### **Project Flow**

Date	20 November 2022
Team ID	PNT2022TMID52214
Project Name	Developing a Flight Delay Prediction Using Machine Learning

#### **Data Collection**

**Flight Data :** The Flight Dataset from 2013.

- > 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