Project Design Phase-I

Proposed Solution

Date	14 October 2022
Team ID	PNT2022TMID46686
Project Name	Developing a Flight delay prediction model using machine learning
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The main objective of the model is to predict flight delays accurately in order to optimize flight operations, to save passengers and airlines from all the hardships caused due to flight delays or in worst case cancellations.
2.	Idea / Solution description	Using a machine learning model, we can predict flight arrival delays. The input to our algorithm is rows of feature vector like departure date, departure delay, distance between the two airports, scheduled arrival time etc. We then use decision tree classifier to predict if the flight arrival will be delayed or not. A flight is considered to be delayed when difference between scheduled and actual arrival times is greater than 15 minutes.
3.	Novelty / Uniqueness	We compare decision tree classifier with logistic regression and a simple neural network for various figures of merit.
4.	Social Impact / Customer Satisfaction	Time management will be the social impact such that when informed

		earlier the passengers can plan accordingly.
5.	Business Model (Revenue Model)	• Low-cost airline business model. • B2C business Model.
6.	Scalability of the Solution	The delayed time of any type of flight can be known with maximum accuracy