

## Model Development Phase Template

Date	23 September 2024
Team ID	LTVIP2024TMID24998
Project Title	Flight Delays Prediction using Machine Learning
Maximum Marks	5 Marks

## Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Flight ID	Unique identifier for each flight	No	For predicting the Flight delay, Flight Id is not required.
Airline	The airline operating the flight	Yes	May have trends in delays due to operational differences.
Scheduled Departure	Scheduled time of flight departure	Yes	Departure time is a crucial factor in predicting delays.
Scheduled Arrival	Scheduled time of flight arrival	Yes	Arrival time is also relevant to assess delay patterns.

Day of Week	Day of the week of the flight	Yes	Delays may be more common on specific days (e.g., weekends, holidays).
Weather Conditions	Weather conditions at the departure and arrival airports	Yes	Weather greatly impacts flight delays.
Airport Traffic	Number of flights departing from or arriving at the airport	Yes	High traffic may lead to delays due to congestion.
Distance	Distance between departure and arrival airports	Yes	Longer flights may experience different delay patterns.
Aircraft Type	Type of aircraft used for the flight	Yes	Some aircraft types may be more prone to delays.
Previous Flight Delay	Whether the previous flight using the same aircraft was delayed	Yes	Delays can cascade across flights using the same aircraft.