

# **DEFINE PROBLEM / PROBLEM UNDERSTANDING**

## **SPECIFY THE BUSINESS PROBLEM**

University admission is the process by which students are selected to attend a college or university. The process typically involves several steps, including submitting an application, taking entrance exams, and participating in interviews or other evaluations.

Students are often worried about their chances of admission in University. the university admission process for students can be demanding, but by being well-informed, prepared, and organized, students can increase their chances of being admitted to the university of their choice.

The aim of this project is to help students in short listing universities with their profiles. Machine learning algorithms are then used to train a model on this data, which can be used to predict the chances of future applicants being admitted. With this project, students can make more informed decisions about which universities to apply to, and universities can make more efficient use of their resources by focusing on the most promising applicants. 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.

## ***BUSINESS REQUIREMENTS***

The business requirements for a machine learning model to predict chances of student admission in the university. A project aims to predict the chances of a student getting admitted to a particular university based on certain factors The business value of this project is that it will help students make more informed decisions about which universities to apply to, and help university counselors to better advise students on the universities they are most likely to be admitted to the university.

## **LITERATURE SURVEY**

The University Chances of Admission project is a well-researched topic in the field of education and machine learning. Many studies have been conducted to predict university admission using different machine learning techniques. One study by (Hsu and Chen, 2019) used decision tree, random forest, and logistic regression algorithms to predict the chance of university admission based on students' GPA, test scores, and personal information. The study found that the random forest algorithm performed the best with an accuracy of 85.5%. Another study by (Al-Shammari et al., 2018) used the k-nearest neighbor (KNN) algorithm to predict the chance of university admission based on students'

GPA, test scores, and family income. The study found that the KNN algorithm performed well with an accuracy of 81.2%. A study by (Najafabadi et al., 2015) used a neural network to predict the chance of university admission based on students' GPA, test scores, and personal information. The study found that the neural network performed well with an accuracy of 94.3%. Overall, these studies suggest that various machine learning algorithms can be used to predict the chance of university admission with high accuracy.

## **SOCIAL OR BUSINESS IMPACT**

**Social Impact:-** The ability to accurately predict the chances of university admission can help students make more informed decisions about which universities to apply to, increasing their chances of being admitted and ultimately gaining access to higher education.

**Business Model/Impact:-** 1. using machine learning models to predict university admission, the service can help universities more efficiently process and evaluate applications, potentially increasing the number of successful admissions.

2. An increase in the number of successful admissions can lead to an increase in revenue for universities, as well as for the company providing the prediction service.