University Rating (4), SOP (4.5), LOR (4.5), CGPA (9.65), and Research (Yes). A "Predicting..." button is at the bottom of the form.

University Admit Eligibility Predictor

Enter your details and get probability of your admission

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.

A problem is a chance for you to do your best

Enter the details

GRE Score: 337

TOFEL Score: 118

University Rating: 4

SOP: 4.5

LOR: 4.5

CGPA: 9.65

Research: ☒ Yes ☐ No

Predicting...

The screenshot shows the same web browser window, but the URL is now "127.0.0.1:5000/chance/93.18488972635095". The page has a green header with a graduation cap icon and the title. The main content area has a green background and contains a white box with a thumbs-up emoji, the text "You Have Chance", "The model has predicted that you have 93.18488972635095% chance", and a "Go Back" button.

University Admit Eligibility Predictor

You Have Chance

The model has predicted that you have 93.18488972635095% chance

Go Back

University Admit Eligibility Predictor

Enter your details and get probability of your admission

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.

Enter the details

GRE Score: 337

TOFEL Score: 118

University Rating: 4

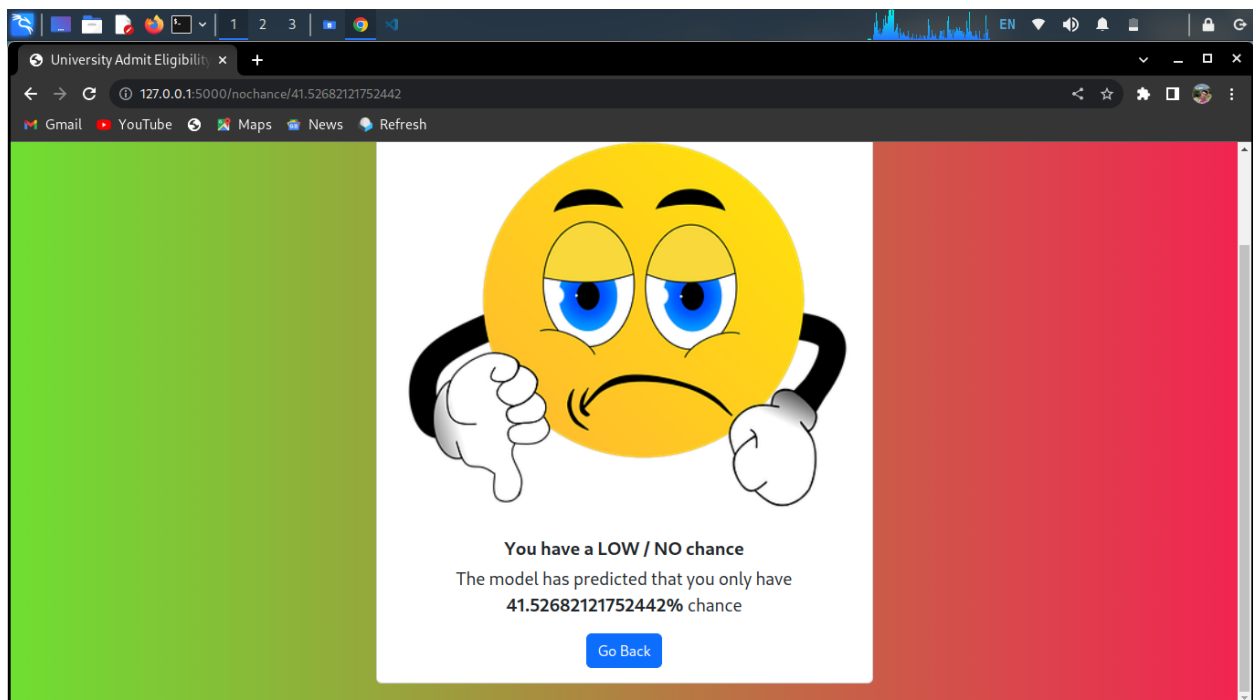
SOP: 4.5

LOR: 4.5

CGPA: 9.65

Research: ☒ Yes ☐ No

Predicting...



GitHub Link:

<https://github.com/IBM-EPBL/IBM-Project-41476-1660642394.git>

Project Demo Link:



<https://youtu.be/7qN5p4e2q3g>