

Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID30209
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)	To predict flight delays using ML algorithm.
2.	Idea / Solution description	<ul style="list-style-type: none">• Predicting flight delays using algorithms such as Random Forest, Logistic Regression, Decision Tree and Support Vector Machine.• A user will be notified of the booked flight's location frequently.• Giving an accurate delay prediction will help in better customer service.• Cancellations will also be notified.• Multiple metrics like arrival/ departure delays, delays based on geographic areas are considered, making this solution more precise.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Frequent updates on the flight's location and accurate prediction of the delays.• Gives the status of different airports too.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• Proper planning of trips.• Reduction of mental pressure and stress.• Prior information helps in avoiding loggerheads with other people.• Reduction of business losses.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none">• This model can be used by all the people who travel via flights. The app can be accessed through any device.• The existing solutions do not give frequent updates to the customer directly.• The ML algorithms to be used have accuracy between 87% - 91%.
6.	Scalability of the Solution	<ul style="list-style-type: none">• The scalability of the solution is expanded for travellers all over the world, irrespective of their purpose for travelling.• This app can help customers to get updates of the flight of any part of the flight.• This is also beneficial for all the airline authorities by reducing complaints and increasing customer satisfaction.

