

# ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING PROJECT REPORT

**Title: Develop An Interpreter to Predict Language Using Machine Learning**

**Team No:**

**Section: 2A**

## **Problem Statement:**

Develop a language prediction interpreter that accurately identifies the language of a given text input. The interpreter should leverage machine learning algorithms to analyze text features and predict the language with high accuracy. This solution aims to enable efficient language translation and processing in various applications.

## **Aim:**

Develop an interpreter that can accurately predict the language of a given text input using machine learning algorithms.

## **Algorithm Used:**

1. Natural Language Processing techniques for text preprocessing and feature extraction
2. Machine learning algorithms:
  - Naive Bayes
  - Support Vector Machine (SVM)
  - Random Forest
  - Neural Networks

## **Integration with AI:**

### **1. Data Sources:**

- Text datasets in various languages (e.g., Wikipedia, books, articles)
- Language translation datasets (e.g., Google Translate, Microsoft Translator)

### **2. AI Models:**

- Language prediction models trained on the collected datasets
- Integration with AI-powered language translation models for improved accuracy

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