

# Titanic EDA - Summary Report (Sample Dataset)

Dataset: titanic\_dataset\_sample.csv (20 rows)

Key steps performed:

- Data loading, info, and descriptive statistics
- Missing value checks
- Univariate plots: Age distribution, Fare distributions
- Bivariate plots: Survival by Pclass, Sex
- Correlation heatmap for numeric variables

Main observations (from this sample):

1. Higher passenger class (Pclass=1) shows higher survival counts in many analyses.
2. Age contains missing values; imputation may be required on full dataset.
3. Small sample; use full Kaggle train.csv for comprehensive analysis.

Files included:

- titanic\_dataset\_sample.csv
- EDA\_titanic\_sample.ipynb
- EDA\_report\_titanic\_sample.pdf
- README\_titanic\_EDA.md

Instructions: Open the Jupyter notebook to run full cell-by-cell EDA. Replace the sample CSV with Kaggle's train.csv for the full data.