Project Design Phase-I
Solution Architecture

Date	02 November 2023
Team ID	Team-592109
Project Name	Airline Review Classification Using Machine Learning
Maximum Marks	4 Marks

Solution Architecture:

The proposed solution revolves around utilizing various machine learning classification models such as Decision Tree Classifier, Random Forest Classifier, XGBoost Classifier, among others, to process and categorize the unstructured text data from airline reviews. The process involves a multi-step approach:

1. Data Collection & Preparation
   - Collect the dataset
   - Data Preparation
   - Exploratory Data Analysis
2. Descriptive statistical
   - Visual Analysis
3. Model Building
   - Training the model in multiple algorithms
   - Testing the model
4. Performance Testing
   - Testing model with multiple evaluation metrics
5. Model Deployment
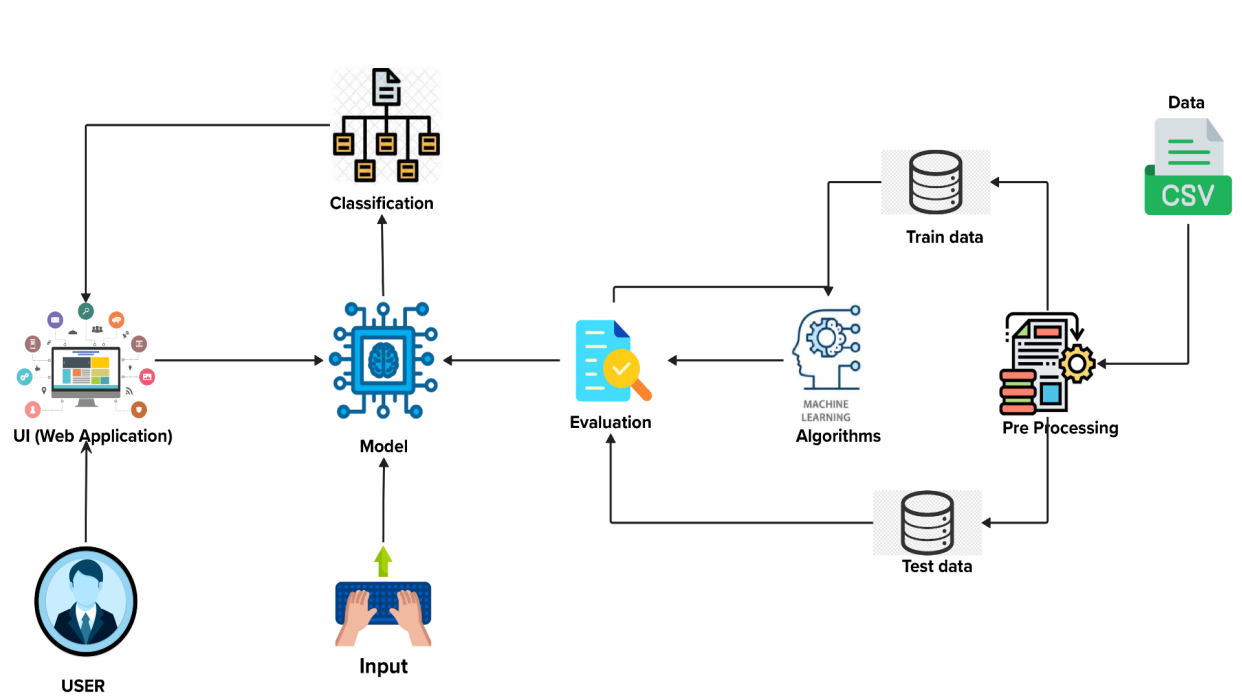   - Save the best model
   - Integrate with Web Framework

Solution Architecture Diagram:

Figure 1: Architecture and data flow