# Titanic EDA Report

## 🔍 Summary

The dataset includes demographic and travel information of passengers. We explored factors affecting survival.

## ✅ Data Cleaning

- Filled missing `Age` values with median.

- Filled missing `Embarked` with mode.

- Dropped `Cabin` due to excessive missing values.

- Encoded categorical variables (`Sex`, `Embarked`).

## 📊 Visual Insights

- \*\*Gender\*\*: Females were more likely to survive.

- \*\*Pclass\*\*: 1st class passengers had higher survival.

- \*\*Age\*\*: Children and young adults had better chances.

- \*\*Fare\*\*: Higher-paying passengers survived more.

- \*\*Embarked\*\*: Port C (Cherbourg) had better survival rates.

## 📂 Outputs

- See `Titanic\_EDA.ipynb` for all preprocessing and plots.

- See `titanic\_eda\_plots.png` for visualizations.