Titanic Dataset – Task 01 Final Report

Internship: Prodigy Infotech – Data Science

1. Missing Values Analysis

The Age column contains 177 missing values. After removing these, 714 records were used for analysis.
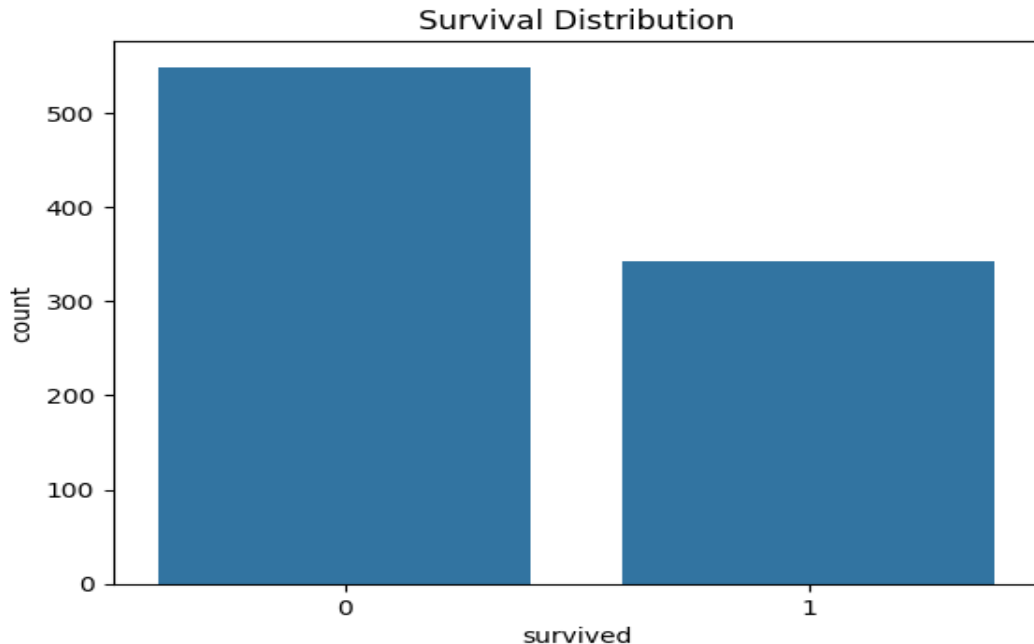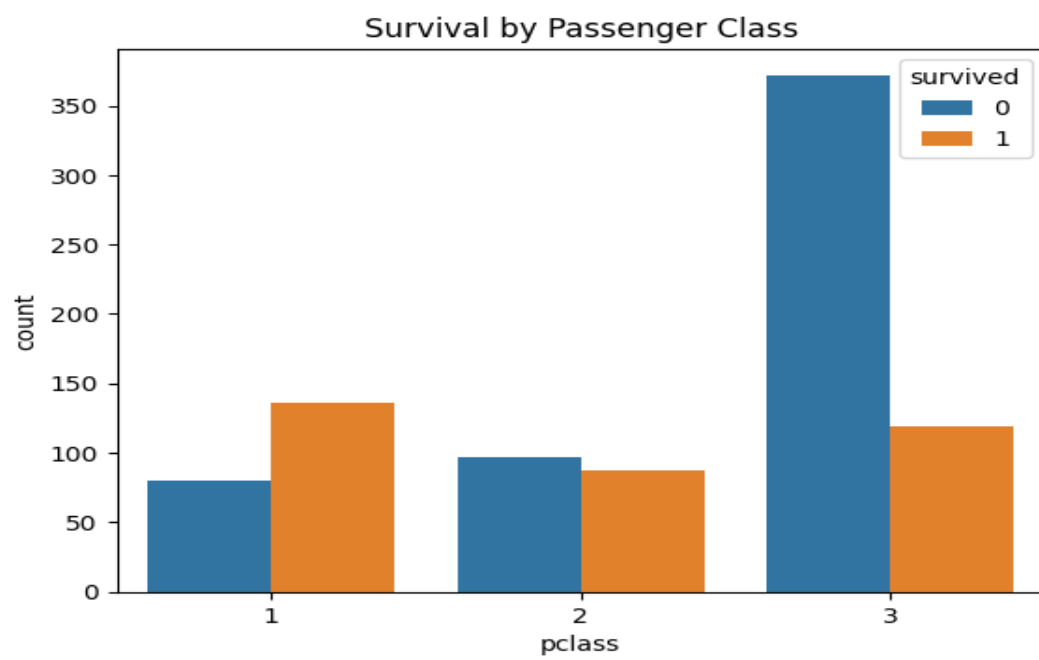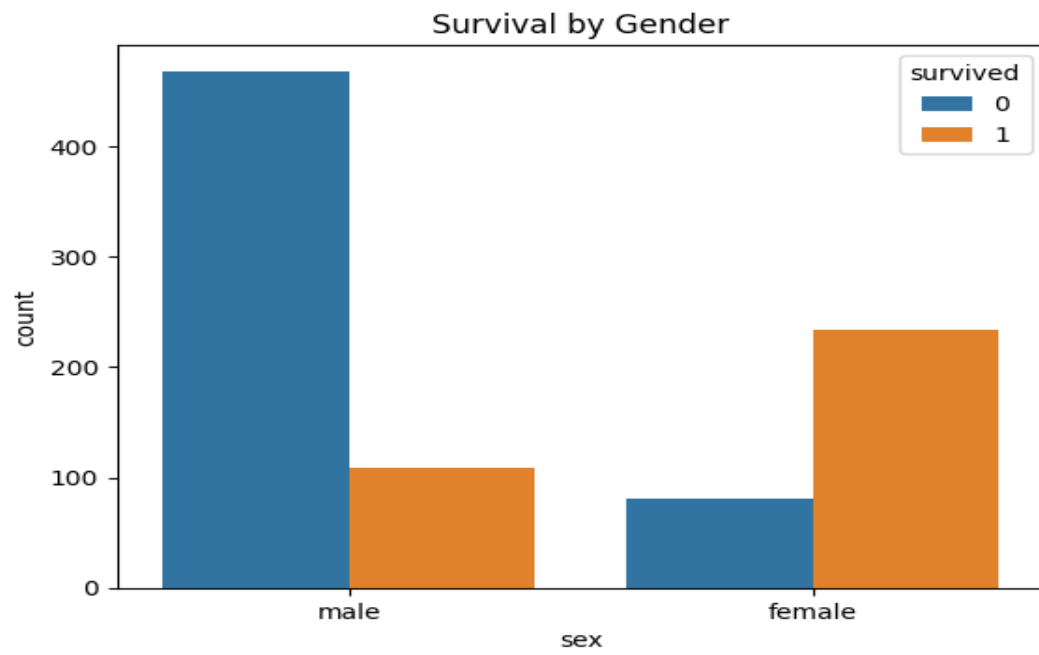
2. Summary Statistics

The average passenger age is 29.70 years. The average fare paid is 34.69. Approximately 40.6% of passengers survived.
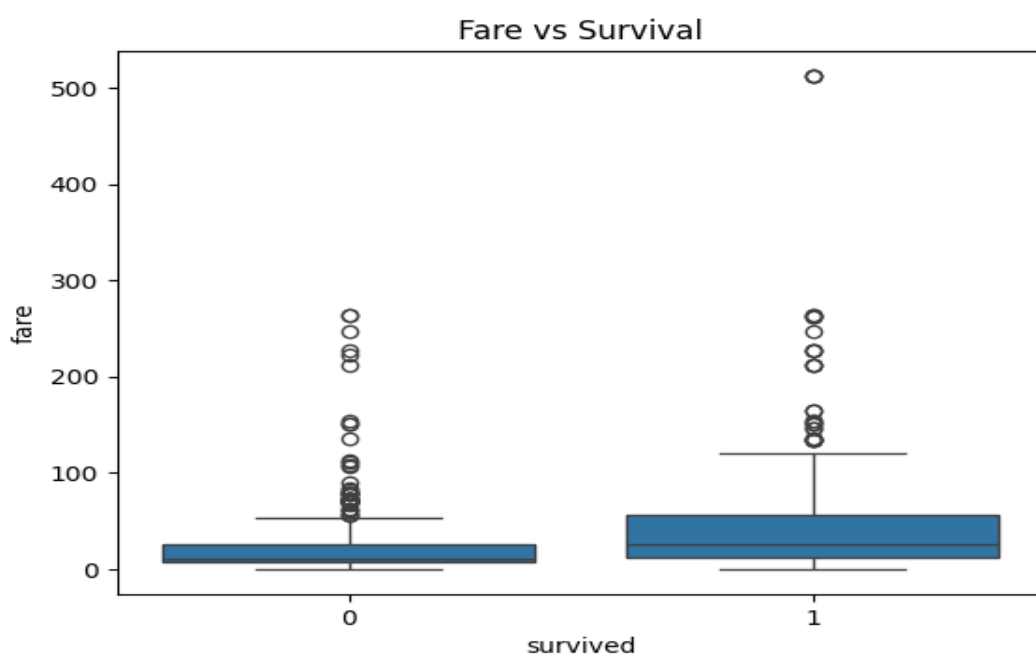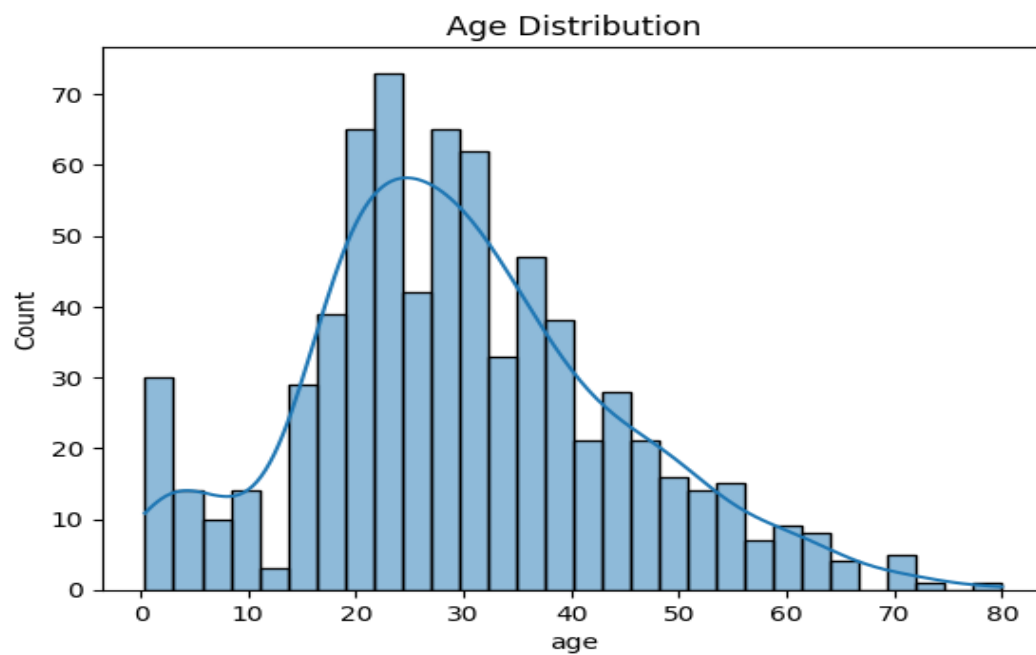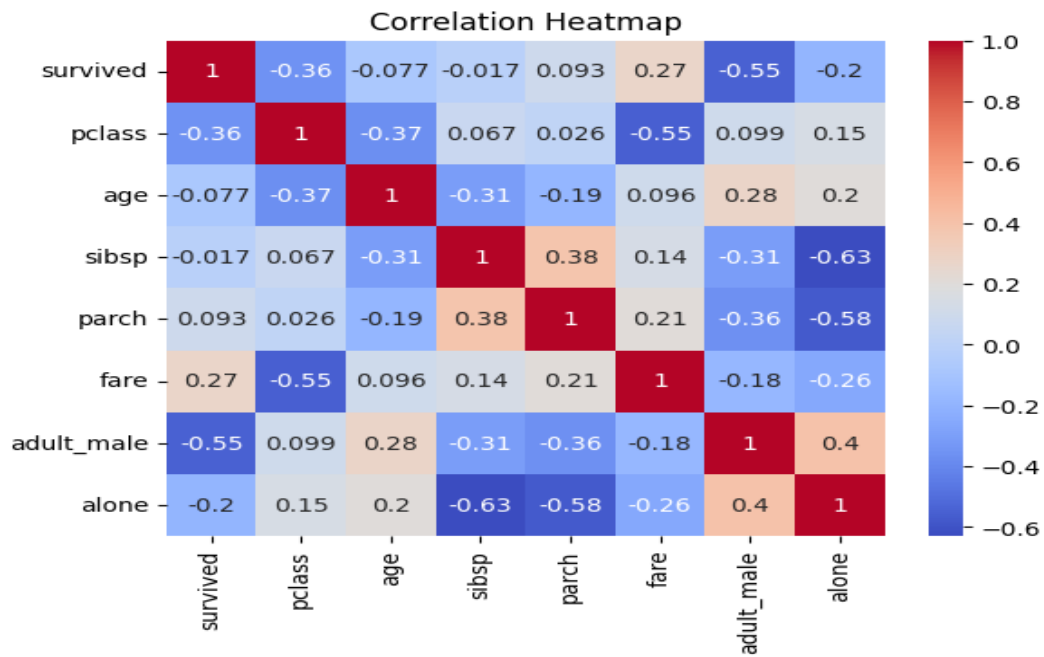
3. Correlation Analysis

Survival has a negative correlation with passenger class (-0.36) and a positive correlation with fare (0.27). Age shows a weak correlation with survival (-0.08).

4. Exploratory Data Analysis (EDA) Visualizations

Survival by Gender

Survival by Passenger Class

Age Distribution

Fare vs Survival

Correlation Heatmap

Conclusion

The analysis shows that passenger class and fare significantly influenced survival outcomes, while age had minimal impact. These findings support further predictive modeling tasks.