**Report**

Starter: As examining the patterns presented in the visualizations of the Titanic dataset, we investigate the influence of socio-economic factors, such as passenger class, gender, age, and fare, on the likelihood of survival.

The bar chart shows the survival and the death rate of the passengers based on their gender and we can conclude that the females were given preference as their survival rate is high compared to their male and their death rate is low compared to male.

The second graph shows the survival rate based on their class of seat and we can conclude that the highest death rate is of 3rd class and the highest survival rate is of 1st class.

The third graph shows that the age of the passengers with their rate of survival and their death rate. We can conclude that the child with the lowest age has a higher survival rate compared to a child with a higher age and the trend goes on with the adults. The death rate goes remains constant over the age.

The last box plot displays the fare distribution with respect to the number of survivors. Comparing the two boxplots, the median (2nd quartile) for passengers who did not survive is lower than those who survived. This suggests that individuals who paid higher fares had a higher chance to survive. For the outliers, in the 0 group, it shows that the fare variable is not certainly determining whenever the individual will survive or not, since the outlier shows a high fare. In addition, the wider interquartile for non-survivors implies a greater variation in the fares been paid, but survivors had a relatively smaller fare range. (Prediction: the higher fares may have more access to better resources so to increase the likelihood of survival.)

Conclusion: As conclusion, the data visualizations indicate correlations between different factors with survival, where significant dependence is suggested. It seems that higher-class passengers, females, children, and those who paid higher fares had higher survival chances. Based on this analysis provides a hypothetical insight into the social and economic factors that influenced the data of survival.