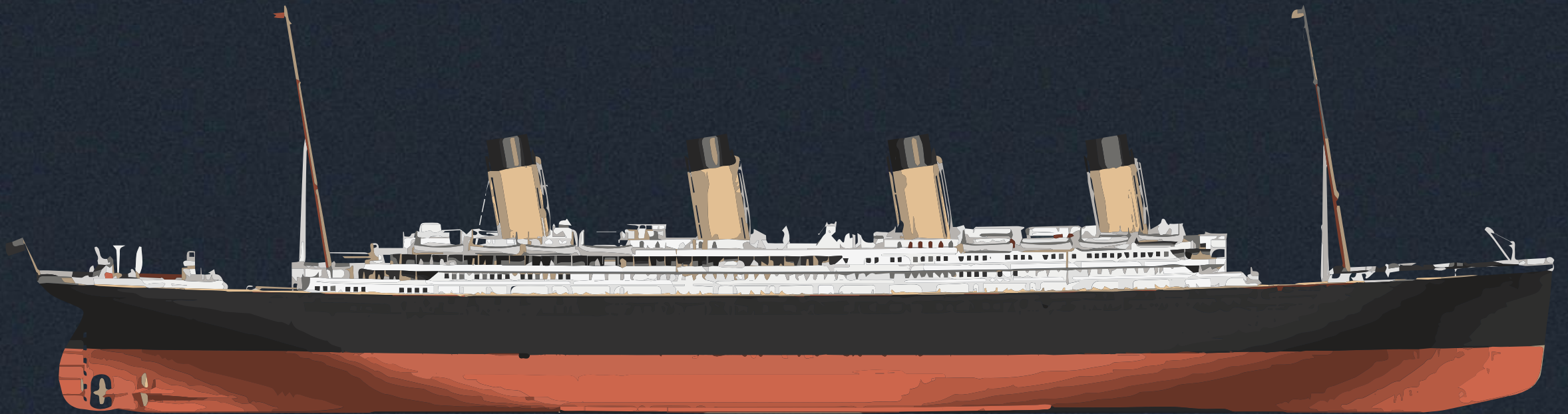


TITANIC



Performed by :

Ana Macedo

Luís Machado

M'bokeno Lowa

Agenda

Introduction

Analysis :

Distribution of passengers by gender

Distribution of Survival by Gender

Age Distribution of passengers by gender and Survival

Correlation Matrix

Survival Rate per Class (%)

Survival Rate by Family Size on Board

Count of Passengers by Family Size and Class

Conclusion



Introduction

Titanic

British ship
Destination: New York

2,224 people on board
891 passengers
(registered)

Collision with the iceberg
on April 14, 1912
1,500 deaths

NEW-YORK CITY

WRECK SITE

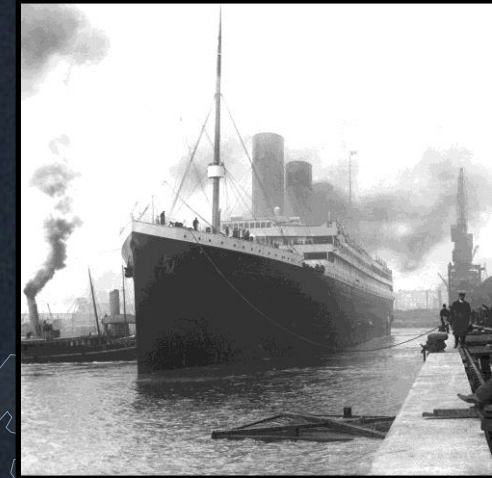
ICEBERG WARNINGS

BELFAST (CONSTRUCTION)

QUEENSTOWN

SOUTHAMPTON (START)

CHERBOURG



Data Processing

Age : 20% null values.

Average calculated by gender.

Cabin : 77% null values

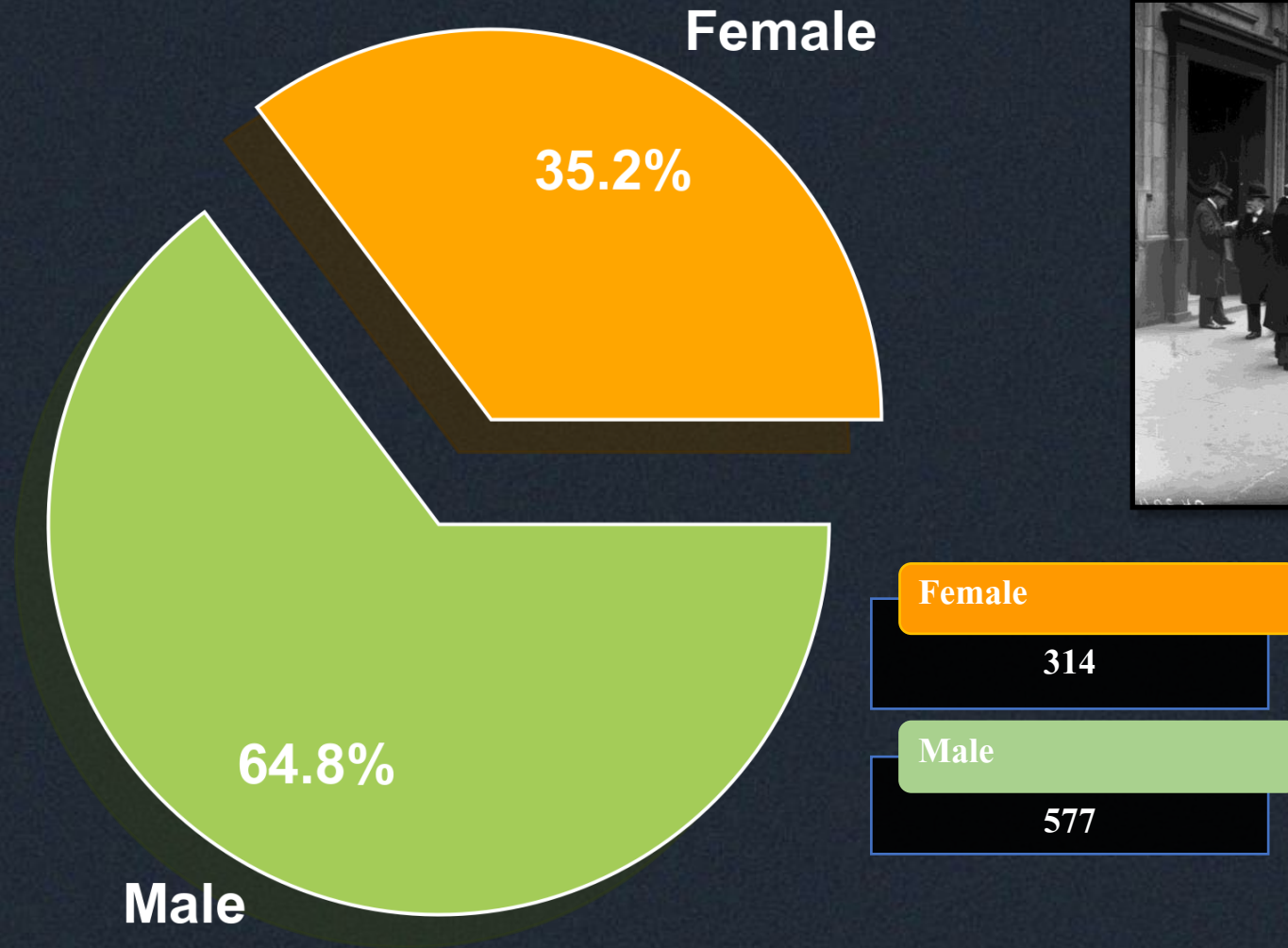
Embarked 0.002% null values.

Null values replaced by the most frequent one.

Family size :

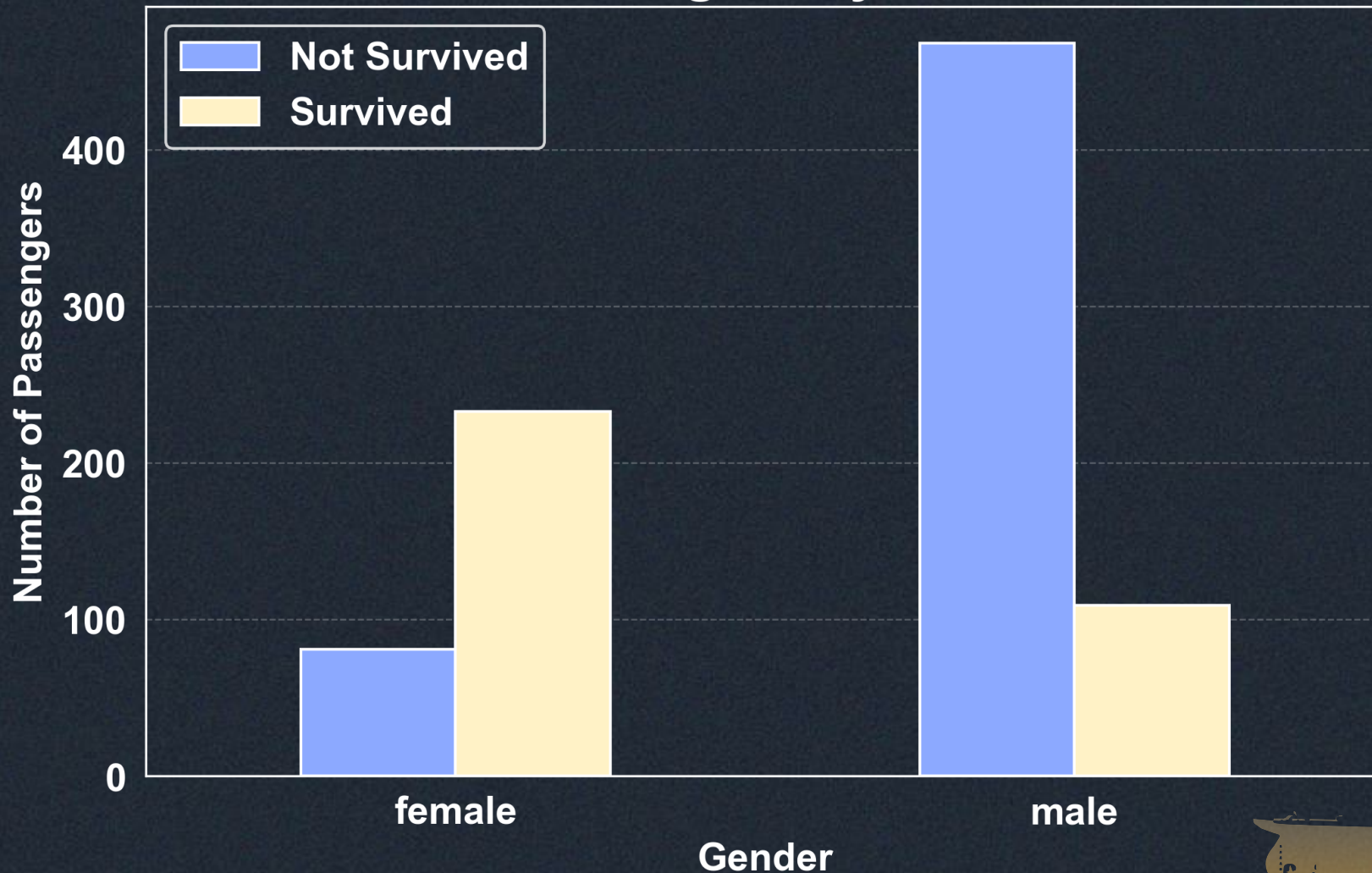
$\text{SibSp} + \text{Parch} + 1$

Distribution of Passengers by Gender



Distribution of Survival by Gender

Distribution of Passengers by Gender and Survival



Male

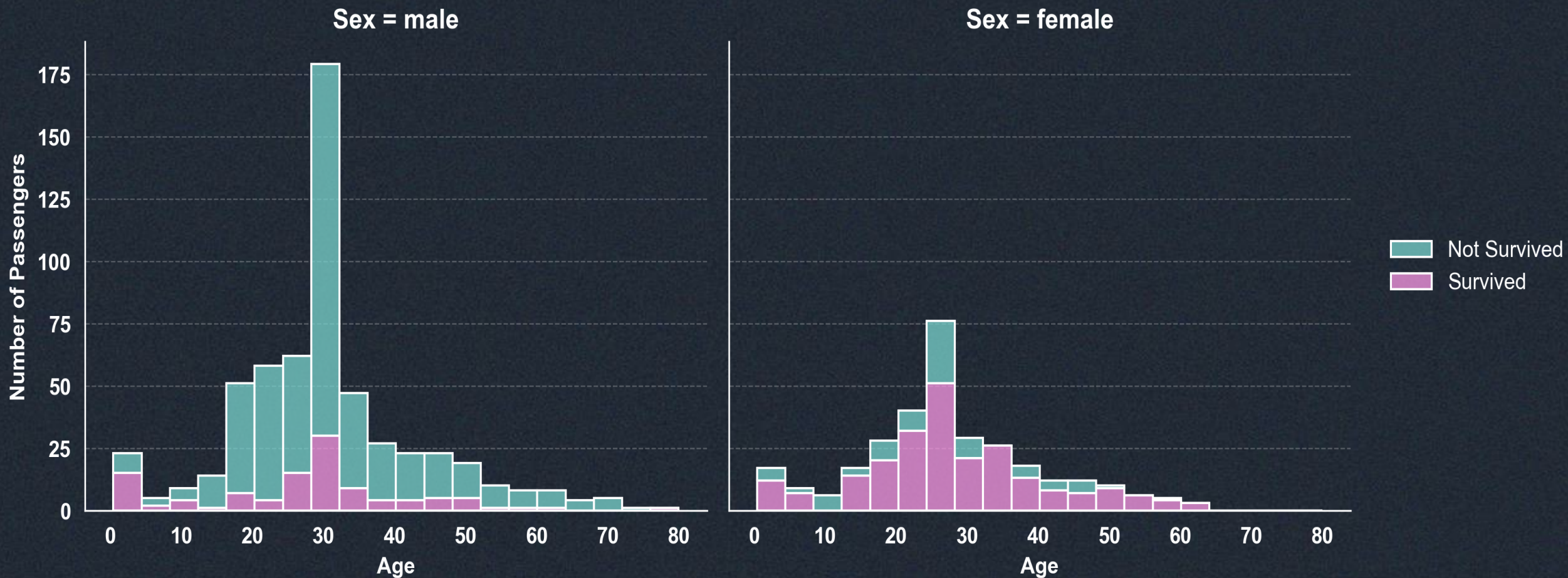
- Survived – 109
- Not survived - 468

Female

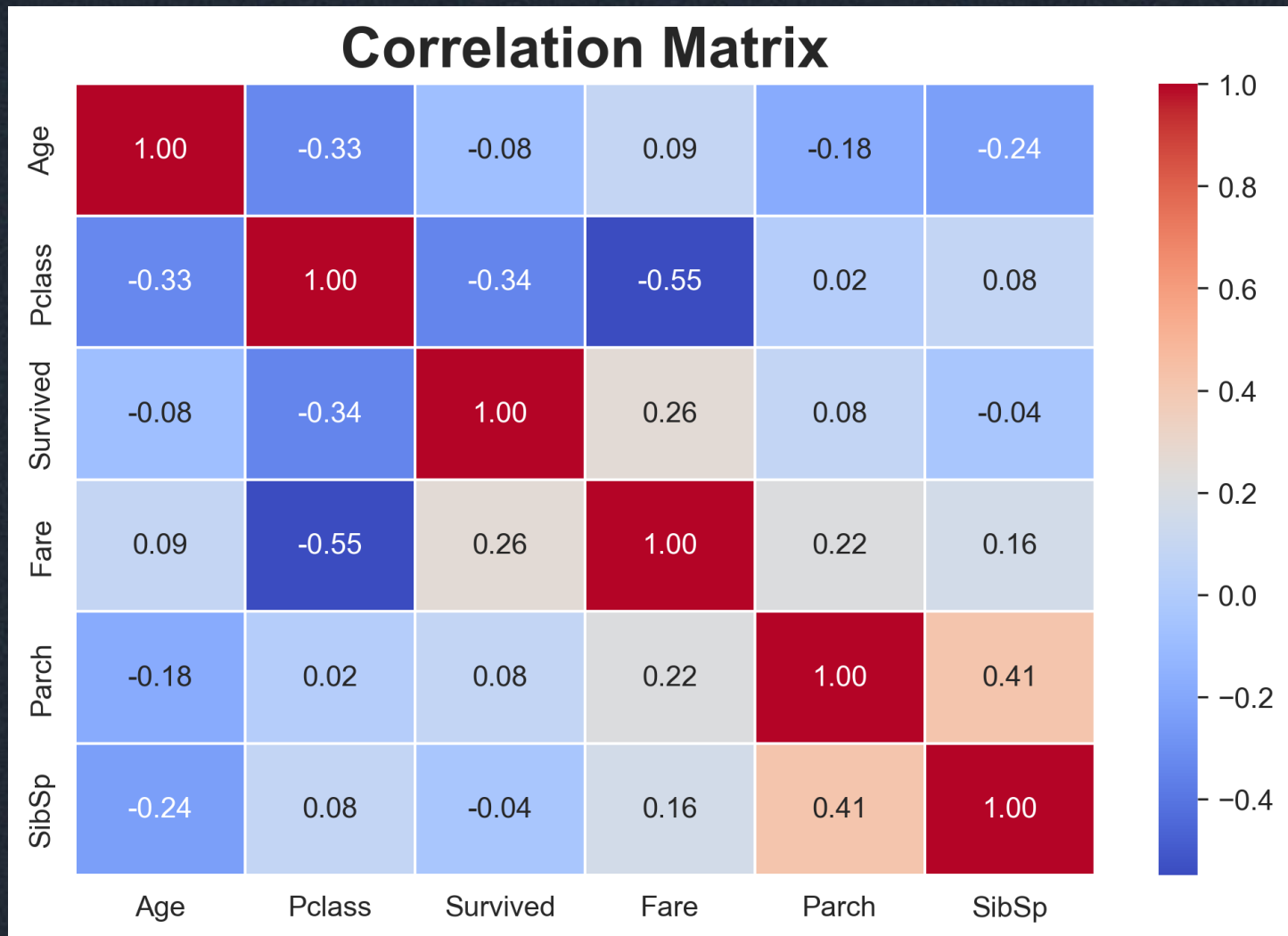
- Survived – 233
- Not Survived - 81



Age Distribution of Passengers by Gender and Survival



Correlation Matrix



Strong Correlation

- Fare – Pclass (-0.55)
- Parch – SibSp (+0.41)

Moderated Correlation

- Pclass – Survived (-0.34)
- Pclass - Age (-0.33)
- Fare – Survived (+0.26)

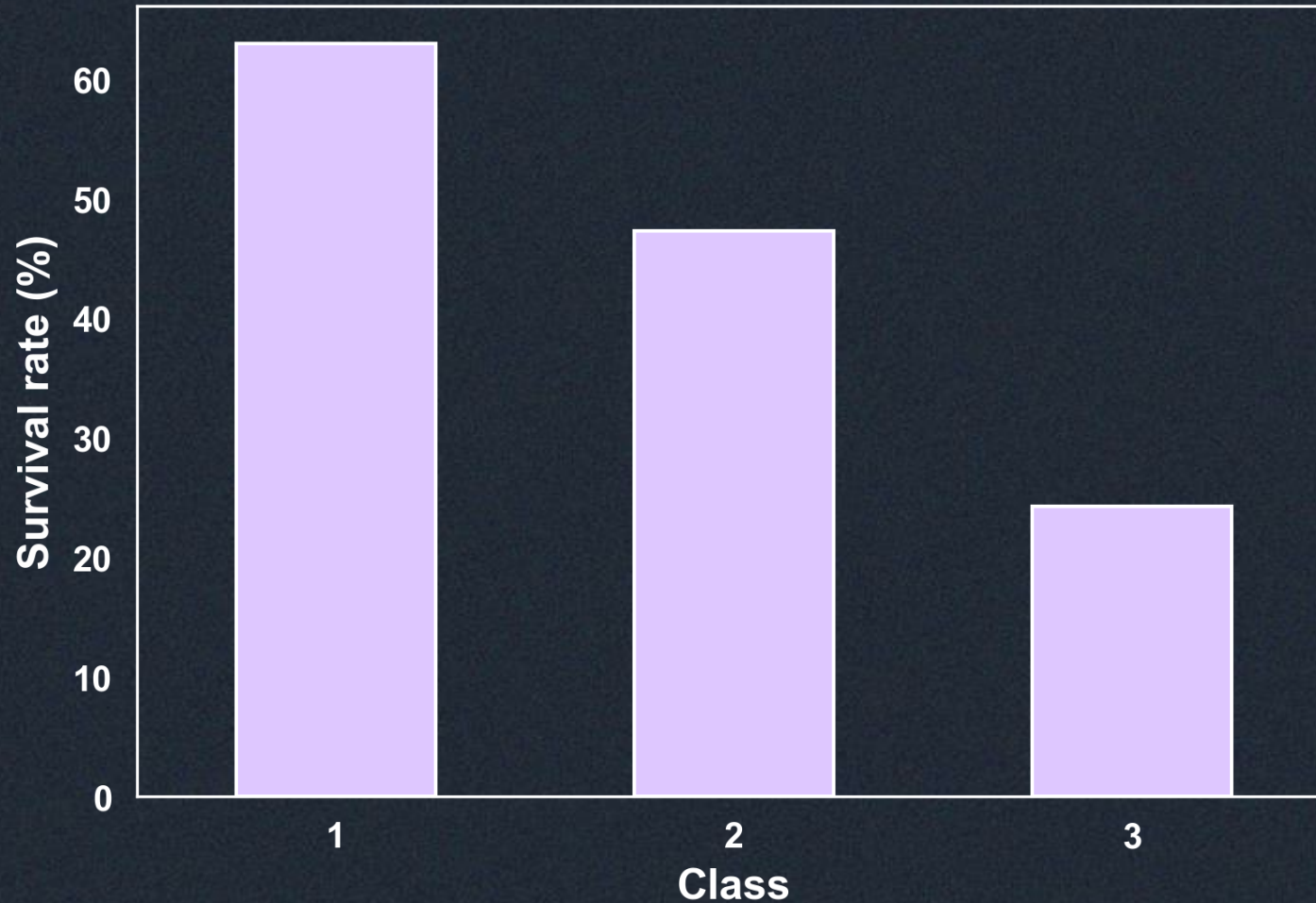
Weak Correlation

- Pclass - SibSp (0.08)
- SibSp – Survived (-0.04)



Survival Rate per Class (%)

Survival rate per class (%)



Total Passengers per Class

1st Class - 216

2nd Class - 184

3rd Class - 491

Total Passengers Survived per Class

1st Class - 136

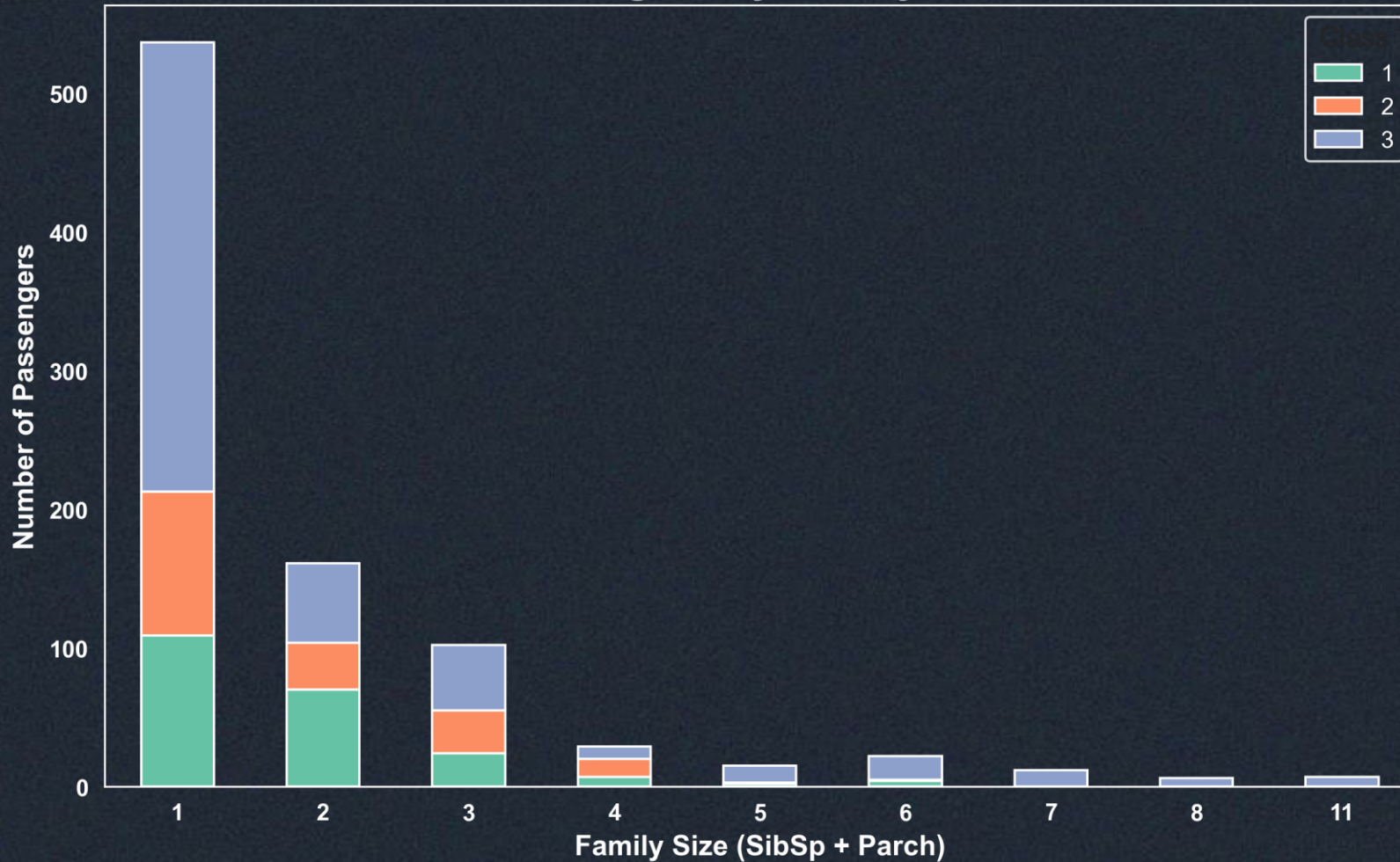
2nd Class - 87

3rd Class - 119



Count of Passengers by Family Size and Class

Count of Passengers by Family Size and Class



1 passenger

Most in the 3rd class

60% of the passengers

2 to 4 Passengers

Distributed equally by
the 3 classes

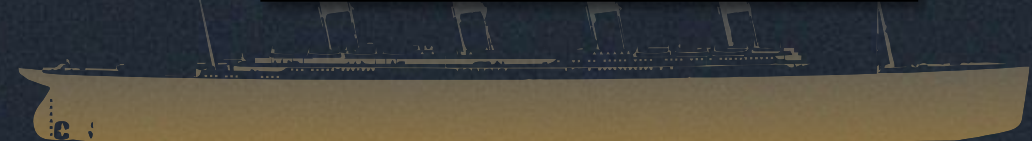
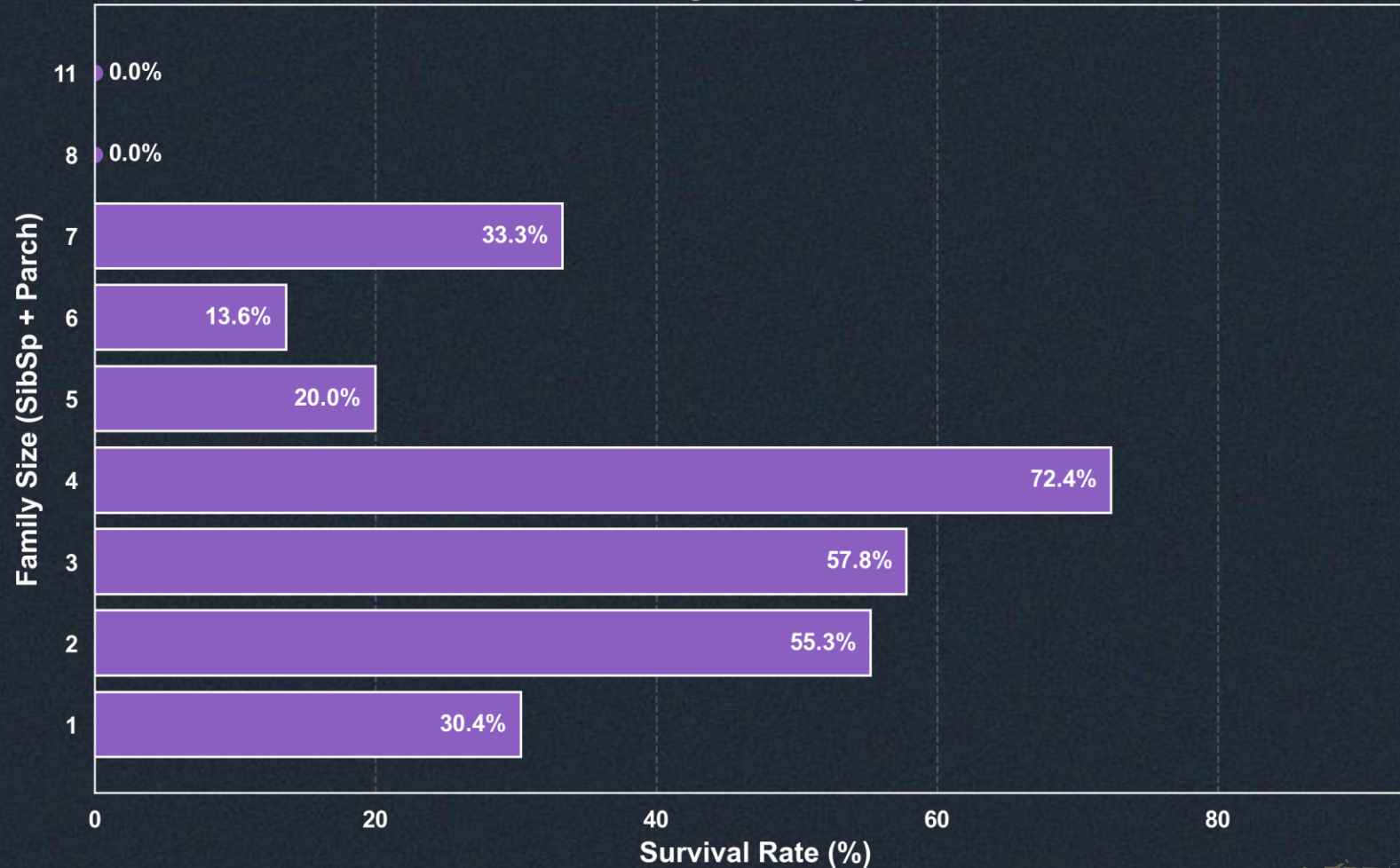
5 to 11 passengers

Most in 3rd class



Survival Rate by Family Size on Board

Survival Rate by Family Size Aboard



Conclusion

Most of the survivors:

- 1st Class
- Children
- Women



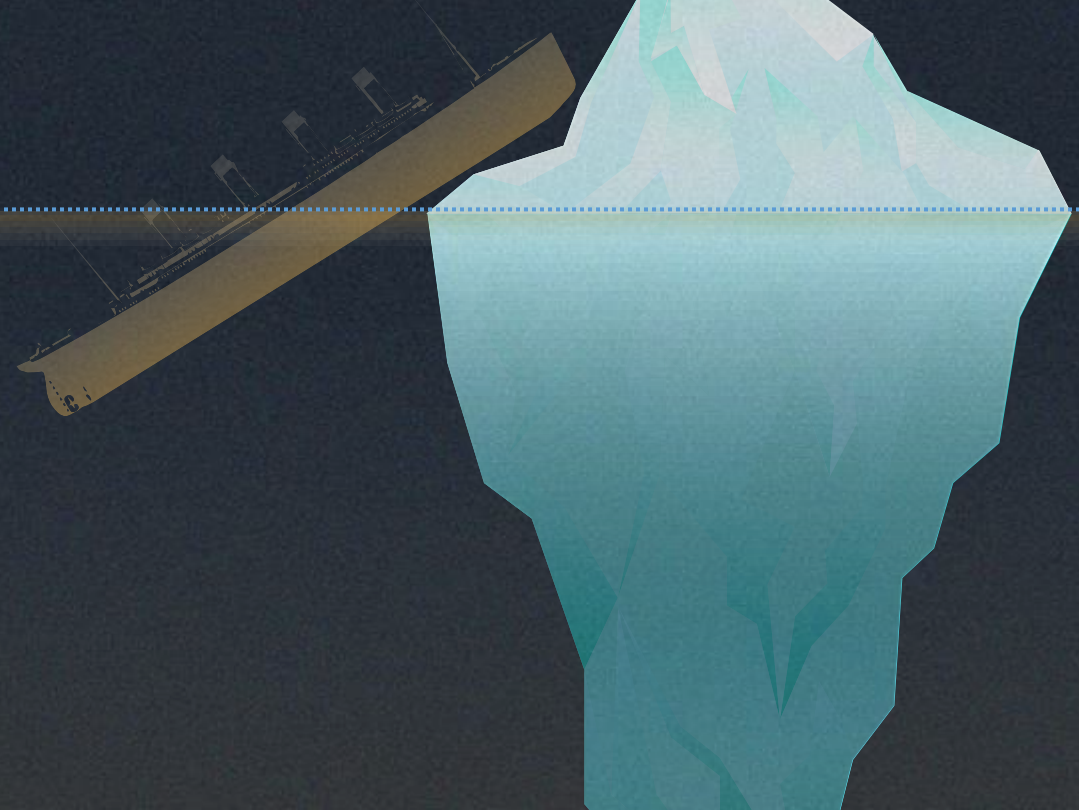
Most of passengers the traveled alone



Family of 4 are the one with the highest percentage of survivors



342 Survivor's



THANKS

