

RMK ENGINEERING COLLEGE



(An Autonomous Institution)

**R.S.M. Nagar, Kavaraipettai-601 206, Gummidipoondi Taluk,
Thiruvallur District.**

PROJECT

University Admit Eligibility Predictor

DONE BY

TEAM ID: PNT2022TMID15683

HARSHINI NAIDU (111719104053)

EKSHITHA B (111719104016)

SAI SRAVANYA B (111719104020)

HIMA BINDU CH (111719104034)

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 Feature 1
 - 7.2 Feature 2
 - 7.3 Database Schema (if Applicable)
- 8. TESTING**
 - 8.1 Test Cases
 - 8.2 User Acceptance Testing
- 9. RESULTS**
 - 9.1 Performance Metrics
- 10. ADVANTAGES & DISADVANTAGES**
- 11. CONCLUSION**
- 12. FUTURE SCOPE**
- 13. APPENDIX**
 - Source Code

PROJECT REPORT

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 to 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

To provide a solution to the students who are in confusion to select the universities for Higher Studies. Our website incorporates an AI Model that was built after considering many leading Machine Learning Algorithms, to provide the most accurate prediction of how much of a chance of admissions does a student's current grades and other academic transcripts allow them in the tier of universities of their choice but also we provide a single platform that documents all the requirements as well as the different tiers of universities.

2.LITERATURE SURVEY

2.1 Existing Problem

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 to a particular university.

2.2 References

Paper 1 - University Admissions Predictor

Publisher -Research Gate

Reference-

https://www.researchgate.net/publication/345391208_University_Admissions_Predictor

Paper 2 - U Graduate Admission Prediction Using Machine Learning Techniques

Publisher - International Journal of Advanced Research in Science, Engineering and Technology

Reference - <http://www.ijarset.com/upload/2021/july/07-mail2vkk-07.PDF>

Paper 3- Product Recommendation using Machine Learning Model

Publisher - Research Gate

Reference -

https://www.researchgate.net/publication/317399986_Product_Recommendation_using_Machine_Learning_Model

Paper 4 - A Review on Data Mining and Machine Learning Methods for Student Scholarship Prediction

Publisher-IEEE

Reference - <https://ieeexplore.ieee.org/document/9418376>

Paper 5-Survey of Pre-processing Techniques for Mining Big Data

Publisher-IEEE

Reference-<https://ieeexplore.ieee.org/document/7944072>

Paper 6-Data Science – Cosmic Info set Mining, Modeling and Visualization

Publisher-IEEE

Reference-<https://ieeexplore.ieee.org/document/8674138>

Paper 7-A University Admission Prediction System using Stacked Ensemble Learning

Publisher-IEEE

Reference-<https://ieeexplore.ieee.org/document/9213205>

Paper 8-Multi Disease Prediction Model by using Machine Learning and Flask API

Publisher-IEEE

Reference-<https://ieeexplore.ieee.org/document/9137896>

2.3 Problem Statement Definition

The problem statement is to design a college prediction/ prediction system and to provide a probabilistic insight into college administration for overall rating, cut-offs of the colleges, admission intake and preferences of students.

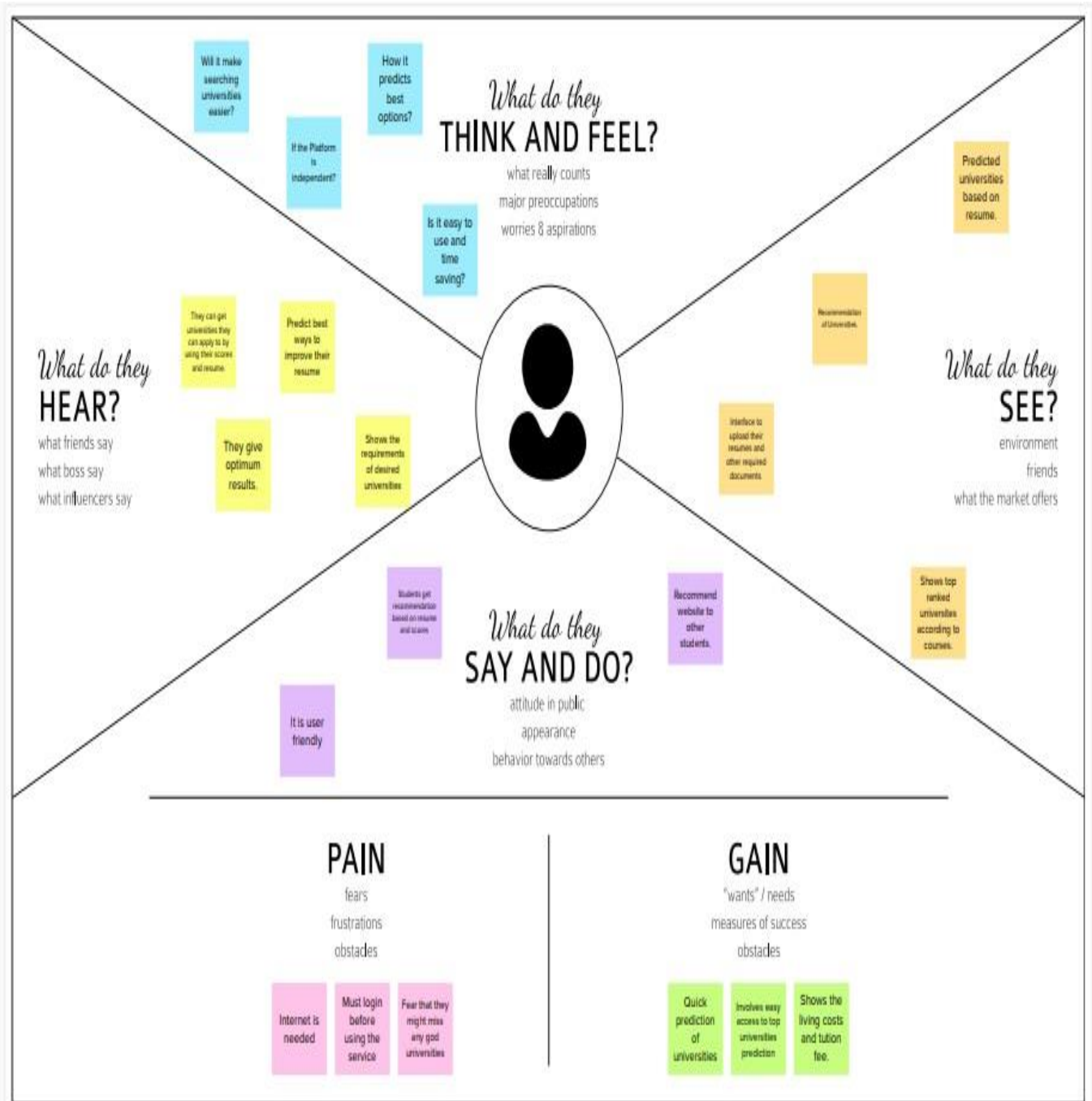
It has always been a troublesome process for students in finding the perfect university and course for their further studies.

At times they do know which stream they want to get into, but it is not easy for them to find colleges based on their academic marks and other performances.

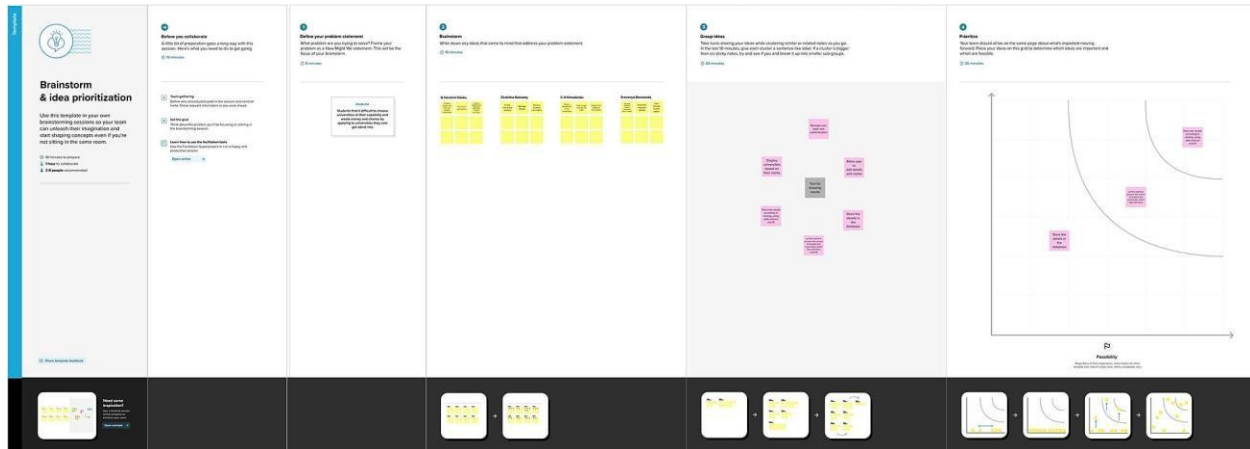
We aim to develop and provide a place which would give a probabilistic output of how likely it is to get into a university given their details.

3.IDEATION AND PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming



3.3 Proposed Solution

1. Problem Statement (Problem to be solved)

Students find it difficult to

- Find universities to study abroad.
- Choose universities they can afford.
- Choose universities which are top in field of interest.
- Know the chances of getting admitted into universities of their choice.
- Find guidance to crack universities of their aim.

2. Idea / Solution description

We provide a solution to that problem. Our website incorporates an AI Model that was built after considering many leading Machine Learning Algorithms, to provide the most accurate prediction of how much of a chance of admissions does a student's current grades and other academic transcripts allow them in the tier of universities of their choice but also we provide a single platform that documents all the requirements as well as the different tiers of universities.

3. Novelty / Uniqueness

- Web application that allows users to enter their academic data
- Integration of email alerting system
- Add filters to search needed information about colleges
- A search tool that can predict universities
- Display final results to the student

- Categorisation and disclosure of living expenses

4.Social Impact / Customer Satisfaction

- This system is needed so as to answer the queries of students in a compete and concise manner as well as to provide them an as accurate as possible analysis of their chances of admissions to their dream universities.

- Users can have a detailed list of all universities.

5.Business Model (Revenue Model)

- The application can be used in by every aspiring student where the significance of knowing their best choice is understood to be important there by serving as a good business model.

6.Scalability of the Solution

- The application can be scaled around every earning individual who wants to study abroad.

- Also, scalability can extend around people working especially in consultancy sectors who pay higher grade of taxes.

3.4 Problem Solution fit

Problem-Solution fit canvas 2.0 Purpose/Vision

<p>1.CUSTOMER SEGMENT(S)</p> <p>Students,Parents,Working professionals wishing to study abroad</p>	<p>6.CUSTOMER CONSTRAINTS</p> <p>Customers want to shortlist universities to pursue their Higher studies.There are various factors which comes into play while doing so.Some want to shortlist based on the top ranking universities,while some want affordable universities,while some want to go to universities that offer greatest scholarships,while some want to know universities that they can get admitted into.These are all various factors customer sees while choosing a university which involves a lot of researching that they have to do all by themselves.</p>	<p>5.AVAILABLE SOLUTIONS</p> <p>This work provides a solution to that problem.Our website incorporates an AI Model that was built after considering many leading Machine Learning Algorithms, to provide the most accurate prediction of how much of a chance of admissions does a student's current grades and other academic transcripts allow them in the tier of universities of their choice but also we provide a single platform that documents all the requirements as well as the different tiers of universities. They can see their desired universities with filters of their choice weather scholarships or tuition fees or university ranks etc.</p>
<p>2.JOBS-TO-BE-DONE / PROBLEMS</p> <ul style="list-style-type: none"> • Web application that allows users to enter their academic data • Integration of email alerting system • Add filters to search needed information about colleges • A search tool that can predict universities • Display final results to the student • Categorisation and disclosure of living expenses 	<p>9.PROBLEM ROOT CAUSE</p> <p>Problem is to design a best AI machine which accurately predicts the solutions according to the requirements.The model should be carefully built based on various machine learning algorithms and data science techniques to process the data.</p>	<p>7.BEHAVIOUR</p> <p>Understand this decision-making process, the study attempts to show accurate behaviours using a existing model based on available resources, prevailing socio-economic conditions and personal aspects of users.</p> <p>This research work needed so as to answer the queries of students in a compete and concise manner as well as to provide them an as accurate as possible analysis of their chances of admissions to their dream universities</p>

<p>Identify strong segments</p>	<p>3. TRIGGERS</p> <p>Students find it difficult to Find universities to study abroad. Choose universities they can afford. Choose universities which are top in field of interest. Know the chances of getting admitted into universities of their choice. Find guidance to crack universities of their aim.</p> <p>4. EMOTIONS: BEFORE /AFTER</p> <p>Without a single platform it takes a lot of time and effort to search information about each and every university so users will feel sad, angry , depleted and tensed. After having a one stop solution here they will take around mins to get the answers of their queries.</p>	<p>10. YOUR SOLUTION</p> <p>A solution ,Our website incorporates an AI Model that was built after considering many leading Machine Learning Algorithms, to provide the most accurate prediction of how much of a chance of admissions does a student's current grades and other academic transcripts allow them in the tier of universities of their choice but also we provide a single platform that documents all the requirements as well as the different tiers of universities.</p>	<p>8. CHANNELS of BEHAVIOURS</p> <p>8.1 ONLINE</p> <p>Online portal for making recommendations of universities considering various parameters using Machine Learning.</p> <p>8.2 OFFLINE</p> <p>Tie up with consultancies to use our tool to best advice their students who don't have exposure to our website.</p>	<p>Extra touch of fine details</p>
---------------------------------	---	--	--	------------------------------------



Problem-Solution canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 license Created by Datta Narendran / Amal Kumar



4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement(Epic)	Sub Requirement(Story/Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Requirements	All the needed files are been asked to feed in the website. Based on the uploads, the system would collect all the necessary information. The information includes the list of all the possible universities and streams.
FR-4	User Details	Has to feed some documents Score Sheets Letter of Recommendation (LOR) Statement of Purpose (SOP) Curriculum Vitae (CV)

4.2 Non-Functional requirements

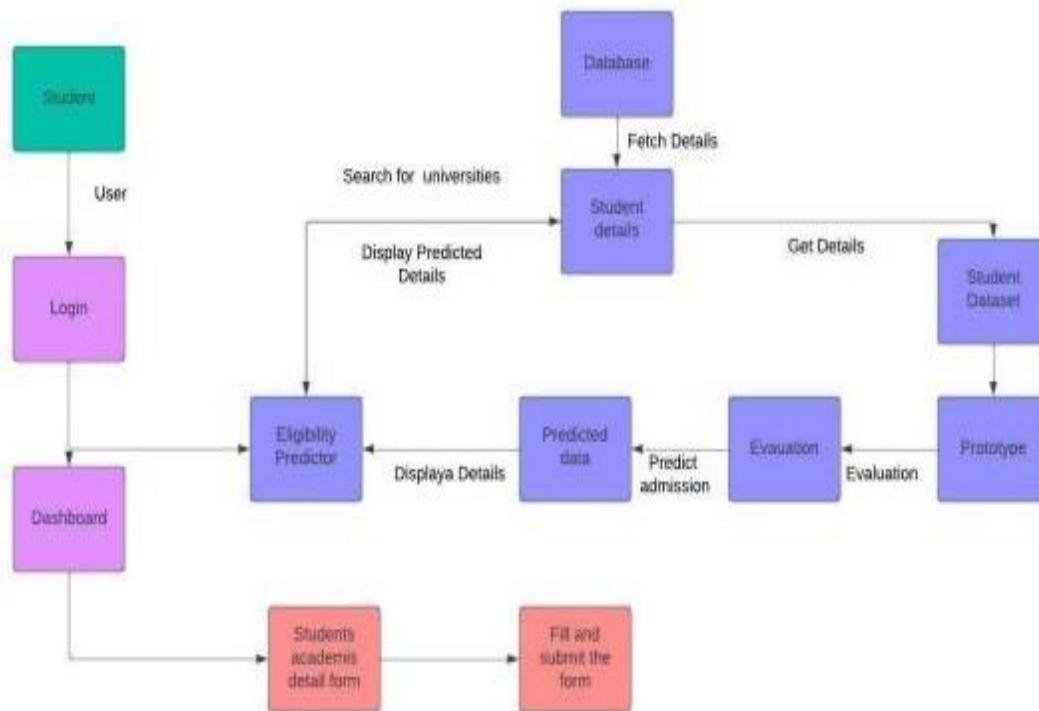
Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Our website is very user friendly. There is no need for any technical skill in order to access our website. The page would not take a lot of time to load the content.
NFR-2	Security	The user who is having the valid credentials can able to access our site. Under any error, the system should be able to come back to regular operation in under an hour
NFR-3	Reliability	The user who is having the valid credentials can able to access our site. Under any error, the system should be able to come back to regular operation in under an hour
NFR-4	Performance	User can able to access in our website with internet connection. Traffics can be handled effectively.
NFR-5	Availability	Fast and efficient. Students can access our website from any of the available browser.
NFR-6	Scalability	a sizable number of users be able to access the system at the same time. It must therefore be able to manage numerous concurrent users.

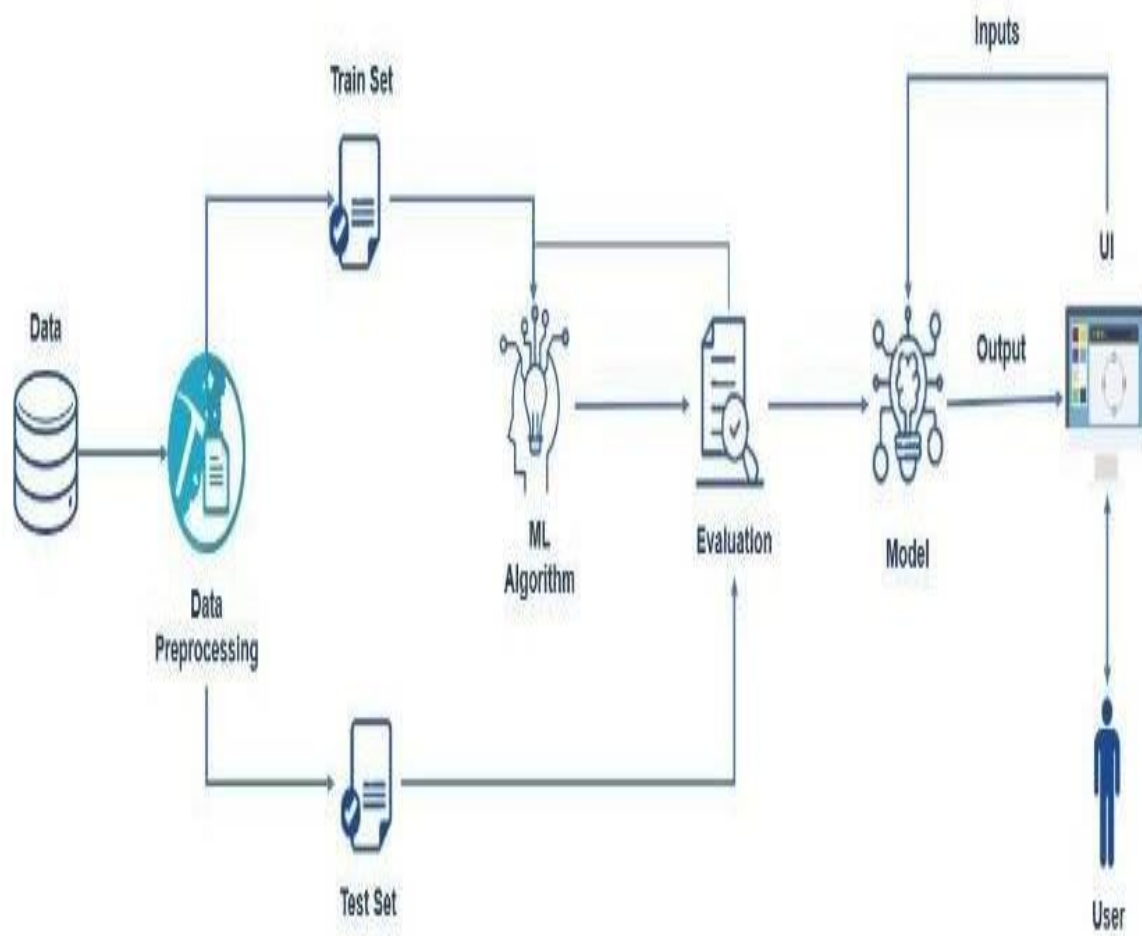
5. PROJECT DESIGN

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



5.3 User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story /Task	Acceptance criteria	Priority	Release
Customer (web user)	Login	USN-1	As a user, I can login and enter the dashboard	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, If i did not have a login first i sign up and then i can access the features.	I can receive mail for confirmation when i sign up and once login i can access the website	High	Sprint-1
	Dashboard	USN-3	I can view the list of university	I can view the available university details	High	Sprint-1
		USN-4	I can search for a particular university	I can view the details of the particular university	Medium	Sprint-2
		USN-5	I can access the academic details form	I can enter the academic details and submit the form	High	Sprint-2
	Prediction	USN-6	I can see the eligibility of the particular university which i like to join	with the help of dataset it shows the predicted result	High	Sprint-3
		USN-7	I can see the eligible universities based on my academic scores	Shows the list of universities which is based on my academic scores	High	Sprint-3
		USN-8	I can apply for the particular university i want.	I can apply for the university through the provided link	High	Sprint-3

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	Login	USN-1	As a user, I can log into the application by entering email & password	3	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Ekshitha Balisetty

Sprint-1	Saving data to database	USN-2	The data will be stored to database	3	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Ekshitha Balisetty
Sprint-2	Rate the university	USN-3	As a user, I will be able to enter the rating of university of my requirement	5	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Ekshitha Balisetty
Sprint-2	Rate the SOPs,LORs	USN-4	As a user, I will be able to enter the rating of my SOPs and LORs	2	Medium	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha
Sprint-2	Enter the scores of Exams GRE,TOEFL	USN-5	As a user, I will be able to enter the scores	2	Medium	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha
Sprint-3	Creating the model	USN-6	An admin,will be creating the Model to predict the yes or no chances	3	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha
Sprint-3	prediction	USN-7	As a admin, I can test the trained machine learning model by analysing the user details by machine learning algorithms like logistic regression	3	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya
Sprint-4	Chance of getting into univeristies	USN-8	As a admin, The model is created to show if the chances are present or not.	2	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha
Sprint-4	Output	USN-9	As a admin, I can upload the confirmation of user for the prediction into the database.	3	High	CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha
Sprint-4	Displaying the results	USN-10	The user will be able to see if his chances are positive or negative	5	High	G Harshini Naidu CH Himabindu Bezawada Sai Sravanya Balisetty Ekshitha

6.2 Sprint Delivery Schedule

Project Tracker	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

7. CODING & SOLUTIONING

7.1 Feature 1

User should enter their GRE Score, TOFEL Score, University Rating, SOP, and the rating of LOR and the CGPA of their Academics. In addition to this one should also enter whether they have published any Research Paper or not. By filling all these details the user can know whether he or she is eligible for the application or not. By analyzing all the given details the application predicts the chance of getting admitted to the universities.

Index.html

```
<!DOCTYPEhtml>
<htmllang="en">
<head>
  <metacharset="UTF-8">
  <metahttp-equiv="X-UA-Compatible"content="IE=edge">
  <metaname="viewport"content="width=device-width, initial-scale=1.0">
  <metaname="viewport"content="width=device-width, initial-scale=1, maximum-
scale=1, user-scalable=no">

<linkrel="stylesheet"type="text/css"rel="noopener"target="_blank"href="../static/
css/styles.css">

<linkhref="https://cdn.jsdelivrivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.cs
s"rel="stylesheet"integrity="sha384-
```

```
Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeu0xjzrPF/et3URy9Bv1WTRi"crossorigin="ano  
nymous">  
    <scripttype="text/javascript"src="../static/js/script.js"async></script>  
    <title>University Admit Eligibility Predictor</title>  
</head>  
<body>  
    <navclass="navbar navbar-expand-lg bg-light">  
        <divclass="container-fluid">  
            <aclass="navbar-brand text-responsive-h" href="/">  
  
                <imgsrc="..\static\image\hat1.png"alt="Logo"width="30"height="24"class="d-inline-  
block align-text-top ">  
                University Admit Eligibility Predictor  
            </a>  
        </div>  
    </nav>  
    {% block body %}  
    <h1> Index Page </h1>  
    {% endblock %}  
  
<scriptsrc="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/js/bootstrap.bundle  
.min.js"integrity="sha384-  
OERcA2EqjJCMA+/3y+gxIOqMEjwtxJY7qPCqsdltbNJua0e923+mo//f6V8Qbsw3"crossorigin="ano  
nymous"></script>  
</body>  
</html>
```

University Admit Eligibility Predictor

Enter your details and get probability of your admission

Bored of your comfort zone and want to try something new?

Studying in other countries opens possibilities all around the world and helps expand your horizon

Want to advance your career by studying abroad?

And know the chances of getting into top notch universities?

Try our Eligibility predictor tool and know the chances!

Enter the details

GRE Score:

TOFEL Score:

University Rating:

SOP:

LOR:

CGPA:

Research:

☐ Yes
 ☒ No

Predict

Demo2.html

```
{% extends 'index.html' %}
{% block body %}
    <divclass="p-4">
        <divclass="row mb-3">
            <divclass="col-4">
                <h2 class="text-responsive-h">
                    Enter your details and get probability of your admission
                </h2>
                <p class="text-responsive">
                    Bored of your comfort zone and want to try something new?<br>
                    Studying in other countries opens possibilities all around
                    the world and helps expand your horizon<br>
                    Want to advance your career by studying abroad?<br>
                    And know the chances of getting into top notch universities?<br>
                    Try our Eligibility predictor tool and know the chances!<br>
                </p>
                <divclass="d-flex justify-content-right">
                    <imgsrc="../static/image/yesno.jpg"class="card-img-
top"alt="...">

```

```

        </div>
    </div>
    <divclass="col-8">
        <divclass="card p-2 ms-2 my-2">
            <divclass="card-body">
                <h5class="card-title pb-4">
                    Enter the details
                </h5>
                <formaction="/"method="post" id="theForm">
                    <divclass="row mb-3">
                        <labelfor="gre"class="col-lg-2 col-form-
label">GRE Score:</label>
                        <divclass="col-lg-10">
                            <inputtype="number"class="form-
control" id="gre" name="gre" min="250" max="340" required>
                        </div>
                    </div>
                    <divclass="row mb-3">
                        <labelfor="tofel"class="col-lg-2 col-form-
label">TOFEL Score:</label>
                        <divclass="col-lg-10">
                            <inputtype="number"class="form-
control" id="tofel" name="tofel" min="50" max="120" required>
                        </div>
                    </div>
                    <divclass="row mb-3">
                        <labelfor="university_rating"class="col-lg-2 col-
form-label">University Rating:</label>
                        <divclass="col-lg-10">
                            <inputtype="number"class="form-
control" id="university_rating" step="0.01" name="university_rating" min="1" max="5" re
quired>
                        </div>
                    </div>
                    <divclass="row mb-3">
                        <labelfor="sop"class="col-lg-2 col-form-
label">SOP:</label>
                        <divclass="col-lg-10">
                            <inputtype="number"class="form-
control" id="sop" name="sop" step="0.01" min="1" max="5" required>

```

```

        </div>
    </div>
    <divclass="row mb-3">
        <labelfor="lor"class="col-lg-2 col-form-
label">LOR:</label>
        <divclass="col-lg-10">
            <inputtype="number"class="form-
control"id="lor"name="lor"step="0.01"min="1"max="5"required>
        </div>
    </div>
    <divclass="row mb-3">
        <labelfor="cgpa"class="col-lg-2 col-form-
label">CGPA:</label>
        <divclass="col-lg-10">
            <inputtype="number"class="form-
control"id="cgpa"name="cgpa"step="0.01"min="5"max="10"required>
        </div>
    </div>
    <fieldsetclass="row mb-3">
        <legendclass="col-form-label col-sm-2 pt-
0">Research:</legend>
        <divclass="col-sm-10">
            <divclass="form-check">
                <inputclass="form-check-
input"type="radio"name="yes_no_radio"id="gridRadios1"value="1">
                <labelclass="form-check-
label"for="yes_no_radio">
                    Yes
                </label>
            </div>
            <divclass="form-check">
                <inputclass="form-check-
input"type="radio"name="yes_no_radio"id="gridRadios2"value="0"checked>
                <labelclass="form-check-
label"for="yes_no_radio">
                    No
                </label>
            </div>
        </div>
    </fieldset>

```

```

        <divclass="row lg-3">
            <divclass="col-lg-2 mb-2 me-3">
                <buttontype="submit"class="btn btn-primary"
id="button">Predict</button>
            </div>
            <!-- <div class="col-lg-2" id="spinner">
                <div class="spinner-border text-primary m-1"
role="status">
                    <span class="visually-
hidden">Loading...</span>
                </div>
                <div class="spinner-grow text-primary m-1"
role="status">
                    <span class="visually-
hidden">Loading...</span>
                </div>
            </div>-->
        </form>
    </div>
</div>
</div>
</div>
</div>
</div>
{% endblock %}

```


University Admit Eligibility Predictor

Enter your details and get probability of your admission

Bored of your comfort zone and want to try something new?

Studying in other countries opens possibilities all around the world and helps expand your horizon

Want to advance your career by studying abroad? And know the chances of getting into top notch universities?

Try our Eligibility predictor tool and know the chances!

Enter the details

GRE Score:	<input type="text" value="300"/>
TOFEL Score:	<input type="text" value="100"/>
University Rating:	<input type="text" value="3"/>
SOP:	<input type="text" value="4"/>
LOR:	<input type="text" value="4"/>
CGPA:	<input type="text" value="9"/>
Research:	<input checked="" type="radio"/> Yes <input type="radio"/> No

Predict

Chance.html

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

{% block body %}

<divclass="container text-center p-4">
  <divclass="d-flex justify-content-center">

    <divclass="card"style="width: 34rem;">
      <imgsrc="..\static\image\chance.png"class="card-img-top"alt="...">
      <divclass="card-body">
        <h5 class="card-title">You Have Chance</h5>
        <p class="card-text">The model has predicted that you have
chance</p>
      </div>
    </div>
  </div>
</div>
```

```
        <a href="/home"class="btn btn-primary">Go Back</a>
    </div>
</div>
</div>
</div>

{% endblock %}
```

🎓 University Admit Eligibility Predictor

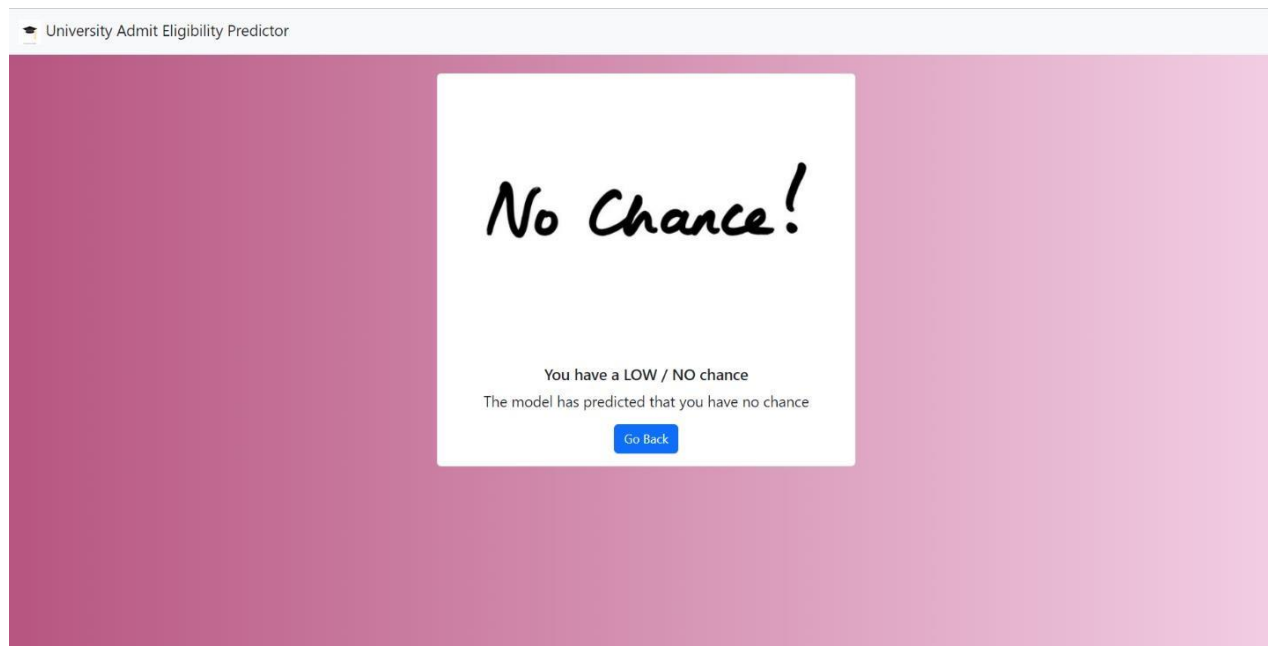


Nochance.html

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

<divclass="container text-center p-4">
  <divclass="d-flex justify-content-center">
    <divclass="card"style="width: 34rem;">
      <imgsrc="..\static\image\Nochance.jpg"class="card-img-top"alt="...">
      <divclass="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 %}
```



Style.css

```
img {  
  max-width: auto;  
  height: auto;  
}  
  
.text-responsive {  
  font-size: calc(50% + 0.6vw + 0.6vh);  
}
```

```
.text-responsive-h {  
  font-size: calc(80% + 0.6vw + 0.6vh);  
}  
Footer
```

Script.js

```
const button = document.getElementById('button');  
const theForm = document.getElementById('theForm');  
const loading = document.getElementById('spinner');  
  
const disableButton = () => {  
  console.log('Submitting form...');  
  button.disabled = true;  
  button.className = "btn btn-outline-primary";  
  button.innerHTML = "Predicting..."  
  loading.style.display = "block"  
};  
  
const enableButton = () => {  
  console.log('Loading window...');  
  button.disabled = false;  
  button.className = "btn btn-primary"  
  button.innerHTML = "Predict"  
  loading.style.display = "none"  
}  
  
theForm.onsubmit = disableButton;  
  
window.onload = enableButton;
```

8. TESTING

8.1 Test Cases

1					Date	12-Nov-22	
2					Team ID	PNT2022TMID15683	
3					Project Name	Project - University Admit Eligibility	
4					Maximum Marks	4 marks	
5	Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Expected Result
6	DataCollection_TC_OO1	Functional	Dataset	Collect all the necessary datasets for the project	Dataset	1. Collect Dataset required for the project.	Downloaded all necessary dataset
7	DataPreprocessing_TC_OO1	Functional	DataGenerator	Collect all insights from the dataset	Dataset	1. Data Processing 2. Collect Information from the Data	Collected information from the dataset
8	CloudModelBuilding_TC_OO1	Functional	Deep Learning Model	To Train the model with train data	Model Building	1. Fit the train data to the model 2. Calculate the accuracy	Accuracy over 85%
9	ModelTesting_TC_OO1	Functional	Deep Learning Model	To Test the Model with the Test Data	Model Testing	1. Fit the test data to the model 2. Calculate the accuracy	Accuracy over 85%
10	ModelFitting_TC_OO1	Functional	Model Fitting	Verify whether the data pipeline is correct and Model is fitted without any errors	Model Compiling	Compile the model, Run the code for Fitting the model, Check for errors	No errors during Model Fitting
11	ModelBuilding_TC_OO1	Functional	Deep Learning Model	Verify whether the model gives accurate Training and Validation results for inputs data	Image Preprocessing	1. Data Processing 2. Compile the Model	Training accuracy of over 85%

1	Date	12-Nov-22									
2	Team ID	PNT2022TMID15683									
3	Project Name	Project - University Admit Eligibility									
4	Maximum Marks	4 marks									
5	Pre-Requisite	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By	
6	Dataset	1. Collect Dataset required for the project.	Images from dataset	Downloaded all necessary dataset	Working as expected	Pass	nil	Y	nil	EKSHITHA BALISETTY	
7	Dataset	1. Data Processing 2. Collect Information from the Data	Images from dataset	Collected information from the dataset	Working as expected	Pass	nil	Y	nil	G HARSHINI NAIDU	
8	Model Building	1. Fit the train data to the model 2. Calculate the accuracy	Train Data	Accuracy over 85%	Working as expected	Pass	nil	Y	nil	SRAVANYA BEZAWADA	
9	Model Testing	1. Fit the test data to the model 2. Calculate the accuracy	TestData	Accuracy over 85%	Working as expected	Pass	nil	Y	nil	C H HIMABINDU	
10	Model Compiling	Compile the model, Run the code for Fitting the model, Check for errors	Data from Dataset	No errors during Model Fitting	Working as expected	Pass	nil	Y	nil	G HARSHINI NAIDU	
11	Image Preprocessing	1. Data Processing 2. Compile the Model	Data from Dataset	Training accuracy of over 85%	Working as expected	Pass	nil	Y	nil	G HARSHINI NAIDU	

8.2 User Acceptance Testing

S. No	Test Cases	Yes/ No
1.	Responds in manually drafted rules	yes
2.	Manages multiple users	yes
3.	Users can enter details	yes
4.	Run the Test cases	yes
5.	Learns from real interactions	no
6.	Training via historical data	no
7.	Has decision-making skills	no

9. RESULTS

9.1 Performance Metrics

10. ADVANTAGES

1. No queueing in responses
2. Latest data and requirements are updated
3. Updated to the latest details
4. Easy to enter data and get results

DISADVANTAGES

- Data cleaning is more challenging
- Frequent Updating
- Miscalculation of data
- Limited entry resources
- Technology and Hacking

11. CONCLUSION

This work provides a solution to that problem. Our website incorporates an AI Model that was built after considering many leading Machine Learning Algorithms, to provide the most accurate prediction of how much of a chance of admissions does a student's current grades and other academic transcripts allow them in the tier of universities of their choice but also we provide a single platform that documents all the requirements as well as the different tiers of universities. They can see their desired universities with filters of their choice whether scholarships or tuition fees or university ranks etc.

12. FUTURE SCOPE

1. The model can be improved as we gain more data about students
2. User can save data of history
3. Data cleaning techniques developed at the data collection
4. To improve the prediction accuracy. An alternative is to use Natural Language Processing methods to evaluate the essays and letters.

13. APPENDIX

Source code:

```

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 = "poJ22ua6BCG9qY33B8fkgnz1bnP1f9DZqULF9NkBM1bZ"
        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/28aea4f7-0bec-4310-82bf-06e502d2cd4d/predictions?version=2022-11-03'

```

Git Hub: <https://github.com/IBM-EPBL/IBM-Project-25308-1659958135>

Demo link: https://drive.google.com/file/d/1pTB9gfwsM_-bBECM1VK6KQ5duc-D0xbv/view?usp=sharing