

# CPSC4800 Assignment 3 Report – Part 2

## GitHub location

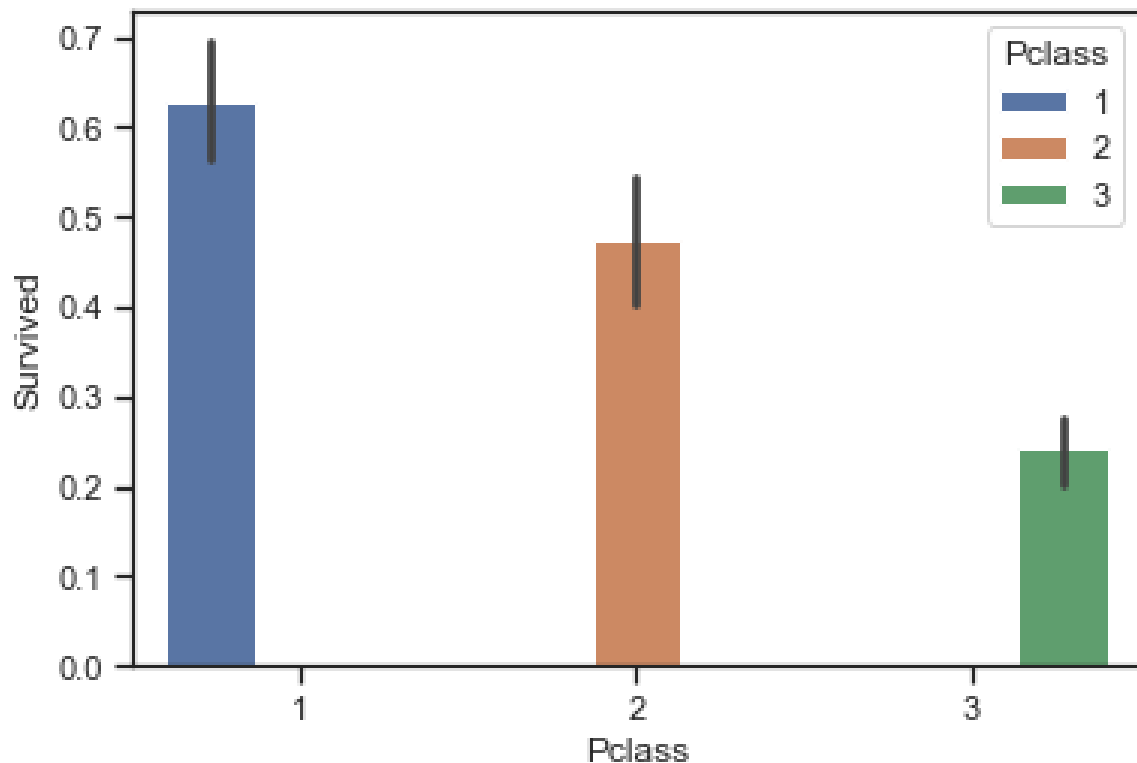
The public GitHub location is in

<https://github.com/hubber65611/Titanic>

## Hypothesis 1 – The Survival rate is associated to the class of the passenger.

The hypothesis that the survival rate is associated with the class of the passenger is supported by the percentage values of the number of class 1,2 and 3 passengers who survived the Titanic.

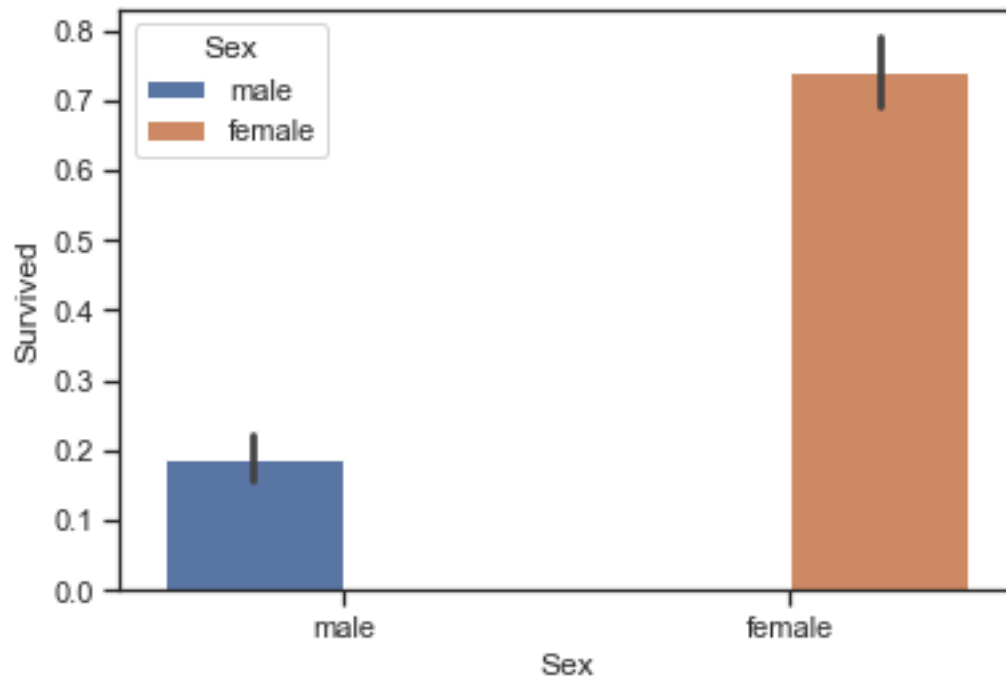
62.96% of passengers in Class 1 survived, and the percentage of survivors goes down as we go down the passenger classes, with 47.28% of Class 2 passengers and an ever lower percentage of 24.24% of Class 3 passengers who survived.



## Hypothesis 2 - The survival rate is associated to the gender.

The hypothesis that the survival rate is associated with the gender of the passenger is also supported by the percentage values of the gender of the passengers who survived the Titanic.

74.20% of the female passengers while only 18.89% of the male passengers survived.



## Hypothesis 3 - The survival rate is associated to the age

The hypothesis that the survival rate is associated with the age of the passenger is tested by binning the ages of the passengers by their decade range.

The resulting table shows a survival age that the survival rate of close to 40% for passengers in the 10 to 59 age ranges, with survival extremely high in the 0-9 age range and the extremely low in ages 50 onwards, giving the

A possible theory for this difference between the 0-9 and the adult population, and the 60+ elderly population is the code of conduct where “women and children” are saved first in a disaster, and the decreased ability of elderly passengers to make their way to safety on lifeboats during the catastrophe.

Age	Survived	Died
0-9	0.593750	0.406250
10-19	0.382609	0.617391
20-29	0.365217	0.634783
30-39	0.445161	0.554839
40-49	0.383721	0.616279
50-59	0.404762	0.595238
60-69	0.235294	0.764706
70+	0.200000	0.800000

