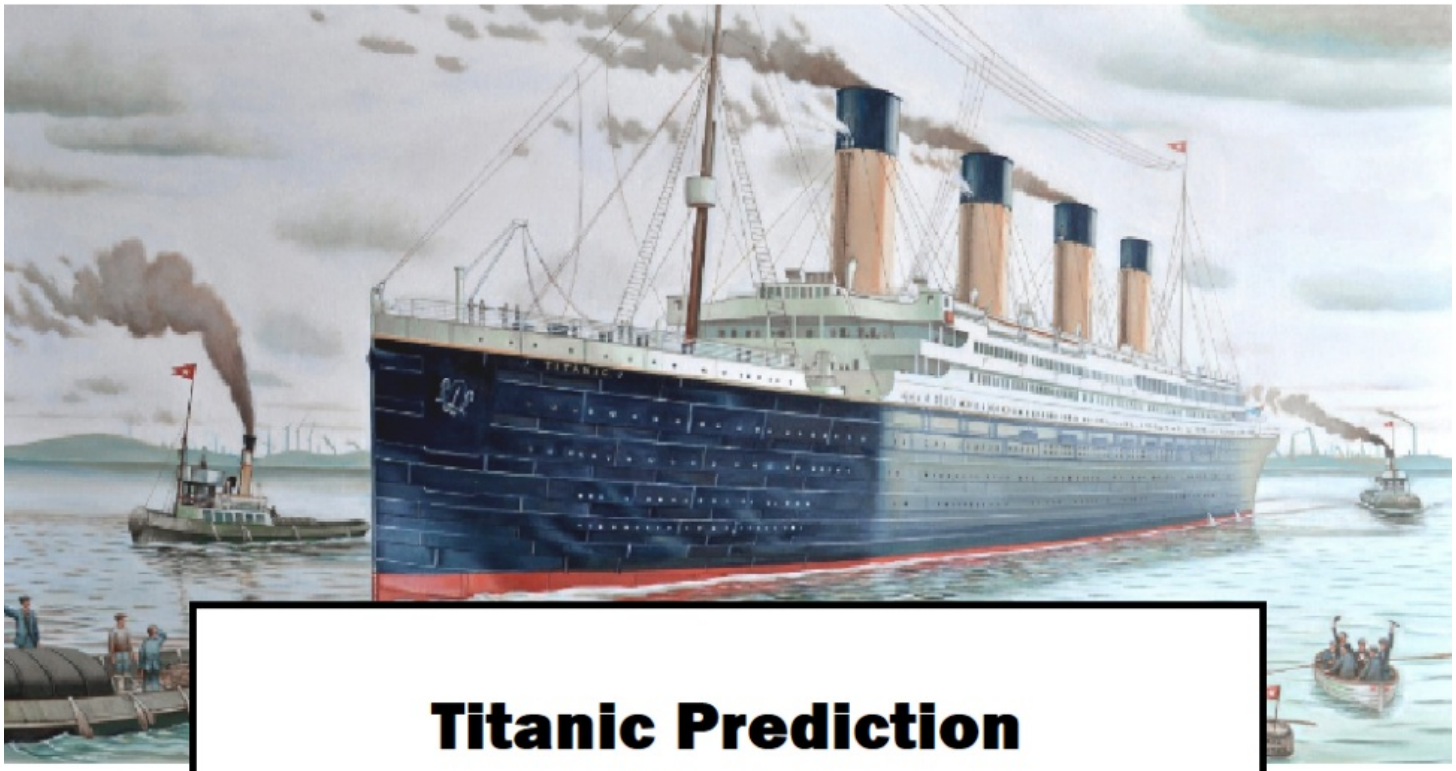
Presentation

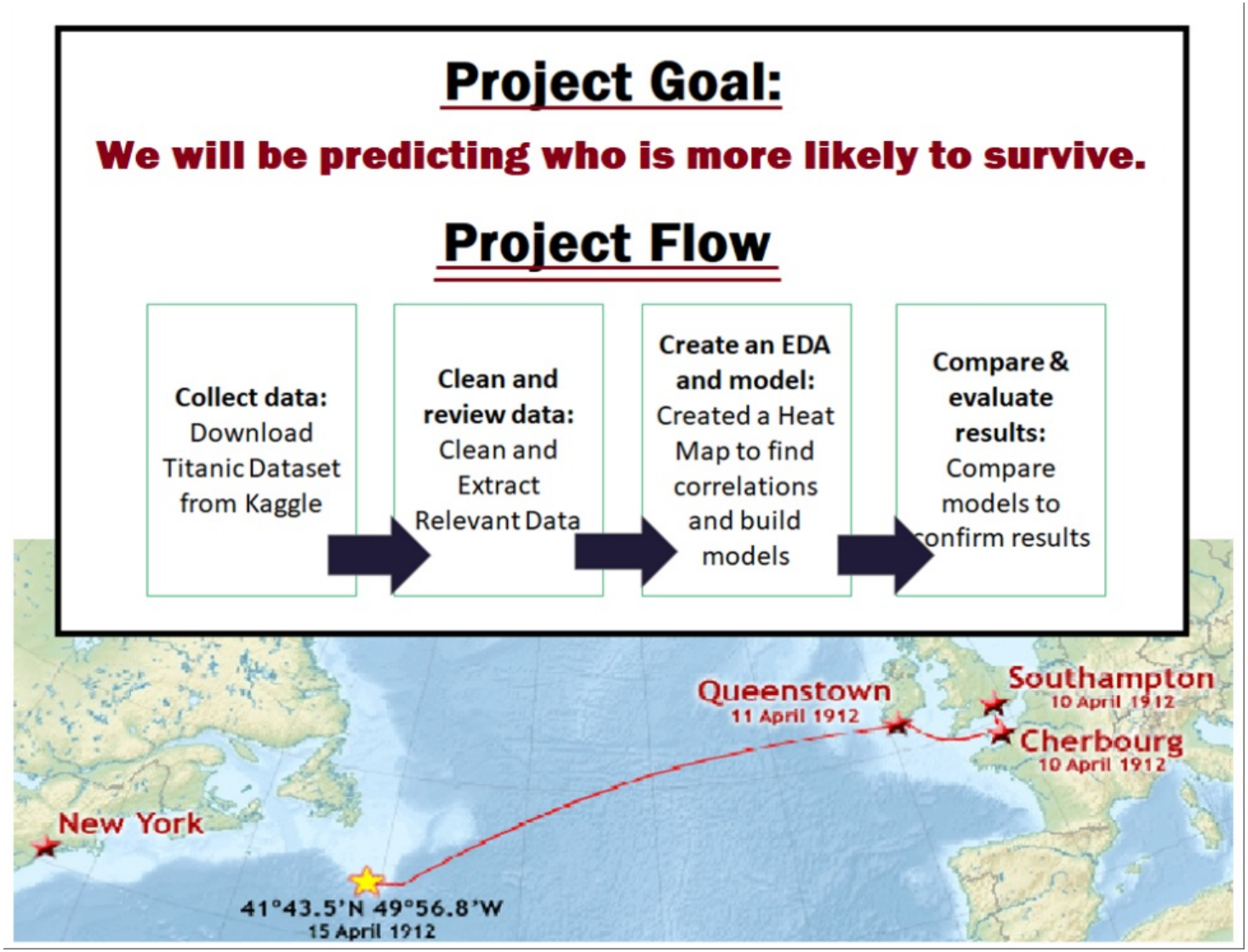
Overview	Project Goal & Flow	Heatmap Correlations	Relative Correlation	Classification Models



Titanic Prediction Model

Presentation

Overview	Project Goal & Flow	Heatmap Correlations	Relative Correlation	Classification Models



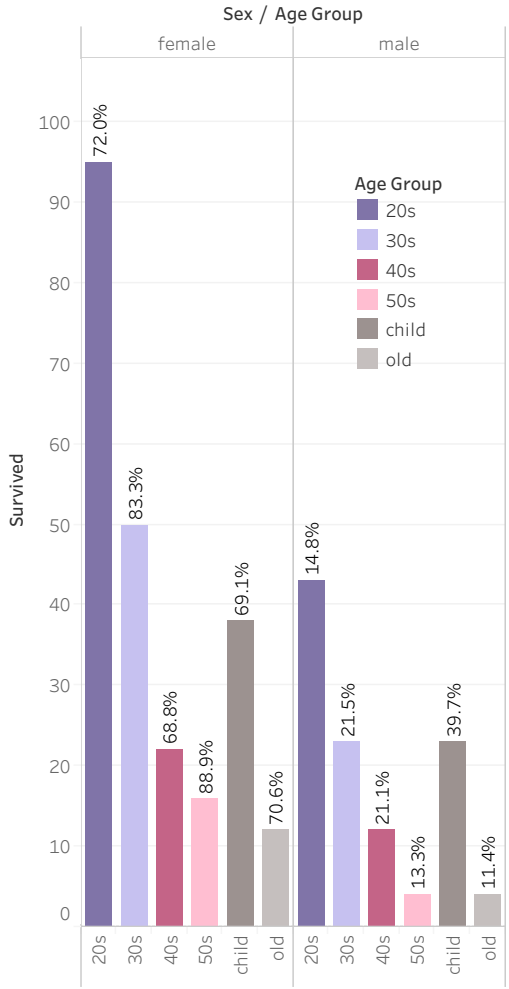
Presentation

Overview	Project Goal & Flow	Heatmap Correlations	Relative Correlation	Classification Models

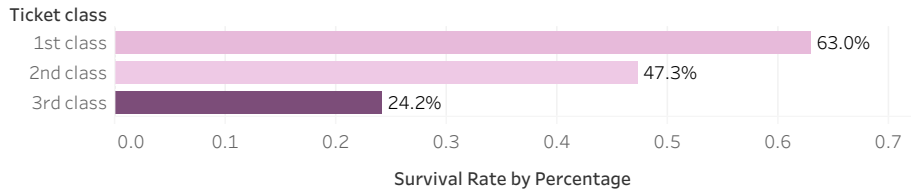
Heatmap Correlations

Based on this heatmap we can see there is a high correlation in both the Ticket class and Sex features.

Survival Rate by Male and Female



Survival Rate by Ticket Class



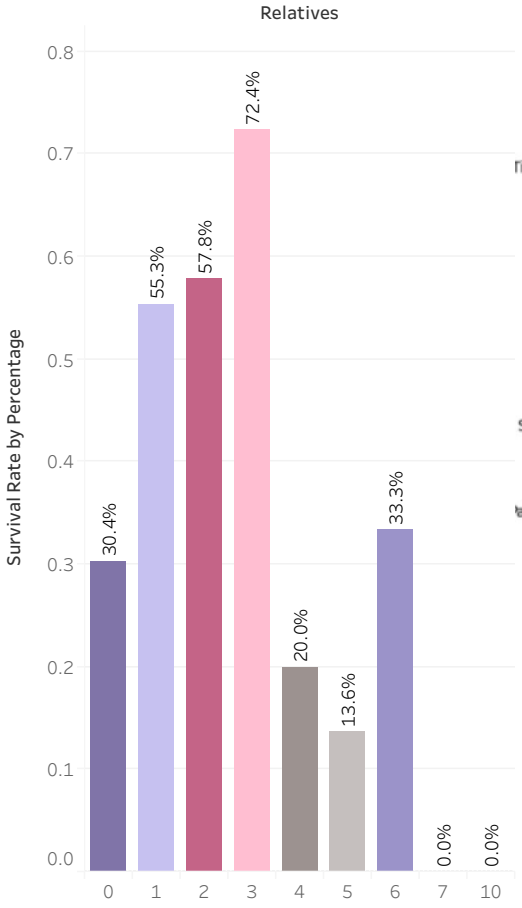
Presentation

Overview	Project Goal & Flow	Heatmap Correlations	Relative Correlation	Classification Models

Relative Correlation

In addition to the correlation between Sex and Ticket Class, there was a relative correlation between Sibling-Spouse and Parent-Child.

Survival Rate by Number of Relatives



Presentation

Classification Models

For this dataset, I tried to use a **Linear Model**, however, the outputs were skewed. I realized classification models would work better for this dataset.

I also used a **Logistical Regression Model** to confirm accuracy. I used Survived as my dependent variable and Ticket class, Sex, Age, Relatives, and Embarked as my independent variables.

I also used the **Random Forest model** on the Titanic dataset to predict survival based on the same variables.

Therefore, based on our data, a 1st class woman travelling with 3 or fewer relatives would be most likely to survive.