Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	17 October 2022
Team ID	PNT2022 TMID37576
Project Name	Developing A Flight Delay Prediction Model Using Machine Learning
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	As a user, I can register for the application by entering my email, password, and confirming my password.
FR-2	User Confirmation	As a user, I will receive confirmation email once I have registered for the application
FR-3	Specify Passengers	The user fills the number of passengers to travel and select whether they are child, adult or infant.
FR-4	Book Flights	The flight ticket booking is done and receipt of booking is sent to mail of the user.
FR-5	Request Cancellation And Booking Of New Flights	The user wants to cancel the ticket reserved due to delay and book a new flight.
FR-6	Remove Flights	The admin removes the flight and its details from the system that are cancelled.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Function al Requirement	Description
NFR-1	**Usability**	In this project, we use flight data, weather, and demand data to predict flight departure delay.
NFR-2	**Security**	A delay prediction model will allow the administrators to take the concerned actions for smooth operation.
NFR-3	**Reliability**	Schedules may become robust and reliable, only if buffer times are embedded and designed properly in airline schedules.
NFR-4	**Performance**	High delay prediction accuracy.
NFR-5	**Availability**	24/7 available
NFR-6	**Scalability**	Flight delays are frequent all over the world and they are estimated to have an annual cost of several tens of billion dollars. This scenario makes the prediction of flight delays a primary issue for airlines and travellers. The main goal of this work is to implement a predictor of the arrival delay of a scheduled flight due to weather conditions.