

# Software Lab : Project Proposal



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## **Topic : Data Visualization on Airline**

### **Introduction :**

Airlines may use airline data to manage their operations and improve customer experiences by learning more about aircraft paths, schedules, passenger demographics, and preferences. Airlines may spot trends and put plans in place to raise punctuality and lessen disruptions by studying data on delays, cancellations, and on-time performance. to decide on aviation policies with knowledge. We analyze market trends, evaluate the effects on the environment, and create plans for the sector's sustainable expansion using data from airlines. Airline data is fundamental to making wise decisions, running operations efficiently, and advancing the aviation industry as a whole.

### **Dataset :**

This dataset comprises diverse parameters relating to airline operations on a global scale. The dataset prominently incorporates fields such as Passenger ID, First Name, Last Name, Gender, Age, Nationality, Airport Name, Airport Country Code, Country Name, Airport Continent, Continents, Departure Date, Arrival Airport, Pilot Name, and Flight Status. These columns collectively provide comprehensive insights into passenger demographics, travel details, flight routes, crew information, and flight statuses. Researchers and industry experts can leverage this dataset to analyze trends in passenger behavior, optimize travel experiences, evaluate pilot performance, and enhance overall flight operations.

### **Objective :**

- we will visualise the data using various plots that will allow us to track the paths that flights follows for specific countries and continents.
- we will analyze where the traffic is more and where is less.
- airportwise passengers distribution.
- genderwise travelling data.
- etc.

### **Technologies Used :**

- PYTHON (Numpy , Pandas)
- PYPLOT
- BASH
- GIT
- HTML / CSS
- MAKEFILE / IDE