

Exploratory Data Analysis (EDA) on Titanic Dataset

Objective

Perform beginner-level Exploratory Data Analysis (EDA) on the Titanic dataset to identify survival patterns.

Libraries Used

- Pandas
- Seaborn
- Matplotlib

Dataset Columns

PassengerID, Name, Age, Gender, Class, Survived

1. Countplot: Survived vs Not Survived

This plot shows the number of passengers who survived (1) and who did not survive (0). It helps in understanding the overall survival rate.

2. Bar Plot: Survival by Gender and Class

This grouped bar plot highlights how survival rates differ across gender and passenger class. Generally, women and higher-class passengers had better chances of survival.

3. Pie Chart: Class Distribution

This pie chart illustrates how the passengers were distributed among different travel classes (1st, 2nd, and 3rd).

4. Histogram: Age Distribution

The histogram displays the age distribution of passengers. Most of the passengers were in the age range of 20-40 years.

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Conclusion

- Majority of passengers did not survive.
- Women and first-class passengers had higher survival rates.
- Most passengers were from third class.
- The age distribution peaked between 20 to 40 years.