

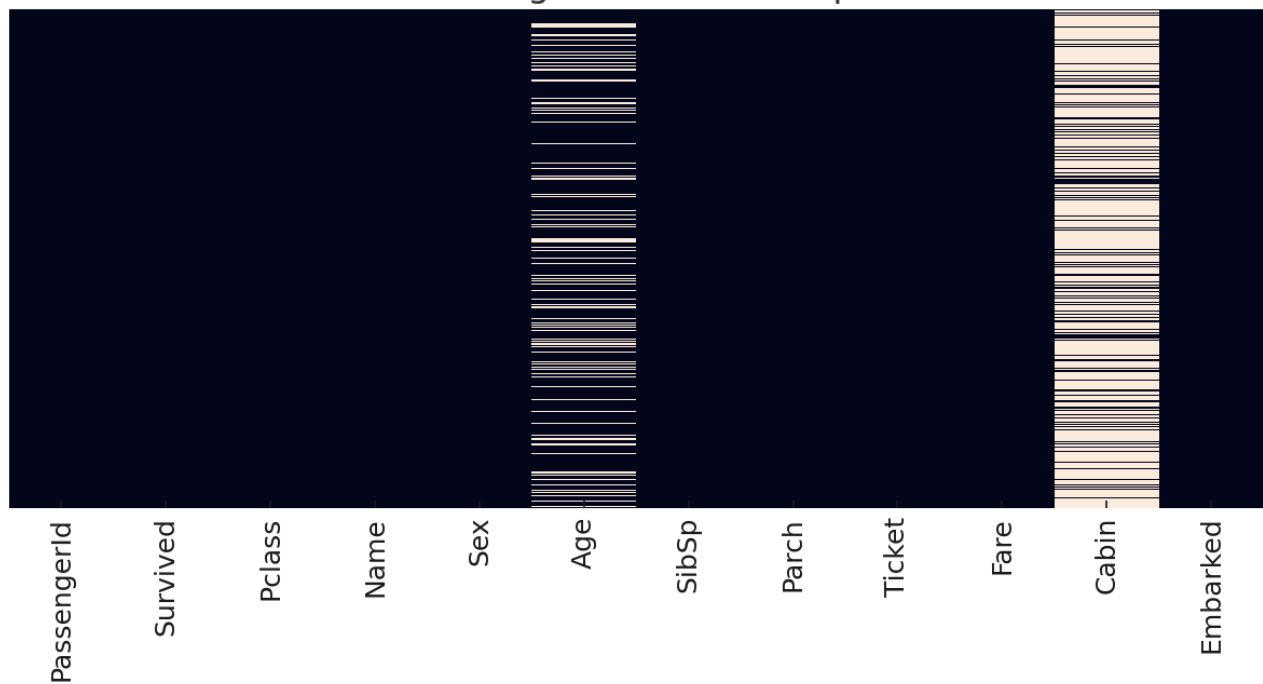
Titanic Dataset - Exploratory Data Analysis (EDA)

Rows: 891 | Survivors: 342 (38.38%)

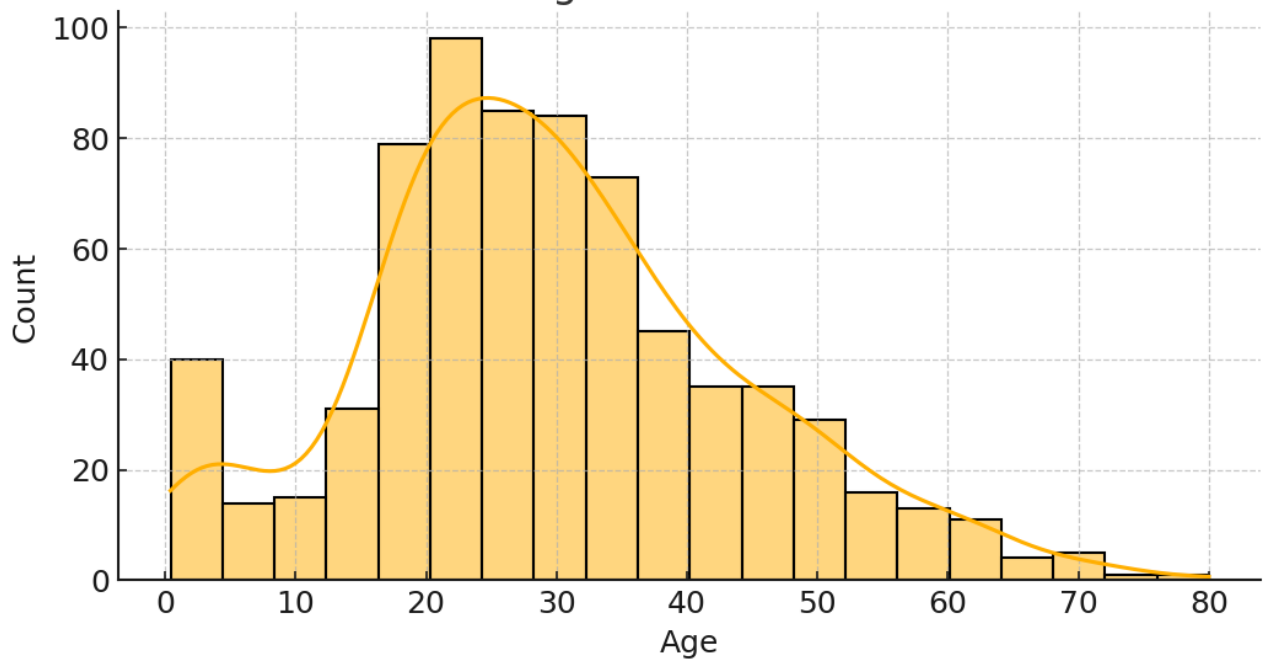
Key Observations:

- Dataset rows: 891, columns: 12
- Total survivors: 342 (38.38%)
- Missing values: Age=177, Cabin=687, Embarked=2
- Survival rate is higher for females than males (see survival_by_sex.png).
- Higher passenger class is associated with higher survival rate (see survival_by_pclass.png).
- Age distribution is right-skewed; fare is heavily right-skewed with outliers.
- Recommend imputing Age (median per Pclass) and feature-engineering (title, family_size).

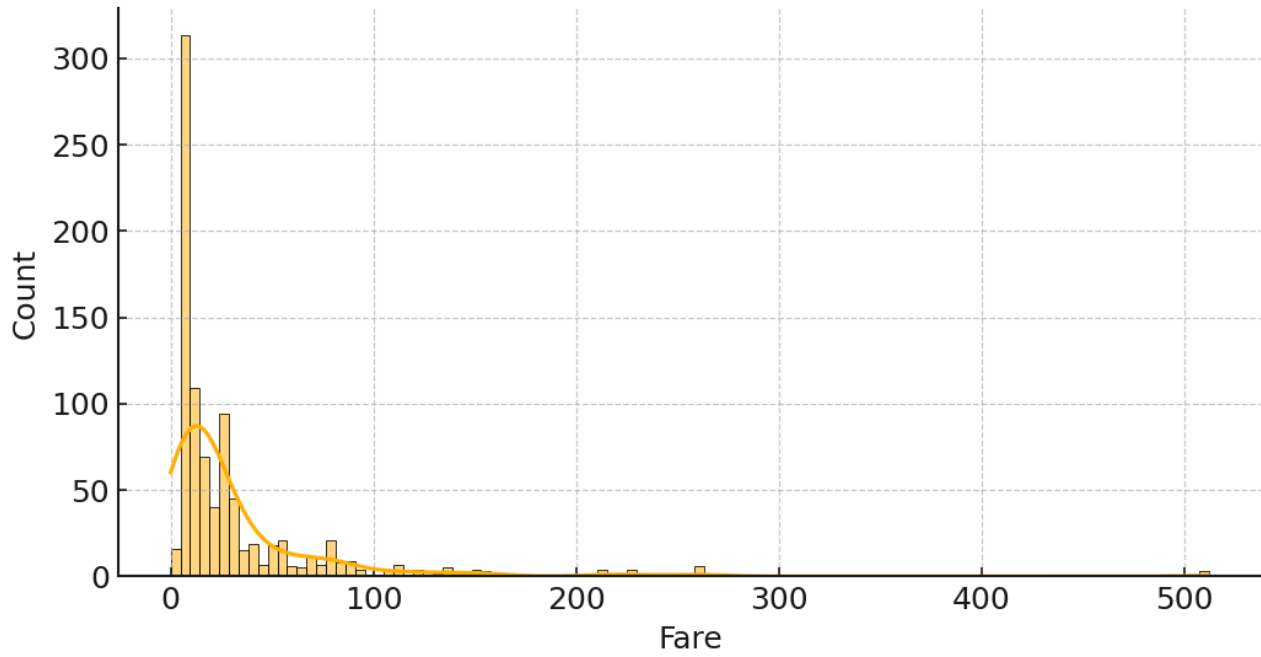
Missing Values Heatmap



Age Distribution



Fare Distribution



Survival Count (0 = No, 1 = Yes)

