Project Design Phase-I

Proposed Solution Template

Date	20 October 2023
Team ID	Team-592973
Project Name	Airline Review Classification Using Machine Learning
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.NO.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop an airline review classification system that can effectively analyze user-generated airline reviews
2.	Idea / Solution description	The solution involves leveraging classification models, including Decision Tree Classifier, Random Forest Classifier, and XGBoost Classifier, to analyze a vast pool of airline reviews. The system will preprocess the raw text data, select relevant features, and use machine learning to classify reviews. It will provide airlines with actionable insights by categorizing reviews into positive, negative, or neutral sentiment classes.
3.	Novelty / Uniqueness	The novelty of this project lies in its specific application of classification models to airline reviews. While sentiment analysis is a common natural language processing task, the focus on airline reviews and the development of a specialized classification system tailored to the aviation industry is unique.
4.	Social Impact / Customer Satisfaction	The project has a significant social impact as it contributes to the improvement of customer satisfaction within the airline industry. By helping airlines understand passenger sentiments and needs, it enables them to make service enhancements that benefit travelers.
5.	Business Model (Revenue Model)	The business model for this project can include several revenue streams: • Subscription Model • Pay-Per-Use Model • Customization Services • Reports
6.	Scalability of the Solution	The solution is highly scalable. It can accommodate a growing number of airline clients and adapt to various review sources and languages. With increasing data volumes, the system can handle the analysis efficiently.