## Project Design Phase-I Solution Architecture

Date	13 October 2022		
Team ID	PNT2022TMID16204		
Project Name	Developing a flight delay prediction model using Machine Learning		
Maximum Marks	4 Marks		

## **Architectural Workflow:**

## **User view:**

- 1. User enters flight details in the UI
- 2. Entered input is sent to the classifier model deployed through IBM Watson.
- 3. The model predicts the estimated time of departure/arrival delay and sends it back to the UI.
- 4. The predicted value of delay is displayed in the UI.

## **Model view**

- 1. The dataset is preprocessed for handling missing/categorical values.
- 2. Spatial and other features are extracted.
- 3. The features are split into training and test sets.
- 4. A Random forest classifier is built and is trained with the dataset.
- 5. The model is evaluated using testing data.
- 6. The trained model is deployed in IBM Watson.

