GRE Admission Prediction

Organization: SRM University, AP

Project Team Details:

Done By :

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Appendices

Introduction

Aim:

The goal of this project is to design a Django based web application where the user can input all these factors. Using the machine learning algorithms, we tell the user if he/she is eligible for admission at a particular university.

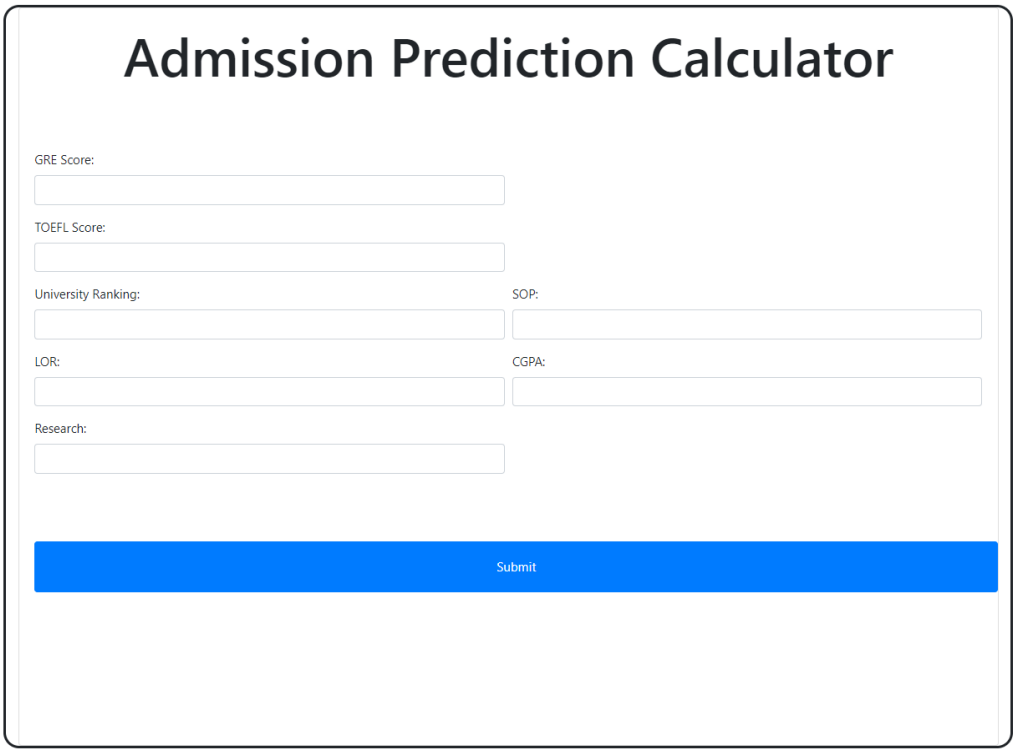
Technologies Used :

The front end of the website: **HTML, CSS, Bootstrap**

All these tech stacks help to display, design, separate contents from design, and make the page interactive. The frontend for this web application is designed using HTML,CSS,JavaScript,Bootstrap.

Back-End: **Python Packages (Scikit learn, Matplot lib, pandas, NumPy, torch)**

Home Page


Admission Prediction Calculator
GRE Score:
TOEFL Score:
University Ranking:
SOP:
LOR:
CGPA:
Research:
Submit

OVERVIEW OF THE PROJECT:

This project is called "University Admission Prediction based on GRE scores". It utilizes a dataset containing GRE scores, Toefl scores, SOPs, LOPs, CGPAs, and computes the chance of admission to particular universities.

In our testing, we found three machine learning algorithms (KNN, Random Forest, Logistic Regression) that were 80% or more accurate in predicting data.

The algorithms that were used in this project :

1. KNN Classifier
2. Logistic Regression
3. Random Forest

- The process includes data tuning, splitting of the data set into two subsets namely:- training and testing data.

- Then, implementing the above algorithms and measuring the accuracy of each algorithm in predicting the data.

- Finally comparing the accuracy of these algorithms in the form of a statistical bar graph.

RESULTS/OUTPUT:

Out of all algorithms, Random forest, KNN and Logistic regression typically predict the desired output with greater than 80% accuracy.

KNN Heat Map

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<AxesSubplot:>
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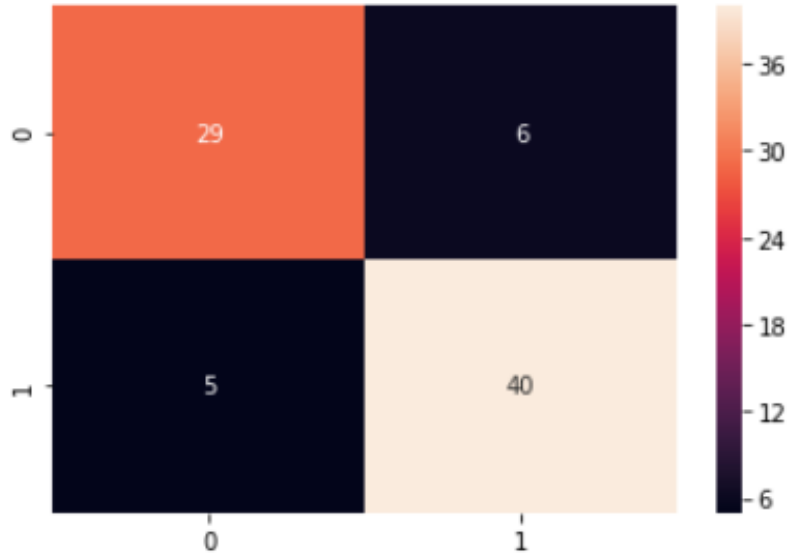
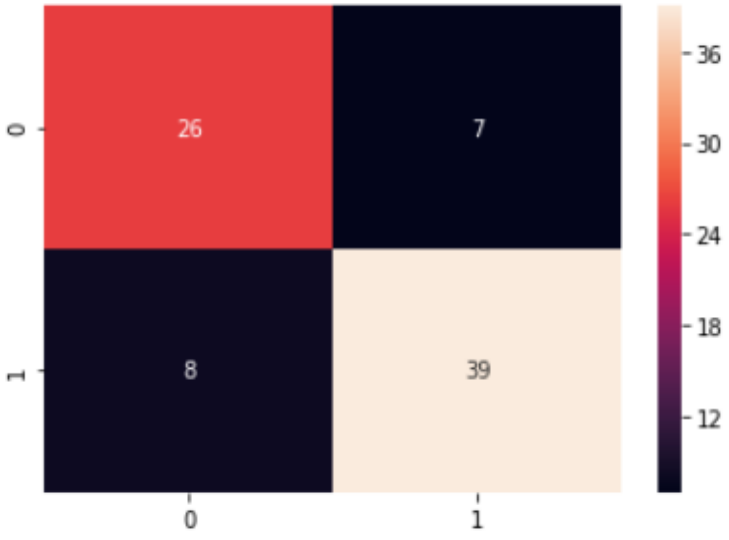
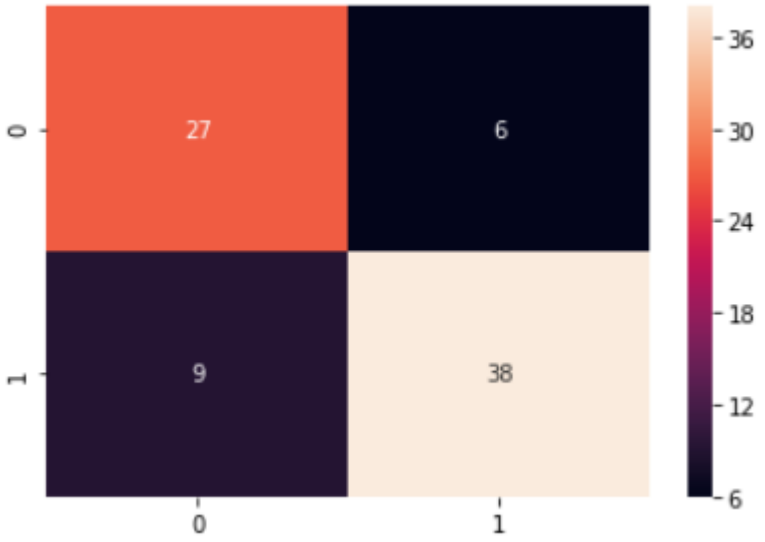
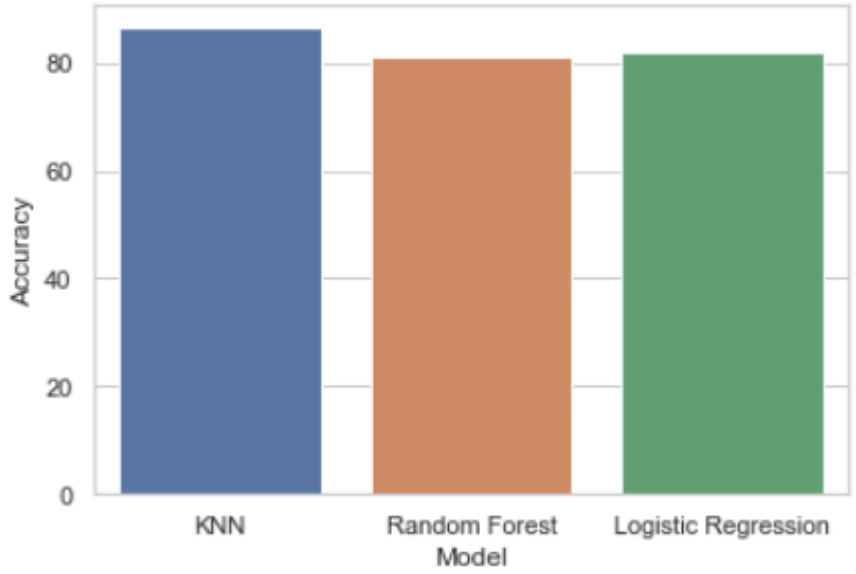


Random Forest Heat Map

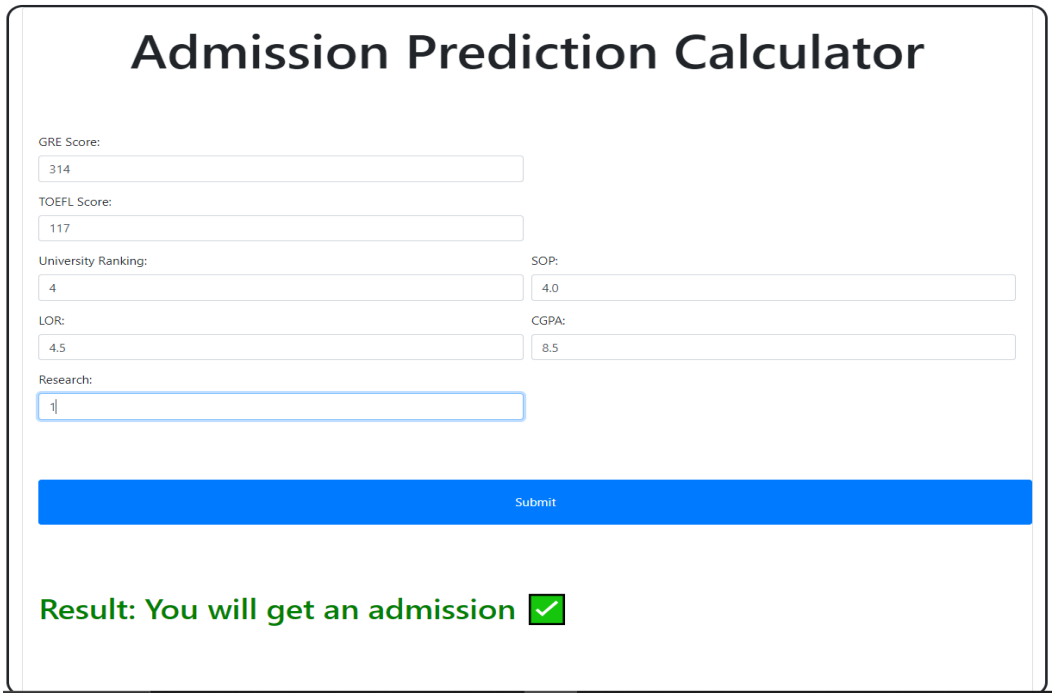


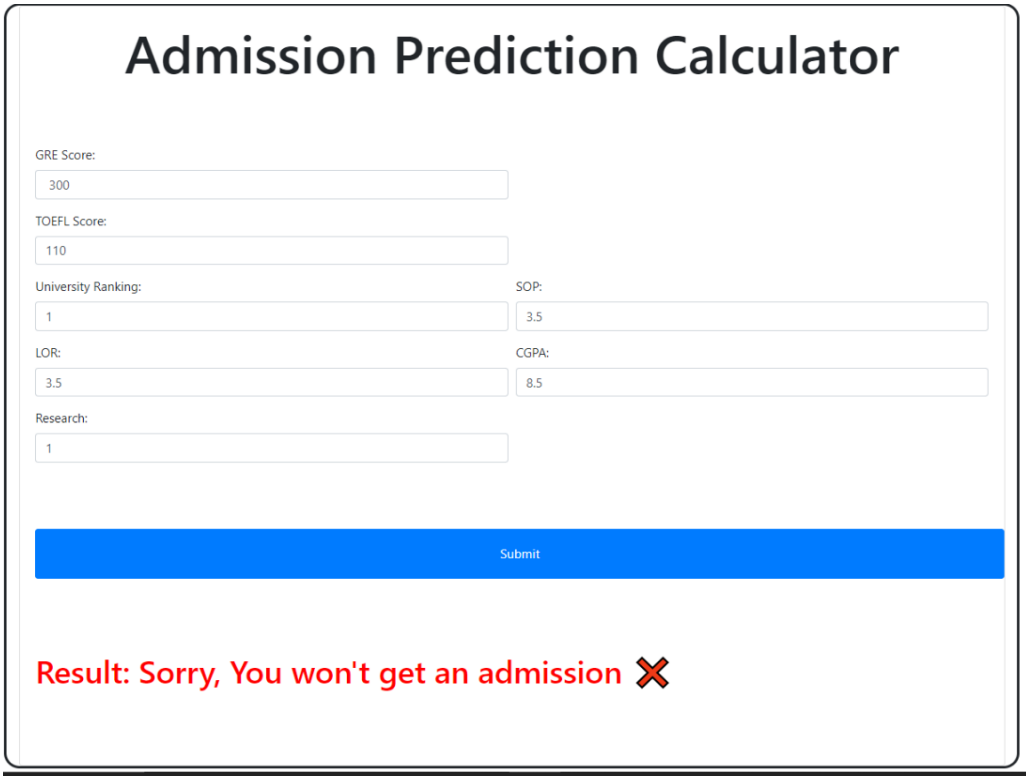
Logistic Regression Heat Map





Web Application Outputs:





Conclusion

This project enables the users to estimate their chances of getting admitted into their desired university with 85 per cent accuracy. This eliminates the uncertainty many students face when selecting universities.

As a result, the students no longer have to research and apply to universities where they have fewer to no chances of being accepted.

References:

1. Dataset was taken from here https://www.kaggle.com/mohansacharya/graduate-admissions

2. https://www.djangoproject.com/