# DECISION MAKING WITH MACHINE LEARNING

#### **Define problem:**

In this milestone, we will see the define problem/Problem Understanding.

#### 1) Specify the Business Problem:

- University admission is the process by which students are selected to attend a college or university.
- The process involves several steps, including submitting an application, taking entrance exam, and participating in interviews or other evaluations.
- The aim of this project is to help students in short listing universities with their profiles.
- The predicted output gives them a fair idea about their admission chances in a particular university.

### 2) 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.

#### 3)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.

- The study found that random forest algorithm performed the best with an accuracy of 85.5%
- Study found that the KNN algorithm performed well with an accuracy of 81.2%.

#### 4) Social or Business Impact:

#### **Social Impact:**

• The ability to accurately predict the chances of university admission and gaining access to higher education.

## **Business Impact:**

- Using machine learning models to predict university admission and also lead to increase in revenue far universities.
- The company provides the prediction service.