# Project Flow

| Date | 17 November 2022 |
|------|------------------|
| Team ID | PNT2022TMID46686 |
| Project Name | Developing a Flight Delay Prediction Using Machine Learning |

## Data Collection

**Flight Data :** The Flight Data from 2015, which is taken from the transportation statics.The Datasets contain following details.

- FLIGHT_NUMBER
- YEAR
- MONTH
- DAY
- SCH_DEPT
- DISTANCE
- ARRIVAL_DELAY
- AIRLINE
- ORIGIN
- DESTINATION
- DAY_OF_WEEK

## Data Preprocessing

We preprocessing the dataset that is collected. Preprocessing includes:

- Import Required Libraries.

- Importing The Dataset.

- Analyze The Data.

- Handling Missing Values.

- Data Visualization.

- Dropping Un Necessary Columns.

- Label Encoding & One Hot Encoding.

- Splitting The Dataset Into Dependent And Independent Variables.

- Split The Dataset Into Train Set And Test Set.

- Train And Test The Model Using Decision Tree Classifier.

- Model Evaluation.

➢ Saving The Model.

## Model Building

➢ Training and testing the model
➢ Evaluation of Model

## Application Building

➢ Create an HTML Code
➢ Build a Python Code