Airline Dataset Analysis Report , Software Lab

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GitHub Link : https://github.com/rohitsingh25/Software-Lab-Project

Introduction
In this analysis, we explore the "Airline Dataset Updated" using Python and various data analysis libraries such as NumPy, Pandas, Matplotlib, Seaborn, and Plotly Express. The dataset contains information about airline passengers, including their gender, age, and departure dates.

Objective :
Analyzing passenger behavior and preferences to optimize travel experiences.
Evaluating pilot performance and flight operations to enhance safety and efficiency.
Identifying trends in flight statuses and delays for operational improvements.

Data Preprocessing We perform some data preprocessing steps, including data type conversion and exploring categorical data.

Data Visualization We create visualizations to better understand the dataset.

Gender Distribution
Implemented pie chart for genderwise distribution.
Further analyze gender-wise travel data, possibly exploring trends in gender preferences and behavior.

Top 10 Airport Countries with Most Passengers
Implemented bar graph for Airportwise passenger Distribution.
Create visualizations to show the distribution of passengers at different airports, aiding in airport operations optimization.

Visualizing Flight Paths
Implement code to track and visualize flight paths for specific countries and continents, as stated in the project objectives.
Use geographic plotting tools and maps to create informative visualizations.