Titanic — Exploratory Data Analysis (Filled Findings Report)

Source notebook (provided): Titanic_EDA (HTML output).

Dataset rows: 891.

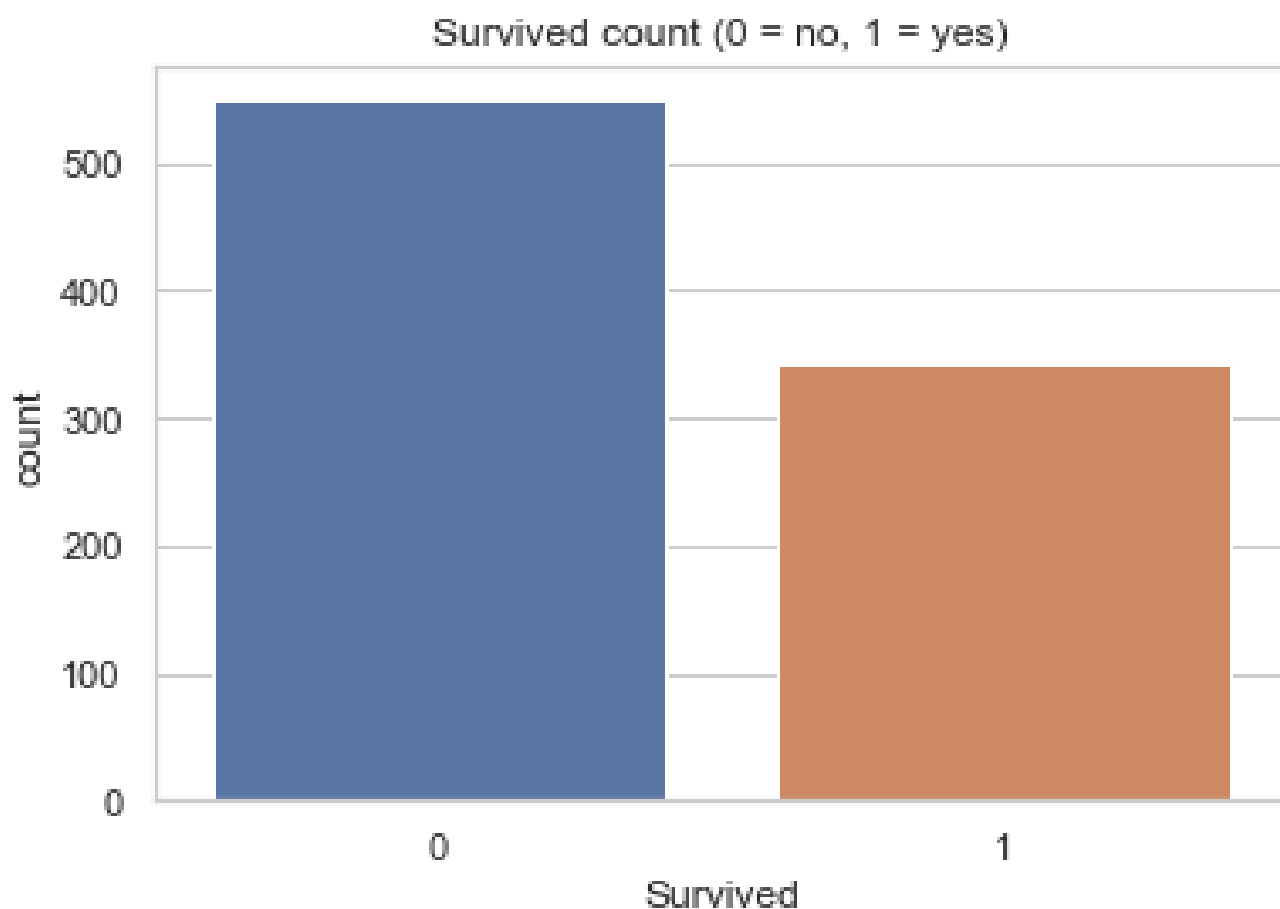Age: 714 non-null, 177 missing.

Cabin: 204 non-null, 687 missing.

Embarked: 889 non-null, 2 missing.

Key Findings:

• Overall survival rate: 38.38% (342 survivors out of 891).
• Pclass 1, Female: survival rate = 96.81% (n=94).
• Pclass 2, Female: survival rate = 92.11% (n=76).
• Pclass 3, Female: survival rate = 50.0% (n=144).
• Pclass 1, Male: survival rate = 36.89% (n=122).
• Pclass 3, Male: survival rate = 15.74% (n=108).
• Pclass 3, Male: survival rate = 13.54% (n=347).

Short Observations:

- Females have substantially higher survival rates than males across classes. See table above.
- 1st and 2nd class females show very high survival (>90%).
- Children (age distributions) show differing survival — check age KDE plot in visuals.

Survived count (0 = no, 1 = yes)

Histograms of numerical features