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POLITEKNIK BRUNEI

SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

DA4310 – DATA SCIENCE

Assignment One: Dashboard Application

Lecturer's Name:

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Contents

Introduction

The sinking of the RMS Titanic in 1912 remains one of the most tragic maritime disasters in history, prompting ongoing fascination and analysis (*Report With Individual Authors References*, n.d.). In this report, we delve into an exploration of the Titanic dataset, sourced from the Titanic beginners' competition on Kaggle (*Report by a Government Agency*, n.d.). The dataset is derived from the Titanic test file and the associated gender_submission, skillfully combined into a comprehensive CSV file. The purpose of this report is to leverage the dataset's insights, allowing for the creation of a dashboard application that aids in visualizing and understanding the factors influencing survival on the Titanic.

Problem Statements

Our analysis begins with a meticulous identification of the key problem statements inherent in the dataset. By scrutinizing the provided data, we aim to uncover patterns and factors that influenced the survival or demise of passengers aboard the Titanic (*Report by a Government Agency*, n.d.). This investigation is underpinned by clear and valid evidence extracted from the dataset, providing a robust foundation for our subsequent analyses.

Aims and Objectives

The overarching aim of our dashboard application is to enhance the understanding of the Titanic dataset, striving for accuracy levels exceeding 70% (*Report by a Government Agency*, n.d.). To achieve this, we outline three specific objectives: to identify influential variables affecting survival rates, to visualize these insights through comprehensible charts, and to empower users to make informed predictions with a potential accuracy of 100%.

Application Overview

This study envisions a dashboard application that is a useful tool for observing the details of the Titanic dataset. Using an easy-to-use interface, users may peruse the content and get important insights into the dynamics of survival and death during the tragic expedition. The purpose, organization, and goals of the application are outlined in this paper, which also provides the foundation for a detailed analysis of the dataset and its implications.

Main Dashboard

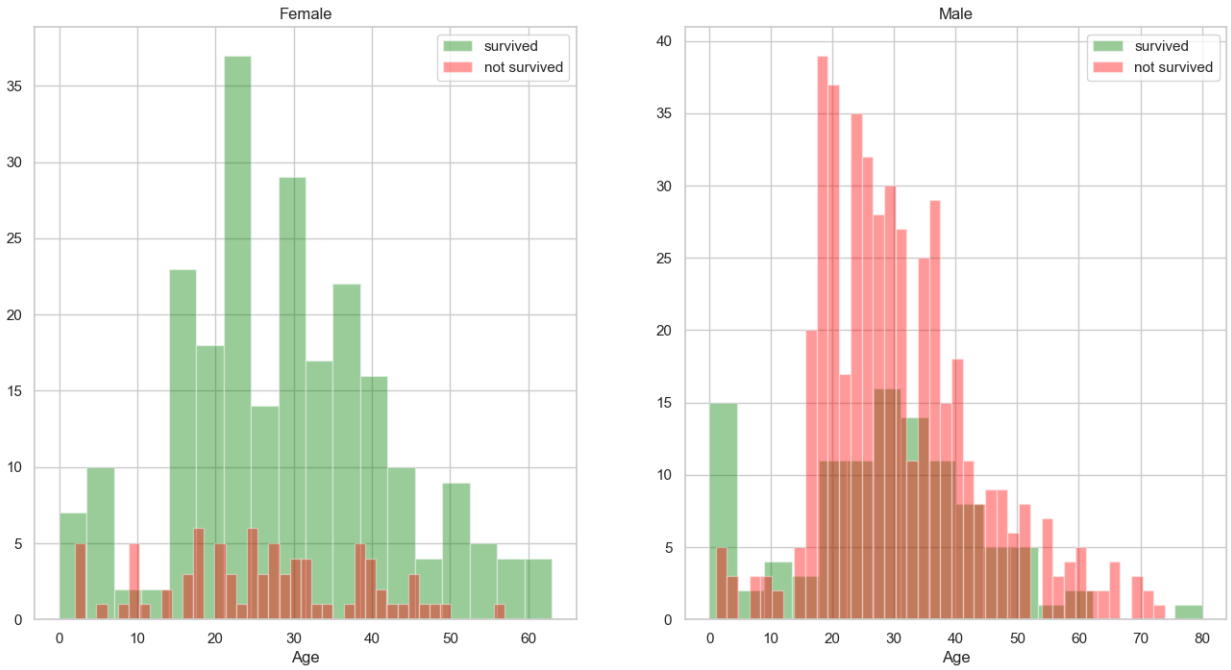


Figure 1 bar chart showing the age of male and female who have survived or not

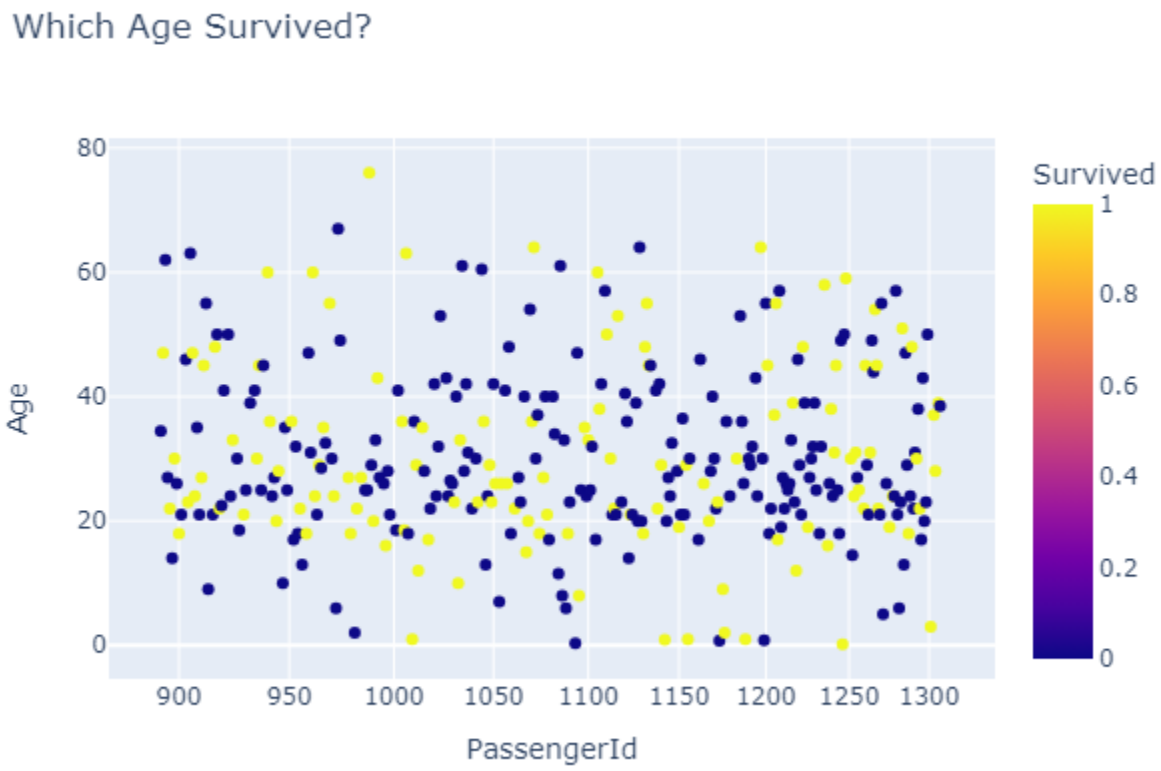


Figure 2 scatter plot showing the passenger id and age of passengers who survived or not

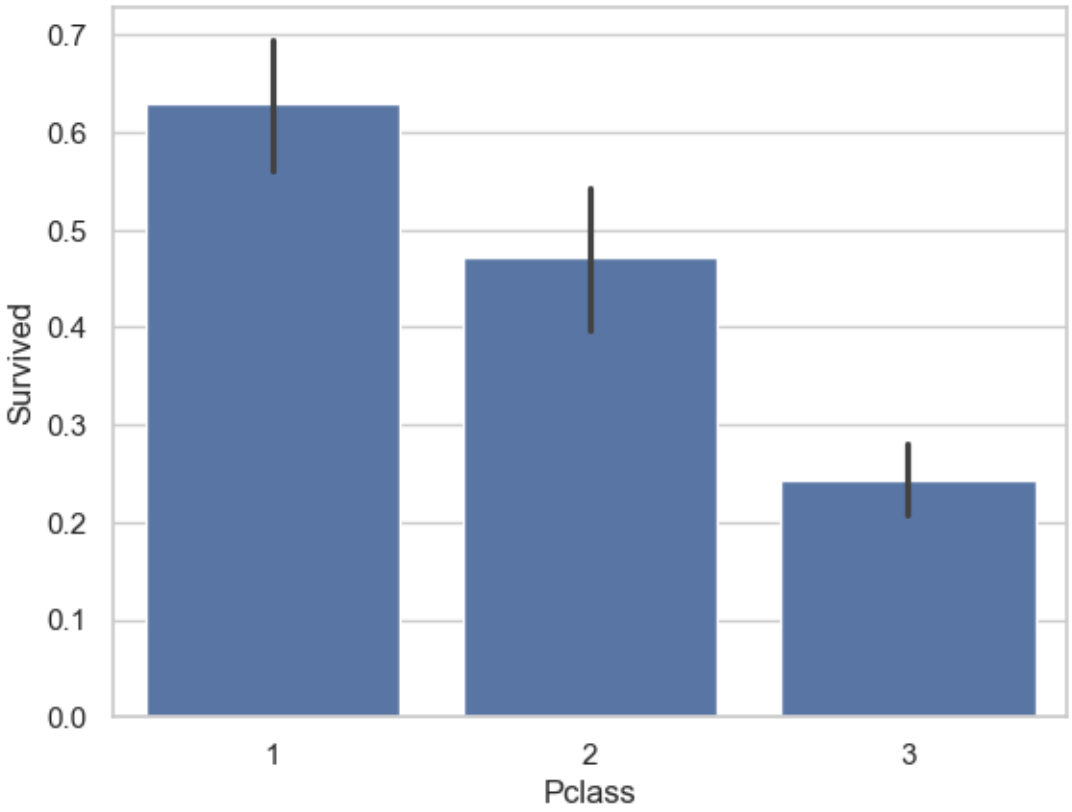


Figure 3 bar chart of class ticket passengers' survival amount

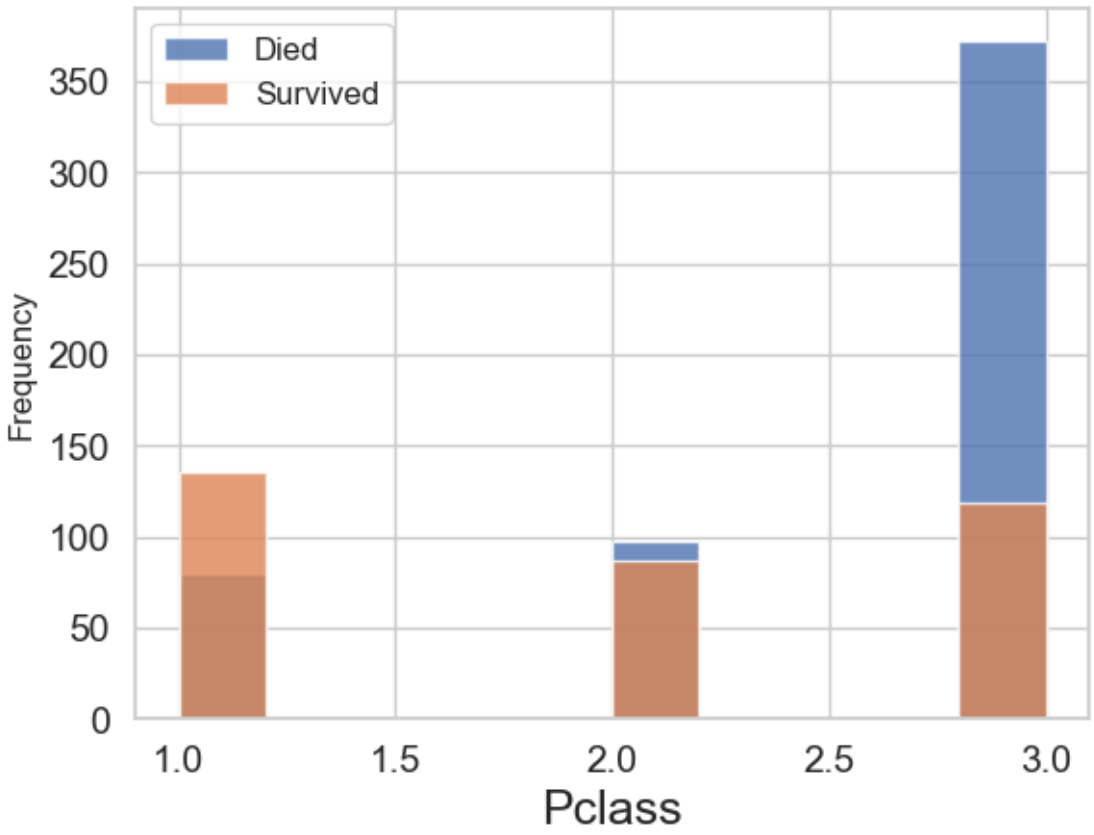


Figure 4 histogram chart showing the dead and survived passenger for each classes

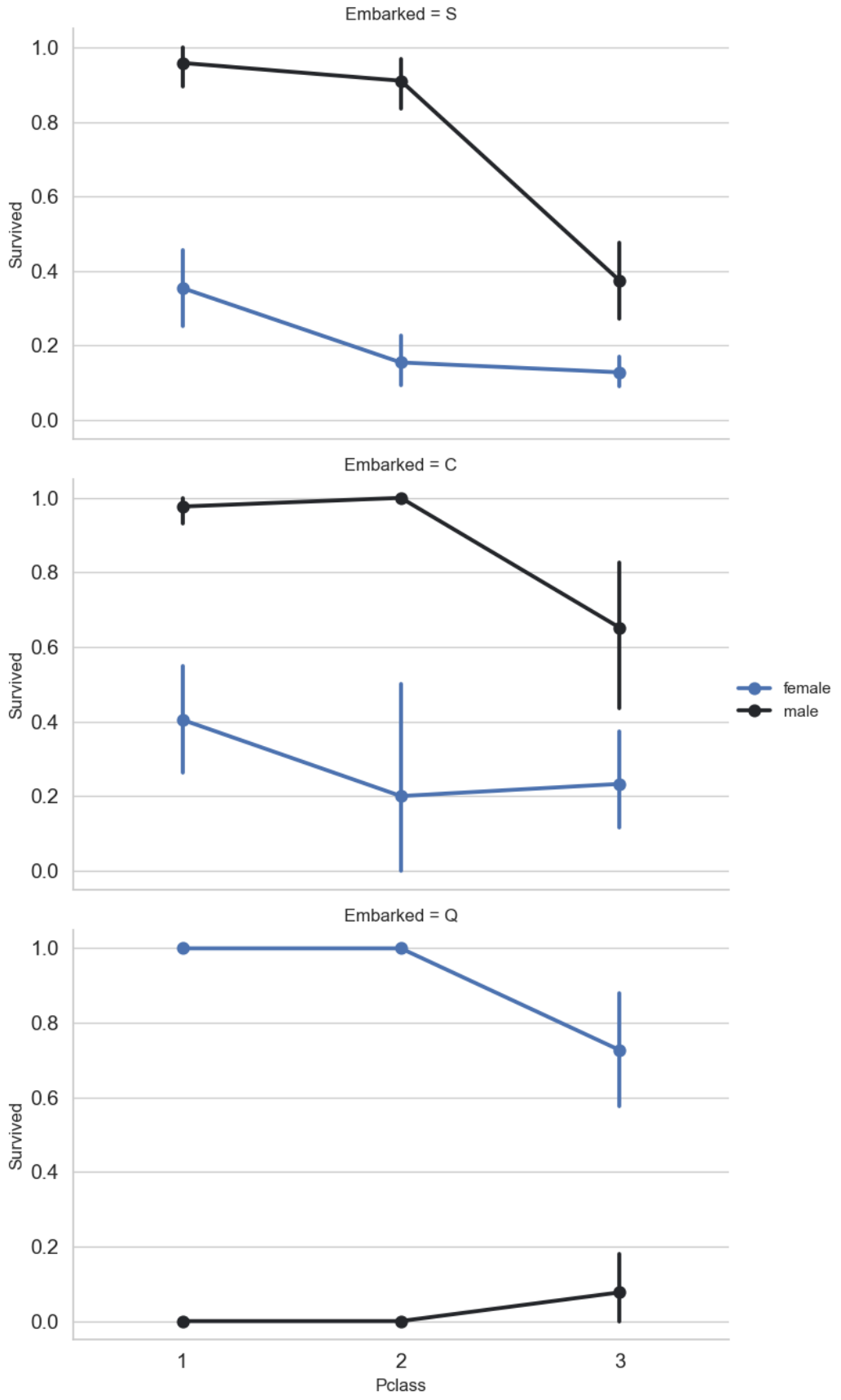

Embarked = S
Embarked = C
Embarked = Q
Survived
1.0
0.8
0.6
0.4
0.2
0.0
1
2
3
Pclass
female
male

Figure 5 showing a facet grid chart showing each embarkment in male and female who have survived or not

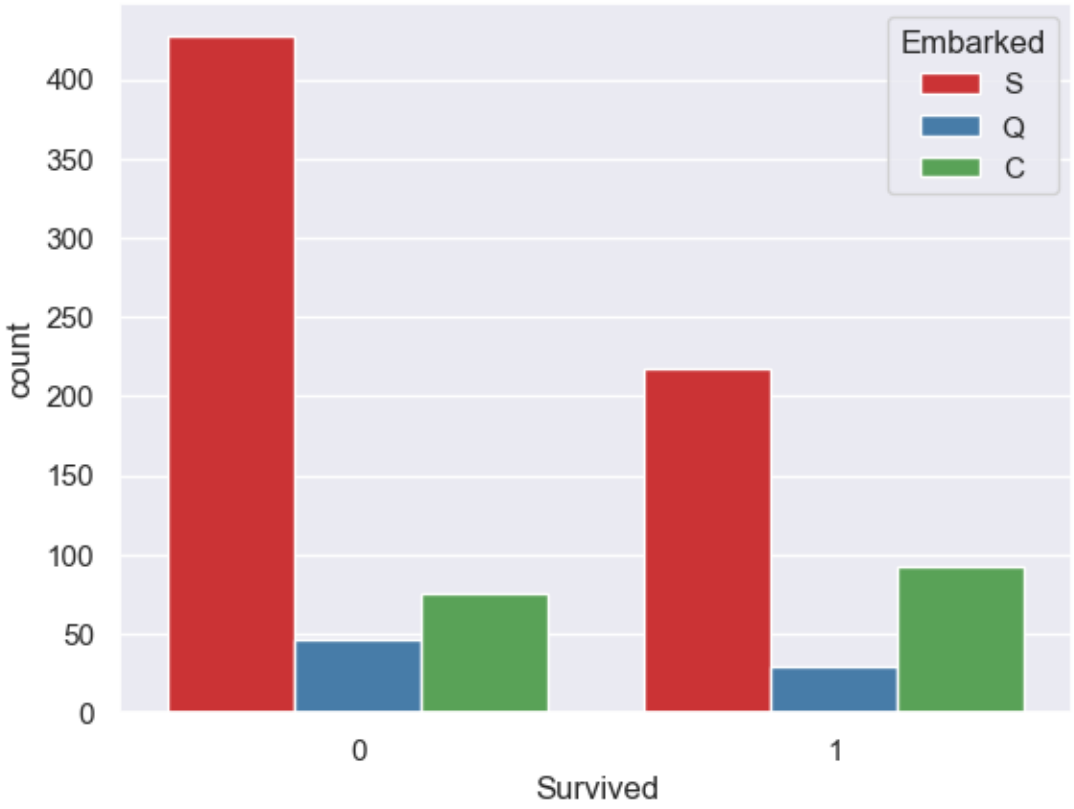


Figure 6 shows a count plot showing passengers who survived or not depending on where they embark

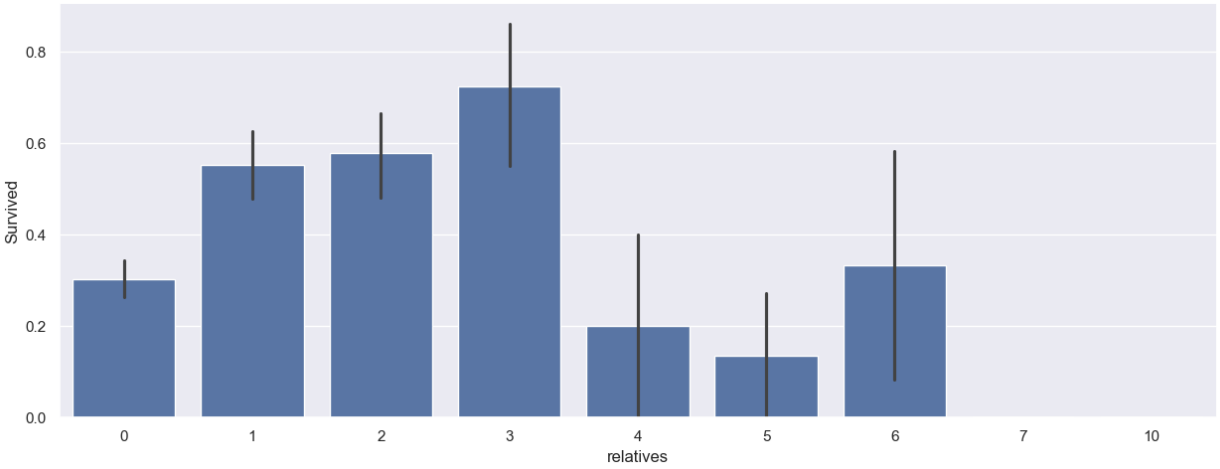


Figure 7 a bar chart showing how many people a passenger travels with chances are of surviving

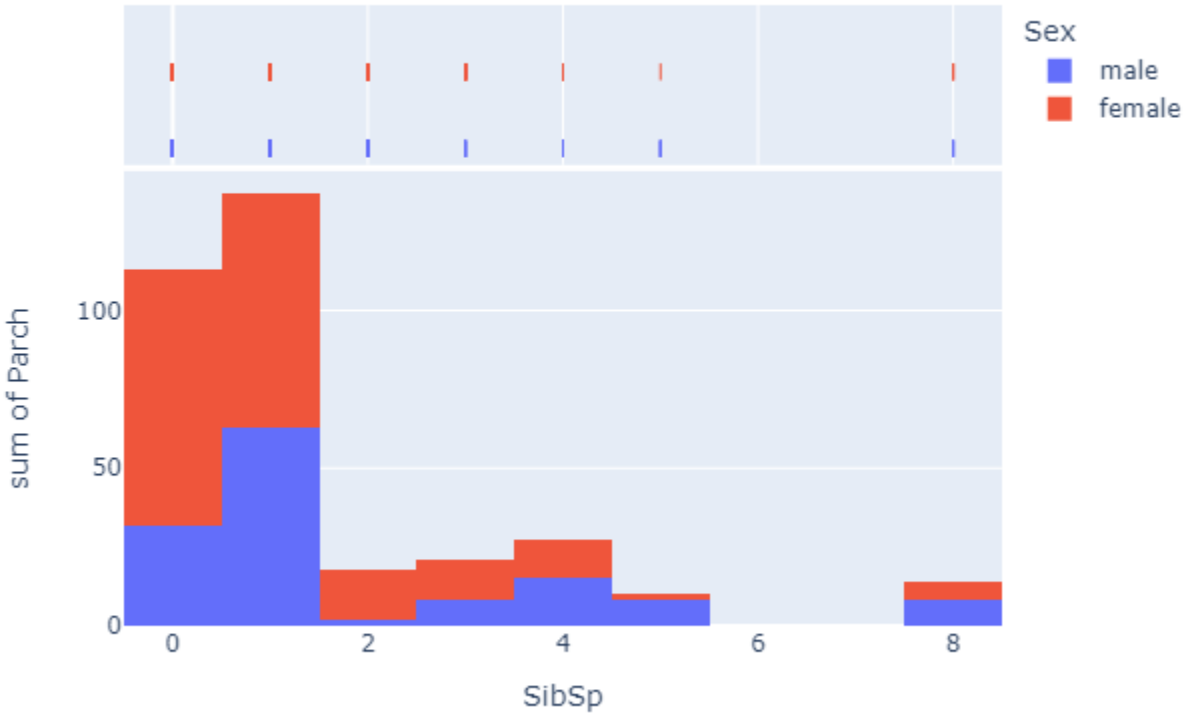


Figure 8 A histogram chart showing the gender of the passengers who are traveling with

User Manual

Recommendations

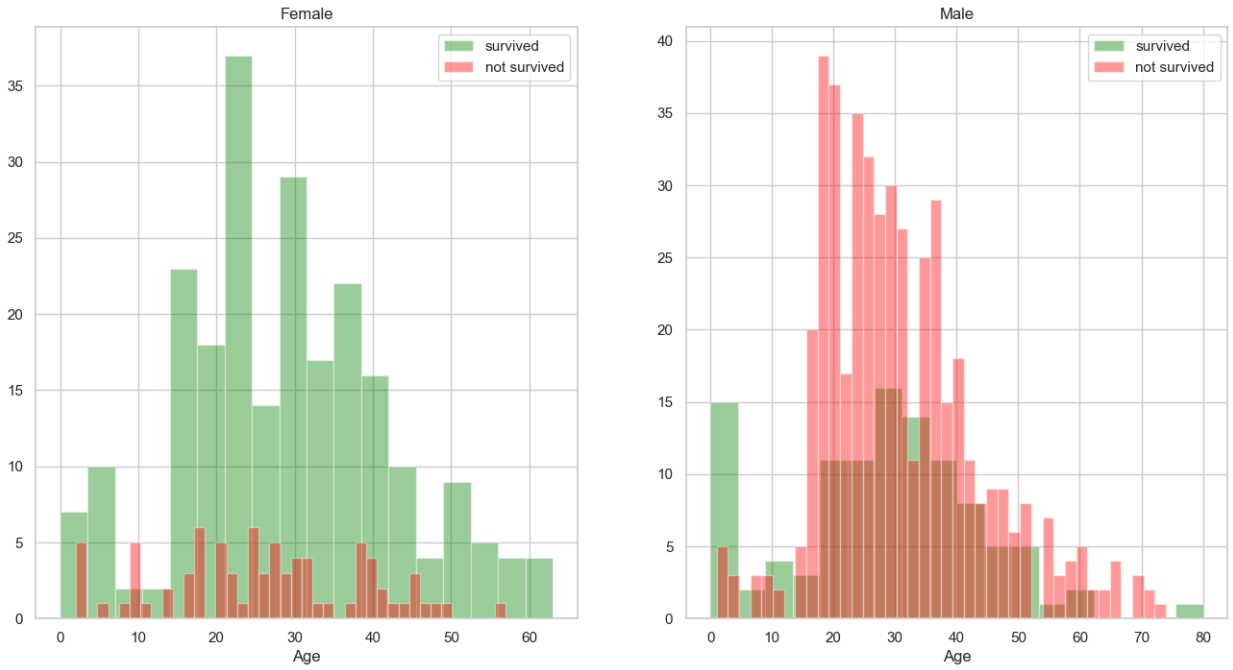
Conclusion

References

Report with individual authors references. (n.d.). https://apastyle.apa.org. https://apastyle.apa.org/style-grammar-guidelines/references/examples/report-individual-authors-references

Report by a government agency. (n.d.). https://apastyle.apa.org. https://apastyle.apa.org/style-grammar-guidelines/references/examples/report-government-agency-references

Appendices



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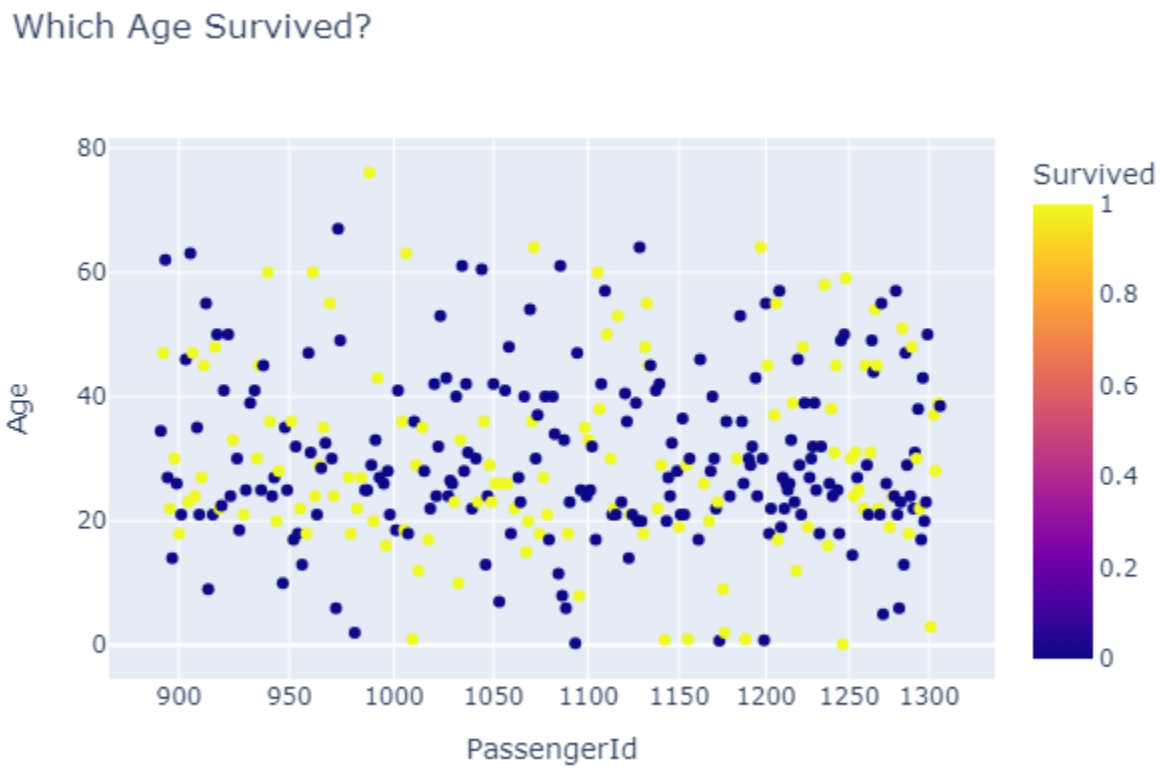

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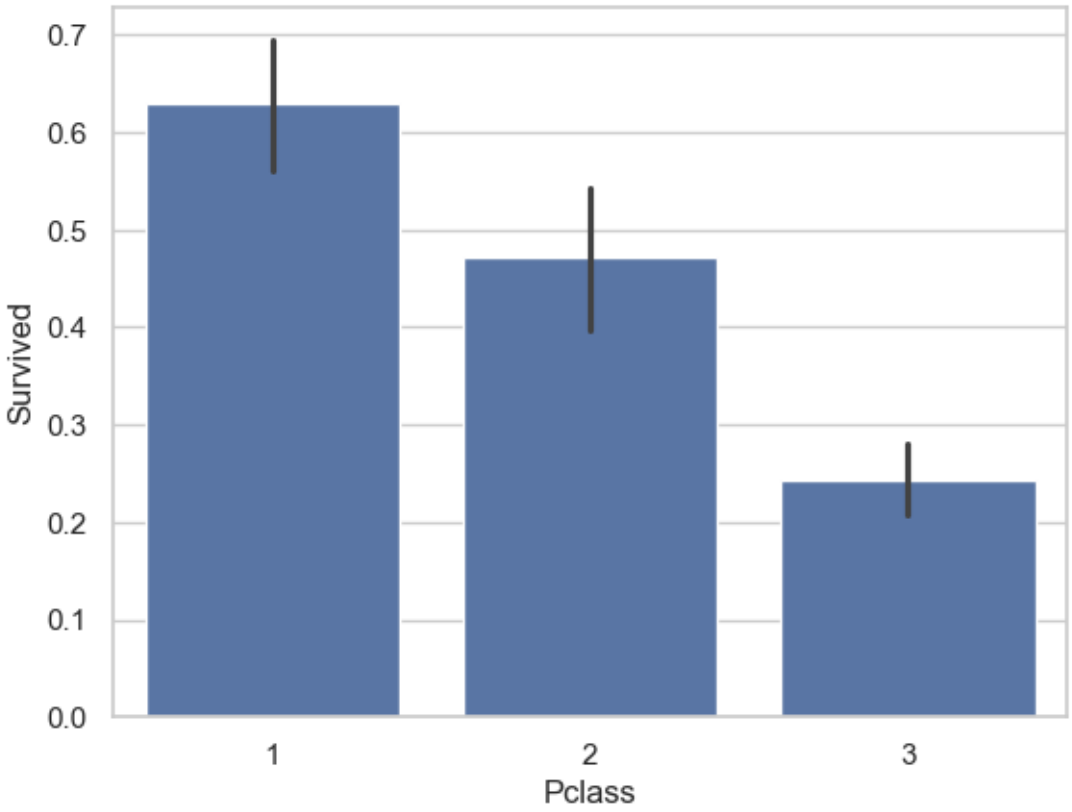

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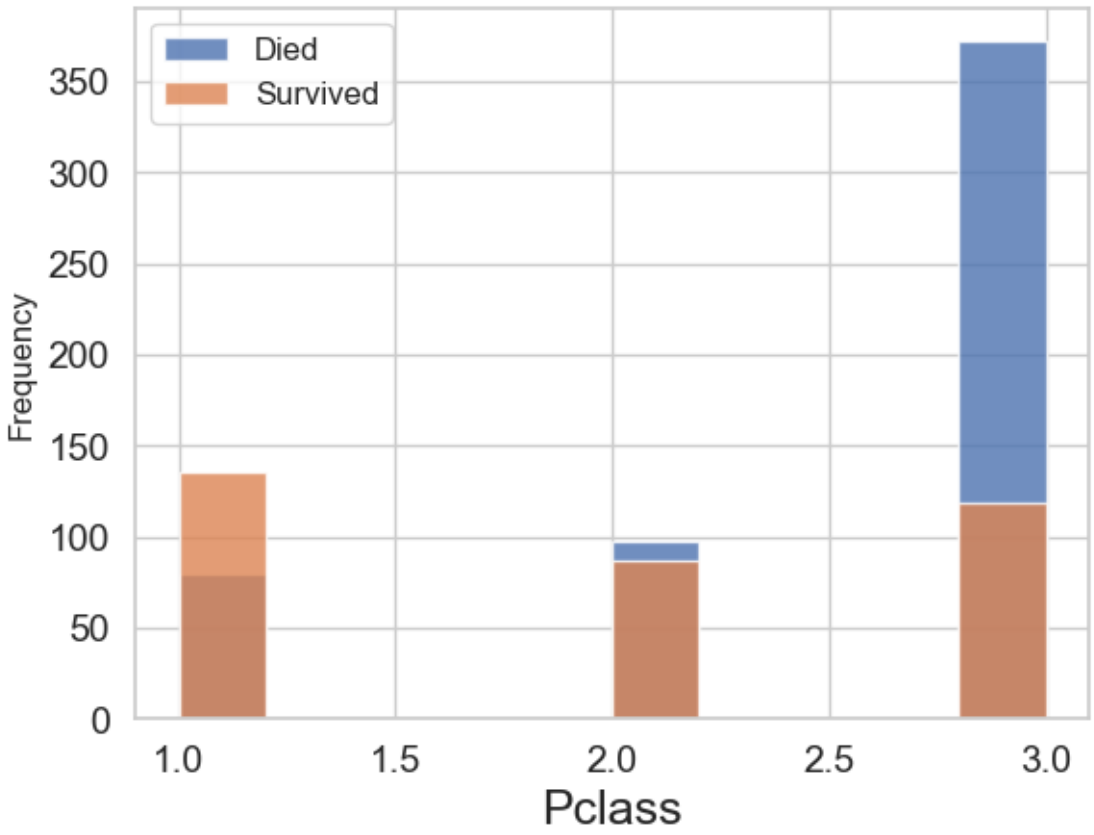

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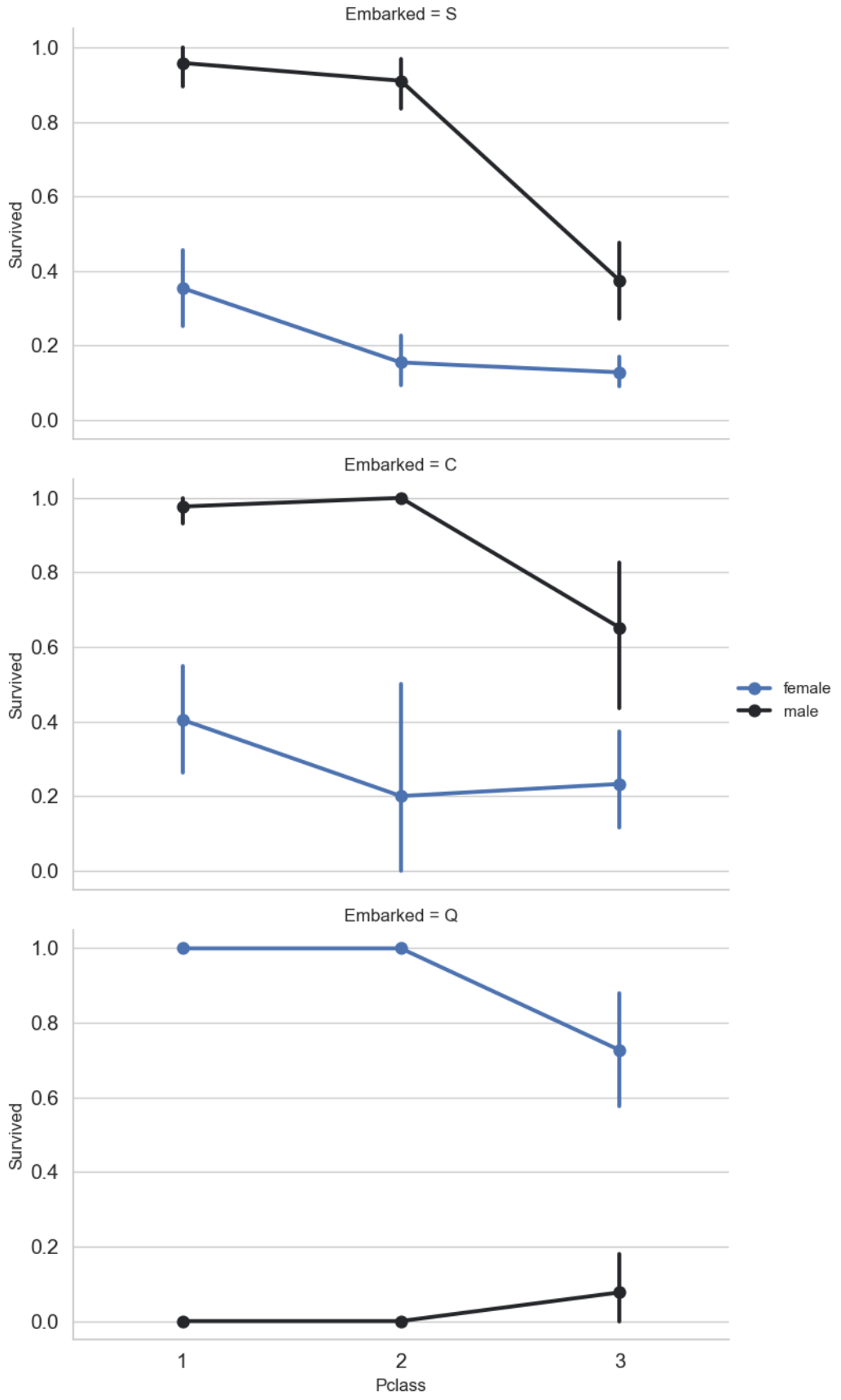
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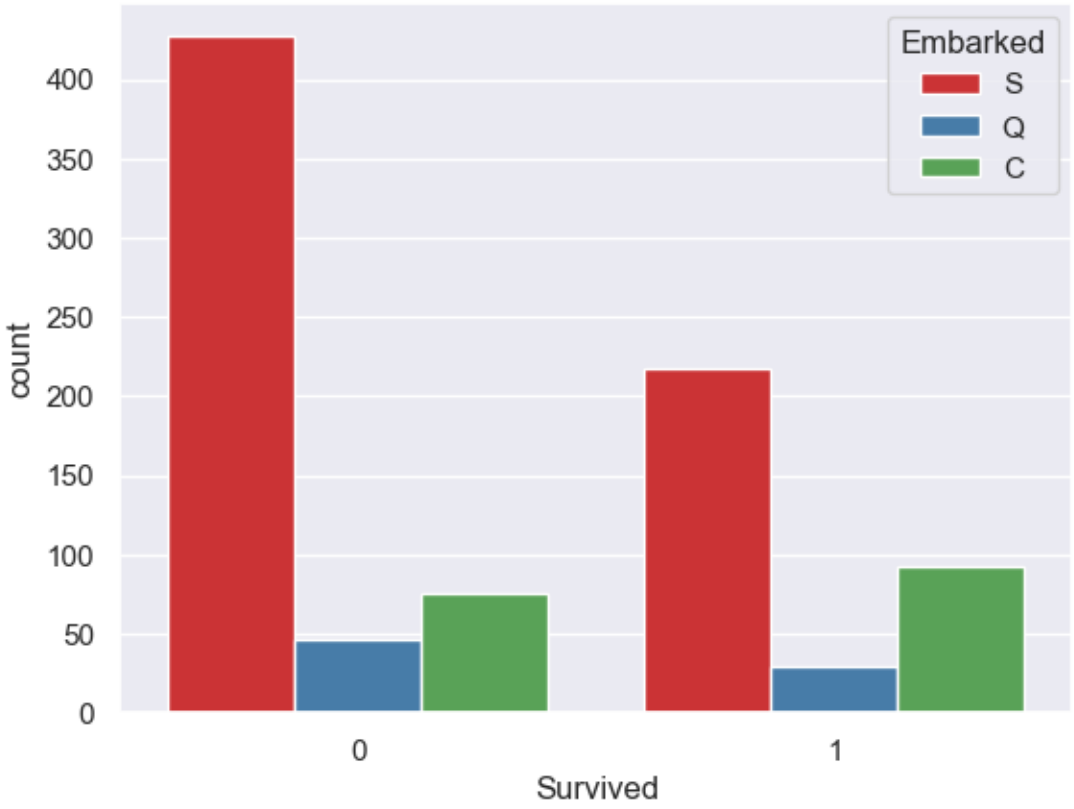

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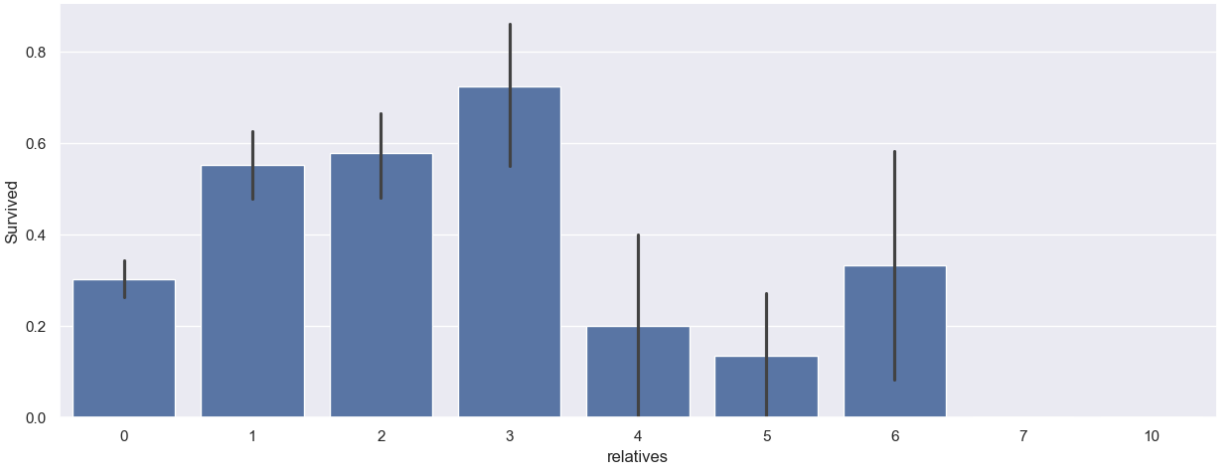

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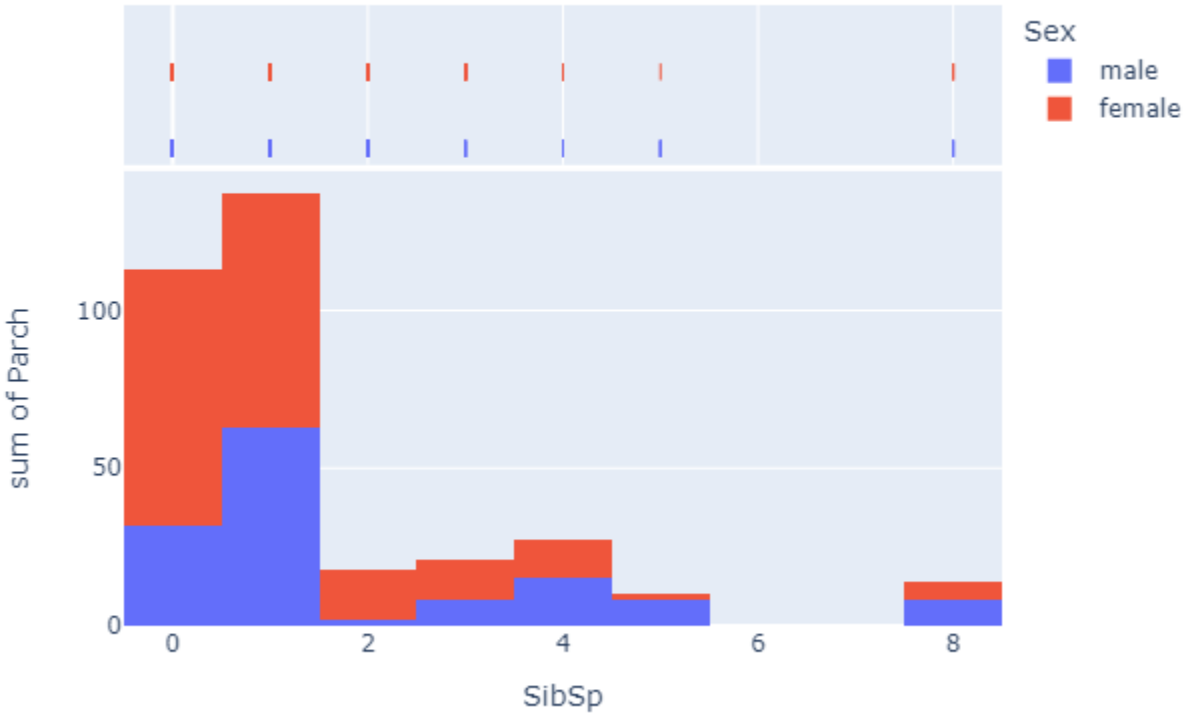

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