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

Date	16 October 2022
Team ID	PNT2022TMID12801
Project Name	Developing a Flight Delay Prediction Model
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	Registration through Form Registration through Gmail Registration through LinkedIN Registration through Facebook
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Data Management	The administrator of the mobile portal can add, amend, or remove the department data.
FR-4	Data Storage	• Application system under consideration manages the archival, retrieval, and retention of historical data • Sufficient information comprising these
FR-5	Process for Exporting Flight Data	A procedure where mobile client users obtain flight data from a web server for web client analysis.
FR-6	Flight Data	The administrator of the mobile portal can add, amend, or remove passenger's data.
FR-7	Regulatory Conditions	This paper proposes a model for predicting the flight delay based on the decision tree. A decision tree is a supervised machine learning tool that may be used to classify or forecast data based on how queries from the past have been answered. The model is supervised learning in nature, which means that it is trained and tested using data sets that contain the required categorisation.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Knowing when the flight will be delayed enables improved operational planning at the airport of destination based on anticipated flight delay at origin.
NFR-2	**Security**	It is highly secure and the passengers who log in to the application will be able to view the status
NFR-3	**Reliability**	As we train with more data the model will be reliable.
NFR-4	**Performance**	- This was done statistically, and the delay time was thought to be shorter. - Using variables that occur close to the destination's arrival time, it has projected the delay at the destination.
NFR-5	**Availability**	The mobile application must be accessible to users in India 99.98% of the time each month between EST and IST business hours.
NFR-6	**Scalability**	- The main problem for airlines and travellers is flight delay. - According to the flight schedule, the anticipated arrival delay considers both flight information and the weather at the airports of origin and destination.