

Project Report Format

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 (Explain the features added in the project along with code)**
 - 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
 - GitHub & Project Demo Link

1. INTRODUCTION:

1.1 PROJECT OVERVIEW:

In this project, we were asked to experiment with a real-world dataset, and to explore how machine learning algorithms can be used to find the patterns in data. This project helps the users to know about the career possibilities just by entering the required details such as marks and career option. The primary purpose is to discuss the prediction of student admission to university based on numerous factors and using logistic regression.

Many prospective students apply for university. The admission decision depends on criteria within the particular college or degree program. The independent variables in this study will be measured statistically to predict graduate school admission. Exploration and data analysis, if successful, would allow predictive models to allow better prioritization of the applicants screening process to university which in turn provides the admission to the right candidates.

1.2 PURPOSE:

As a commodity, a used car not only has its attributes that will affect the price, but also some external factors will also affect the value of the used car. Factors affecting the value of used cars should be fully considered, as well as the availability of indicator data. This paper will analyze the factors of the vehicle itself and the market and analyze the factors that affect the price of used cars in combination with the parameters of used cars, vehicle condition factors, and transaction factors.

2. LITERATURE SURVEY:

YEAR	AUTHORS	OBJECTIVES	METHODOLOGY	LIMITATIONS
2017	Mr.Pierpaolo dondio	The principle objective of the research is to help the students who are aspiring to pursue their education in the USA. The SAP system will help them to evaluate the chances of the success in the particular university without being depended on any education consultancy firm. It will help them in saving a huge amount of time and money spent in the application process .	Cross industry standard process (CRISP) Methodology (Azevdo 2008) was followed in the research. Business understanding , data understanding , data preparation , modelling , evaluation and deployment .	Student admission predictor system will only take into consideration the data related to the Indian students pursuing masters in computer science from universities in the USA.

2020	Mr. Jubail	<p>Earlier student performance prediction can help universities to provide timely action , like planning for appropriate training to improve students success gate .</p> <p>Exploring educational data can certainly help in achieving the desired educational goals. (By applying EDM Techniques it is possible to develop prediction models to improve</p>	<p>Earlier student performance prediction can help decision makers to provide needed actions at the right movement, and to planning the appropriate training order to improve the student rate several studies have been published in using data mining methods to predict students academic success. One can observe several levels targeted.</p> <p>~Degree Level</p> <p>~Year Level</p> <p>~Course Level</p> <p>~Exam Level</p> <p>In this study literature related to the exam level is excluded as the outcome of a single</p>	<p>Despite the many dedicated softwares this is still not a straight forward process, involving many directions .</p>
------	------------	--	---	---

		student success), However using data mining techniques can be daunting and challenging for non-technical person.	exam does not necessarily imply a negative outcome.	
2021	Nasteski . V	The data analysis provides key insides to the applications about the importance of various parameters in the admission process and the weightage. The machine learning modules helps the user to get real time prediction based on different models for their profiles . This helps them to know their chances of getting admit from various universities . The project also helps the applicants to shortlist universities based on their profile.	~Importing modules ~Loading the data ~Summarizing data ~Data science - Outlier detection - Getting the correlated features - Exploratory data analysis ~Standardization ~Machine learning - Preparing ,Training , Testing data - study various regression/ classification / regressor models - Deploying and testing models ~Shortlisting universities based on various users detail criteria ~Testing the system in real time	As of now ,the highest accuracy achieved in the prediction modelling is approximately 78%. However , it should be high as possible in order to get better predictor results. The data set is small with just 500 column of data for better supervised learning , it is desired to have a large data in order to improve accuracy .

2.1 EXISTING PROBLEM:

As a commodity, a used car not only has its attributes that will affect the price, but also some external factors will also affect the value of the used car. Factors affecting the value of used cars should be fully considered, as well as the availability of indicator data. This paper will analyze the factors of the vehicle itself and the market and analyze the factors that affect the price of used cars in combination with the parameters of used cars, vehicle condition factors, and transaction factors.

.

2.2 REFERENCES:

1. M. Fowler, Refactoring: improving the design of existing code. Pearson Education India, 1999.
2. M. Zhang, T. Hall, and N. Baddoo, "Code bad smells: a review of current knowledge," Journal of Software Maintenance and Evolution: research and practice, vol. 23, no. 3, pp. 179– 202, 2011.
3. M. Kessentini, R. Mahaouachi, and K. Ghedira, "What you like in design use to correct bad-smells," Software Quality Journal, vol. 21, no. 4, pp. 551–571, 2013.
4. D. Rattan, R. Bhatia, and M. Singh, "Software clone detection: A systematic review," Information and Software Technology, vol. 55, no. 7, pp. 1165–1199, 2013.

5. N. Moha, Y.-G. Gueh´eneuc, A.-F. Le Meur, and L. Duchien, “A domain analysis to specify ´ design defects and generate detection algorithms,” in *Fundamental Approaches to Software Engineering*. Springer, 2008, pp. 276–291.
6. A. Yamashita and L. Moonen, “To what extent can maintenance problems be predicted by code smell detection?—an empirical study,” *Information and Software Technology*, vol. 55, no. 12, pp. 2223–2242, 2013.
7. J. Kreimer, “Adaptive detection of design flaws,” *Electronic Notes in Theoretical Computer Science*, vol. 141, no. 4, pp. 117–136, 2005.
8. M. V. Mantyl¨a and C. Lassenius, “Subjective evaluation of software evolvability using code ¨ smells: An empirical study,” *Empirical Software Engineering*, vol. 11, no. 3, pp. 395–431, 2006.
9. E. Murphy-Hill and A. P. Black, “An interactive ambient visualization for code smells,” in *Proceedings of the 5th international symposium on Software visualization*. ACM, 2010, pp. 5–14.
10. C.-T. Chen, Y. C. Cheng, C.-Y. Hsieh, and I.-L. Wu, “Exception handling refactorings: Directed by goals and driven by bug fixing,” *Journal of Systems and Software*, vol. 82, no. 2, pp. 333–345, 2009.

2.3 PROBLEM SOLUTION:

This is a Requirements Specification Document for a new Data science-based University Admit Eligibility Predictor . It is an AI based application that asks for the users to input their academic transcripts data and calculates their chances of admission into the University Tier that they selected. It also provides an analysis of the data and shows how chances of admissions can depend on various factors. This document describes the scope, objectives and goals of the system. In addition to describing the non-functional requirements.

Project Name: University Admit Eligibility Predictor

Development Platform: Jupyter Notebook and Anaconda application

In the current world scenario, it is not enough for a student to just have an Under Graduate degree. Most employers now look for higher qualifications in their new recruits. As a result, the demands for a good higher education are at an all time high. A lot of students prefer to continue their higher education.

In order to get admitted to these universities, a set of academic requirements are needed. However, because of the sheer number of universities of different levels, students are often stuck in a dilemma till the very last minute as to whether or not their applications will be accepted or not as no concrete documentation is available which lists the requirements.

Our 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.

The scope of this project is to allow the users to enter their academic data and get predictions of their chances of admissions in the university tier of their choosing.

Students- The people who will benefit the most from using this system are Indian students.

Administrators- The administrator shall be able to access all the data stored in the application.

The system will be available to all users from any location as long as they have an Internet connection. The administrator can also access the website from any location as long as he has the correct login credentials and access to the Internet.

Overview of Document

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

The system is built on a limited data set, this could affect the accuracy of the predictions as a whole.

The system cannot guarantee that our predictions will be a 100% guarantee of admissions because a lot of other factors such as the Personal Interview also plays a major role in the admissions procedure.

Other factors such as changes in policies by the university or by the college can also affect chances of admissions in a way that is beyond the scope of this project.

3. IDEATION & PROPOSED SOLUTION:

3.1 Empathy Map Canvas



[illegible]

3.3 PROPOSED SOLUTION:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Students often worry about their chances of getting into college. The goal of this project is to help profile shortlisted college students. Predicted results give them a good idea of their likelihood of getting into a particular college. This analysis is also useful for students preparing or planning to prepare for a better image must. It also aims to connect students and universities directly, without intermediaries.
2.	Idea / Solution description	<p>This project aims to calculate the likelihood of admission to a particular graduate school after evaluating a candidate's profile.</p> <p>The main attributes considered in decision making are:</p> <ol style="list-style-type: none">1) GRE & TOEFL Scores2) Undergraduate CGPA3) SOP & LOR4) Corporate Work Experience/Research Experience Extracurricular Activities5) Extra-curriculars <p>Determine Acceptance Rate, Logistic Regression, Multi linear, Use a variety of ML models such as regression, decision trees, and random forests, and use performance metrics such as accuracy score, precision, and retrieval to evaluate which model has the best accuracy.</p>
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• We plan to develop a new hybrid model based on deep learning that is more accurate than existing traditional ML models.• Students often have trouble narrowing down which colleges to apply to.

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • Students often struggle to narrow down which colleges to apply to and wonder if their profile matches the requirements of a particular college. • In addition, the cost of applying to universities is very high, and it is important for students to narrow down their universities based on their profile. • University Admit Eligibility Predictor Systems are very useful in determining the likelihood that a student will be admitted to a particular college. • The system reduces reliance on expensive educational consultancies to analyze candidate profiles and determine which colleges to apply to.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Advertisements of different universities could be placed in the web-app to generate revenue through ads. • In the future, a separate premium plan could be created where the students can directly interact with the professors and alumni of the university through video calls.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Future updates will allow candidates, faculty, students, and alumni to interact and have a chat area where candidates can get their questions answered quickly. • Cloud-based storage (IBM Cloud, AWS, GCP, AZURE) and NoSQL databases (MongoDB, Redis, etc.) to be able to handle large amounts of data (both applicant and university data) in the future.) can use traditional RDBMS storage • Alternatively, if the number of users using your website grows exponentially over time, you can consider distributed big data processing techniques.

3.4 PROBLEM SOLUTION FIT:

PROBLEM – SOLUTION FIT		
1.CUSTOMER SEGMENT(S) Students who have recently completed their school or university education and are seeking admission to a prestigious university	6.CUSTOMER CONSTRAINTS Customers may not trust the accuracy or reliability of the predictors, which can hinder their use.	5.AVAILABLE SOLUTIONS In addition to factors such as grades and GPA, we also consider IELTS/TOFEL, GRE, which play an important role in the admissions process of some colleges by further improving the reliability of predictors.
2.JOBS-TO-BE-DONE Data collection is probably the most important step in designing predictors, so it's important to make sure it's done right	9.PROBLEM ROOTCAUSE Confidence in predictors may be compromised if collected data are found to be inaccurate or if not enough factors are considered to assess suitability	7.BEHAVIOUR The most important aspect of a predictor from the customer's point of view is its accuracy as it is approved based on its results.
3.TRIGGERS User can provide a comparison between desired and actual results	10.YOUR SOLUTION Use collected data to design predictors and ensure their accuracy or reliability. Also, make sure the data you collect from users is secure.	8.CHANNELS OF BEHAVIOUR Customers can find reliable online predictors of eligibility and rate them based on their preferences.
4.EMOTIONS : BEFORE/AFTER Users will feel completely in control of the admissions process because they can trust the predictor with all their heart.		Students discuss such predictors in peer groups and whether they can find them.

4. REQUIREMENT ANALYSIS:

4.1 FUNCTIONAL REQUIREMENTS:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Profile	Complete user profile by providing the Student Academic details.
FR-2	User Search	Search for desired University based on their Academic Performance and eligibility criteria.
FR-3	User Preference	Search for Universities based on their location preference.
FR-4	Result	The list of universities is filtered based on the eligibility of the students where the order of the list will be based on the ratings of the university.

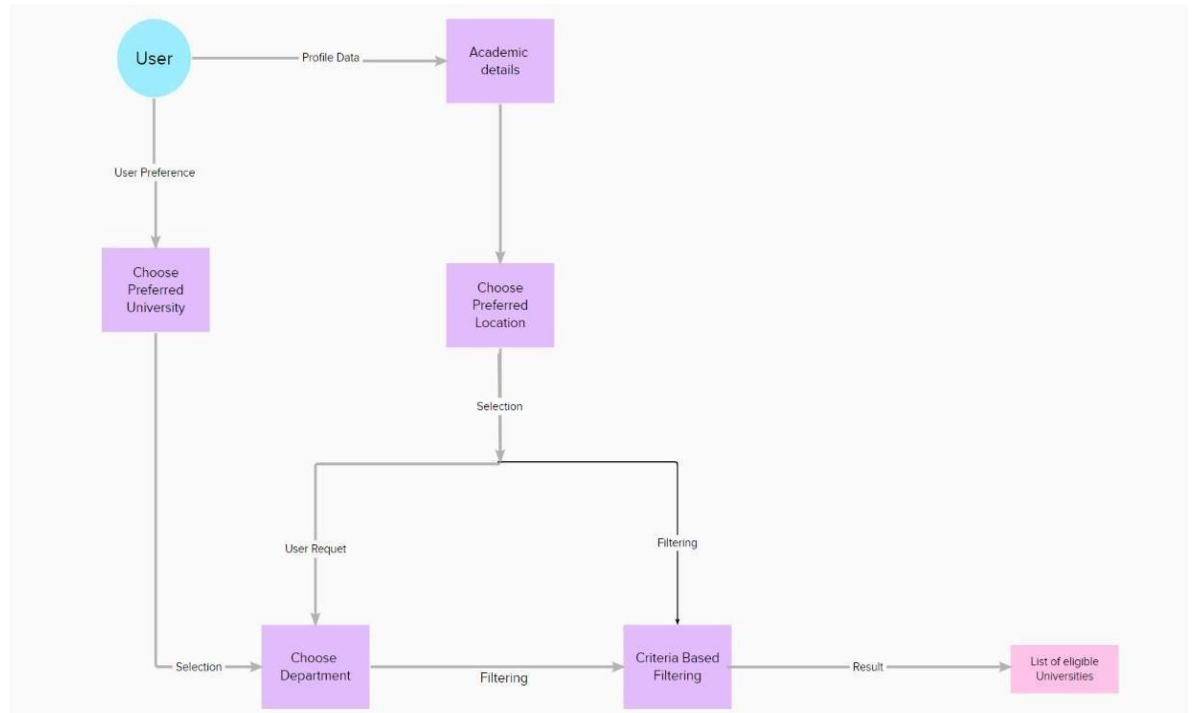
4.2 NON-FUNCTIONAL REQUIREMENTS:

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

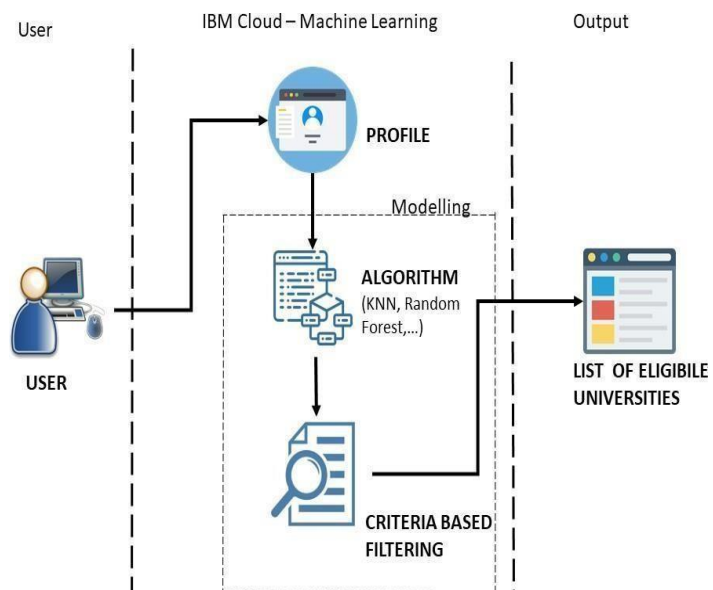
NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	Filters the universities based on the user profile.
NFR-2	Security	User details are secured from unauthorized parties.
NFR-3	Reliability	The users can find universities based on their preferred location and results.
NFR-4	Performance	The website will provide the list of universities within 30 seconds.
NFR-5	Availability	Students across India can access the website anytime and anywhere.
NFR-6	Scalability	The solution will be helpful for the students in India to know the details about universities they are eligible.

5. PROJECT DESIGN:

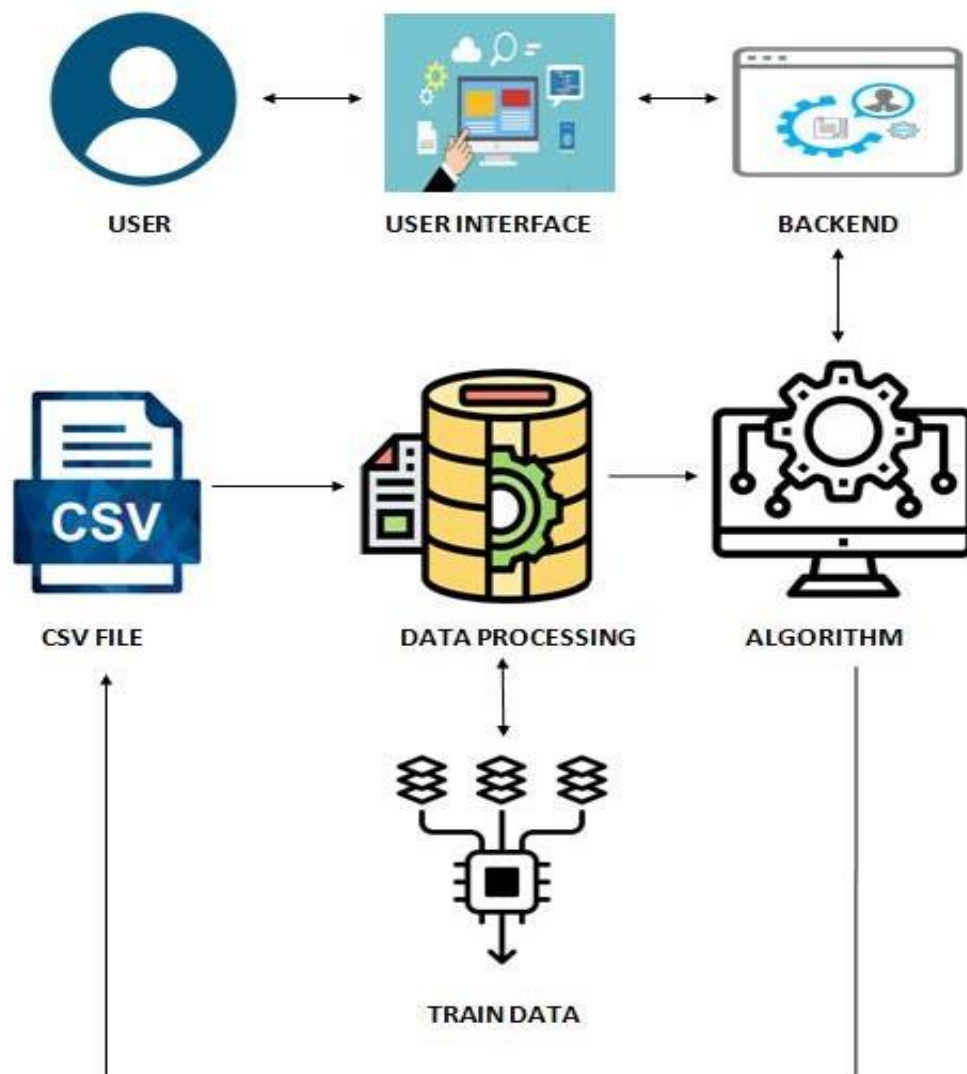
5.1 DATA FLOW DIAGRAM:



5.2 SOLUTION & TECHNICAL ARCHITECTURE:



WORKING ALGORITHM



5.3 USER STORIES:

Journey Steps Which step of the experience are you describing?	Discovery Why do they even start the journey?	Registration Why would they trust us?	Onboarding and First Use How can they feel successful?	Sharing Why would they invite others?
Actions What does the customer do? What information do they look for? What is their context?	Take a Tour To Search for Eligibility Criteria to get Admission In an University	By Clicking on the Help icon The user Completes User Profile Search for Universities	The user enters their Academic Information Enter a Particular Preferred Location in India Search for Desired Universities	To Know the List of Universities they are Eligible To know the details about the Universities in their preferred Locations
Needs and Pains What does the customer want to achieve or avoid? <i>Tips: Reduce ambiguity, e.g. by using the first person narrator.</i>	Help to get Information about the Universities Help to find the eligible University	Help to find relevant information about the Universities Help to find the Location of the University	To know about the Academic details needed Help to navigate through the website To Know about the eligibility criteria for Universities	Help to find the University information Help to know what to do next
Touchpoint What part of the service do they interact with?	Free Registration Information about the University they search	Academic profile section of the website The Location select section of the website The Department select section of the website	The University select section of the website The Link to the Location and University website The filtering section of the website	The share section of the website
Customer Feeling What is the customer feeling? <i>Tips: Use the emoji app to express more emotions</i>				
Backstage				
Opportunities What could we improve or introduce?	To search about the Universities that they are eligible		They come to know about the Universities they are eligible in their preferred location	
Process ownership Who is in the lead on this?	 User	 User	 User	 User and the admin

miro

6. PROJECT PLANNING & SCHEDULING:

6.1 SPRINT DELIVERY PLANNING AND ESTIMATE:

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	17 NOV 2022

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

FEATURE-1 :

```
<!DOCTYPE html>

<html>

<head>

  <meta charset="UTF-8">

  <title>Admission Prediction</title>

  <style>

    .login{

      text-align:center;

      margin:auto;
```

```
width:100%;

}

.button{

border: none;

color:black;

padding:5px;

text-align: center;

text-decoration: none;

display: inline-block;

font-size: 14px;

margin: 4px 2px;

cursor: pointer;

}
```

```
</style>
```

```
</head>
```

```
<body style="background-color:powderblue;">
```

```
<div class="login">
```

```
<h1>University AdmissionPrediction</h1>
```

```
<form action="{ { url_for('y_predict') } }" method="post">
```

```
<label for="gre"><b>ENTER GRE SCORE:</b></label><br>
```

```
<input type="text" name="GRE_score" placeholder="GRE_score" id="gre"
```

```

required="required" /><br><br>

<label for="toefl"><b>ENTER TOEFL SCORE:</b></label><br>

<input type="text" name="TOEFL_score" placeholder="TOEFL_score" id="toefl"
required="required" /><br><br>

<label for="rating"><b>ENTER THE UNIVERSITY RATING:</b></label><br>

<select name="University_rating" id="rating" required="required">

    <option value="">Choose Rating</option>

    <option value=1>1</option>

    <option value=2>2</option>

    <option value=3>3</option>

    <option value=4>4</option>

    <option value=5>5</option>

</select><br><br>

<label for="sop"><b>ENTER SOP:</b></label><br>

<input type="text" name="sop" placeholder="sop" id="sop" required="required"
/><br><br>

<label for="lor"><b>ENTER LOR:</b></label><br>

<input type="text" name="lor" placeholder="lor" id="lor" required="required"
/><br><br>

<label for="gpa"><b>ENTER CGPA:</b></label><br>

<input type="text" name="cgpa" placeholder="cgpa" id="gpa" required="required" />
<br><br>

<label for="research"><b>HAVE YOU DONE ANY RESEARCH:</b></label><br>

<select name="Research" id="research" required="required">

```

<option value="">Research</option>

<option value=1>YES</option>

<option value=0>NO</option>

</select>

<button type="submit" class="button">Predict</button>

</form>

{{prediction_text}}

</div>

</body>

</html>

Feature -2 :

Chances.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="/Users/aaronraja/Desktop/data science projects/University Admit Eligibility
Predictor/untitled folder/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">
```

```
  <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="/">
```

```
 University Admission
Eligibility Prediction System
```

```
</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>
```

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">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>

</div>

{% endblock %}

```

Demo.html :

```

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

<div class="p-4">

    <div class="row mb-3">

        <div class="col-4">

            <h2 class="text-responsive-h">

```

Enter your details and get probability of your admission

</h2>

<p class="text-responsive">

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.

</p>

<div class="d-flex justify-content-right">

</div>

</div>

<div class="col-8">

<div class="card p-2 ms-2 my-2">

<div class="card-body">

<h5 class="card-title pb-4">

Enter the details

</h5>

<form action="/" method="post" id="theForm">

```

<div class="row mb-3">

    <label for="gre" class="col-lg-2 col-form-label">GRE
Score:</label>

    <div class="col-lg-10">

        <input type="number" class="form-control" id="gre"
name="gre" min="250" max="340" placeholder="250 to 340" required>

    </div>

</div>

<div class="row mb-3">

    <label for="tofel" class="col-lg-2 col-form-label">TOFEL
Score:</label>

    <div class="col-lg-10">

        <input type="number" class="form-control" id="tofel"
name="tofel" min="50" max="120" placeholder="50 to 120" required>

    </div>

</div>

<div class="row mb-3">

    <label for="university_rating" class="col-lg-2 col-form-
label">University Rating:</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" placeholder="1 to 5" required>

```

</div>

</div>

<div class="row mb-3">

<label for="sop" class="col-lg-2 col-form-label">SOP:</label>

<div class="col-lg-10">

<input type="number" class="form-control" id="sop" name="sop" step="0.01" min="1" max="5" placeholder="1 to 5" required>

</div>

</div>

<div class="row mb-3">

<label for="lor" class="col-lg-2 col-form-label">LOR:</label>

<div class="col-lg-10">

<input type="number" class="form-control" id="lor" name="lor" step="0.01" min="1" max="5" placeholder="1 to 5" required>

</div>

</div>

<div class="row mb-3">

<label for="cgpa" class="col-lg-2 col-form-label">CGPA:</label>

<div class="col-lg-10">

```
        <input type="number" class="form-control" id="cgpa"
name="cgpa" step="0.01" min="5" max="10" placeholder="5 to 10" required>
```

```
    </div>
```

```
</div>
```

```
<fieldset class="row mb-3">
```

```
    <legend class="col-form-label col-sm-2 pt-
0">Research:</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>

        <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>

    </div>

</form>

</div>

</div>

</div>

```

</div>

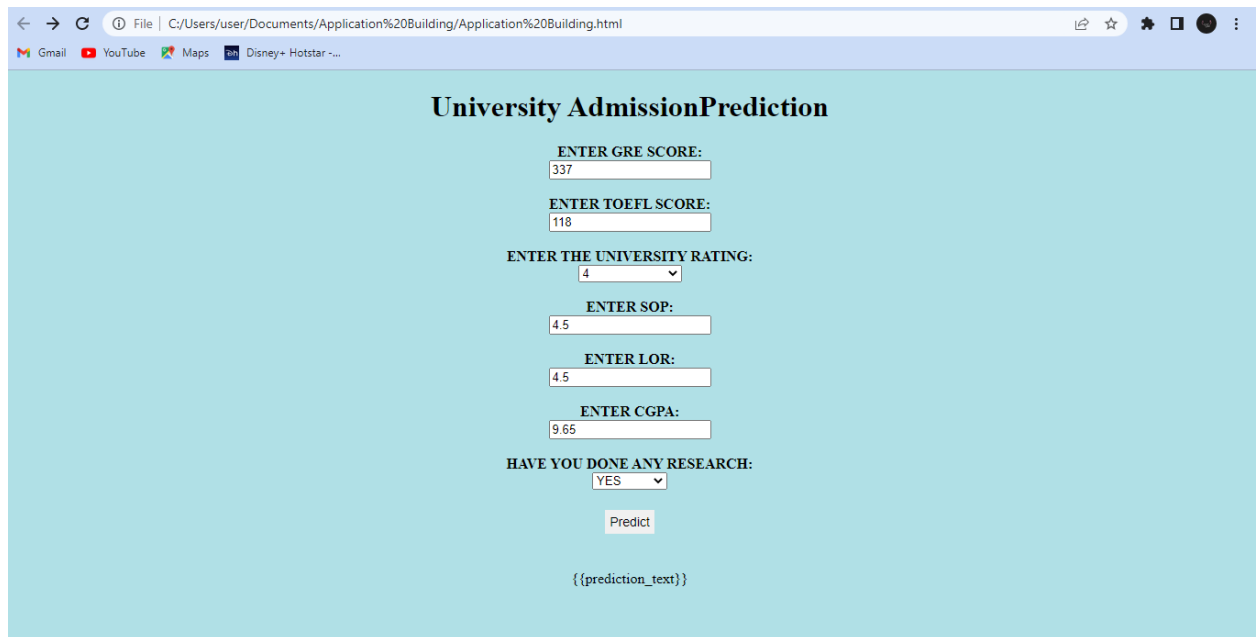
```
<script type="text/javascript" src="/Users/aaronraja/Desktop/data science
projects/University Admit Eligibility Predictor/untitled folder/static/js/script.js"
async></script>
```

```
{% endblock % }
```

8. TESTING

Test cases :

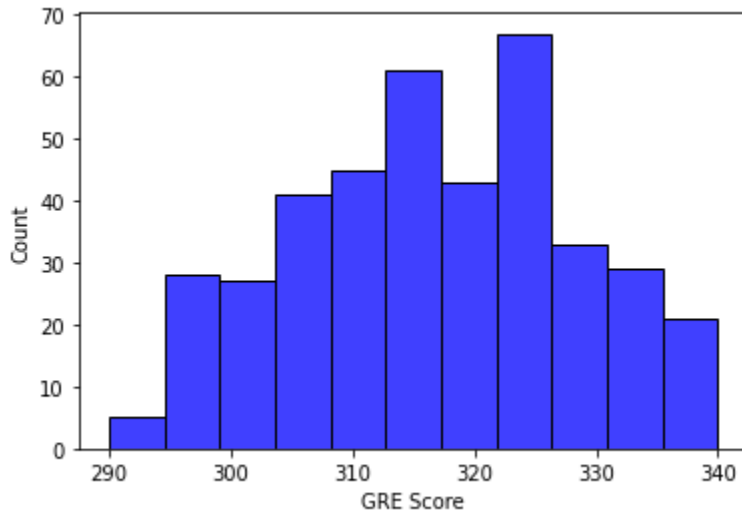
The Results are cross checked by using previous year's datasets and outputs. user expected results and result are verified using sample test cases.



The screenshot shows a web browser window with the address bar displaying 'File | C:/Users/user/Documents/Application%20Building/Application%20Building.html'. The browser's toolbar includes icons for Gmail, YouTube, Maps, Disney+, and Hotstar. The main content area has a light blue background and is titled 'University AdmissionPrediction'. Below the title, there are several input fields and a dropdown menu, each with a label above it: 'ENTER GRE SCORE:' with a text input containing '337'; 'ENTER TOEFL SCORE:' with a text input containing '118'; 'ENTER THE UNIVERSITY RATING:' with a dropdown menu showing '4'; 'ENTER SOP:' with a text input containing '4.5'; 'ENTER LOR:' with a text input containing '4.5'; 'ENTER CGPA:' with a text input containing '9.65'; and 'HAVE YOU DONE ANY RESEARCH:' with a dropdown menu showing 'YES'. Below these fields is a 'Predict' button. At the bottom of the form, the text '{{prediction_text}}' is displayed.

9. RESULTS

Performance Metrics :



IT	Information Technology	174.75	154.25	171.5	161.5		107.5
ME	Mechanical Engineering	174	166.5	169.5	167.5	162.25	130
CS	Computer Science and Engg.	178.75	170.5	176	165.5		113.5
EI	Electronics and Instru Engg.	180	174.25	176.5	169.5		121.75
IT	Information Technology	184.75	179.75	182	173.25		129.75
ME	Mechanical Engineering	186.5	182.75	183.5	178.5		155.25
AU	Automobile Engineering	177	171.25	169.5	164.25		129
CE	Civil Engineering	180.5	173.25	175	174.5		146.75
CS	Computer Science and Engg.	188	182.75	186	177	152.25	146.5
EC	Electronics and Comm Engg.	190.75	176.75	188.25	184.25	95.5	163.75
EE	Electrical and Elec. Engg.	186.25	178	183.5	178.25		152
ME	Mechanical Engineering	184	180.25	179.5	169.5	112.5	138.75
EE	Electrical and Elec. Engg.	185.75	175.5	183	167.75	102.25	129.75
EC	Electronics and Comm Engg.	192	182.75	189.5	181.25	139.25	137.5
CS	Computer Science and Engg.	189.25	182.25	187.25	176.5	129	132.5
IT	Information Technology	185	175.5	183.75	166.75		120.5
CE	Civil Engineering	183	179	179.75	169.75	115.25	148.75
CS	Computer Science and Engg.	172.5	116.25	163	125.25	137.75	84.25
EE	Electrical and Elec. Engg.	164.5	158.25	145	116.75	138.5	87.5
IT	Information Technology	161.5	107.75	152.5	104	113.75	129.75
BM	Bio Medical Engineering	183	173.25	173	161	143	103.75
CE	Civil Engineering	150.75	135.25	128.25	100.5	120	109
ME	Mechanical Engineering	161		140.5	133.75	133.75	113
EC	Electronics and Comm Engg.	172.5	108.5	159	113.25	134	98.5

10. ADVANTAGES & DISADVANTAGES

Advantages:

- Reach to geographically scattered student.: One of the important objectives of the admission system is communicate with all the students scattered geographically.
- Reducing time in activities: Reduce the time taken process the applications of students, admitting a student as they already know about their possibilities of getting into the colleges.
- Centralized data handling: Transfer the data smoothly to all the departments involved and handle the data centralized way.
- Operational efficiency: Improve the operational efficiency by improving the quality of the process as it is easy to use with a basic knowledge about the system. The students can fill the details by themselves and check the desired career in desired college.

Disadvantages:

The model has some draw back when grade system of the corresponding university changes , the prediction can't be accurate.

11. CONCLUSION

The prediction of this model is compared with the test dataset created by picking random values from the original dataset and the evaluation of the prediction is further evaluated using different methods. After a complete evaluation of the predictive model, we can conclude that the accuracy of this model is very and Random Forest and Decision Tree algorithm is one of the best algorithms for regression problems. These two algorithms are highly accurate and fast in prediction irrespective of the size of the dataset.