TITANIC Disaster

Machine Learning Project

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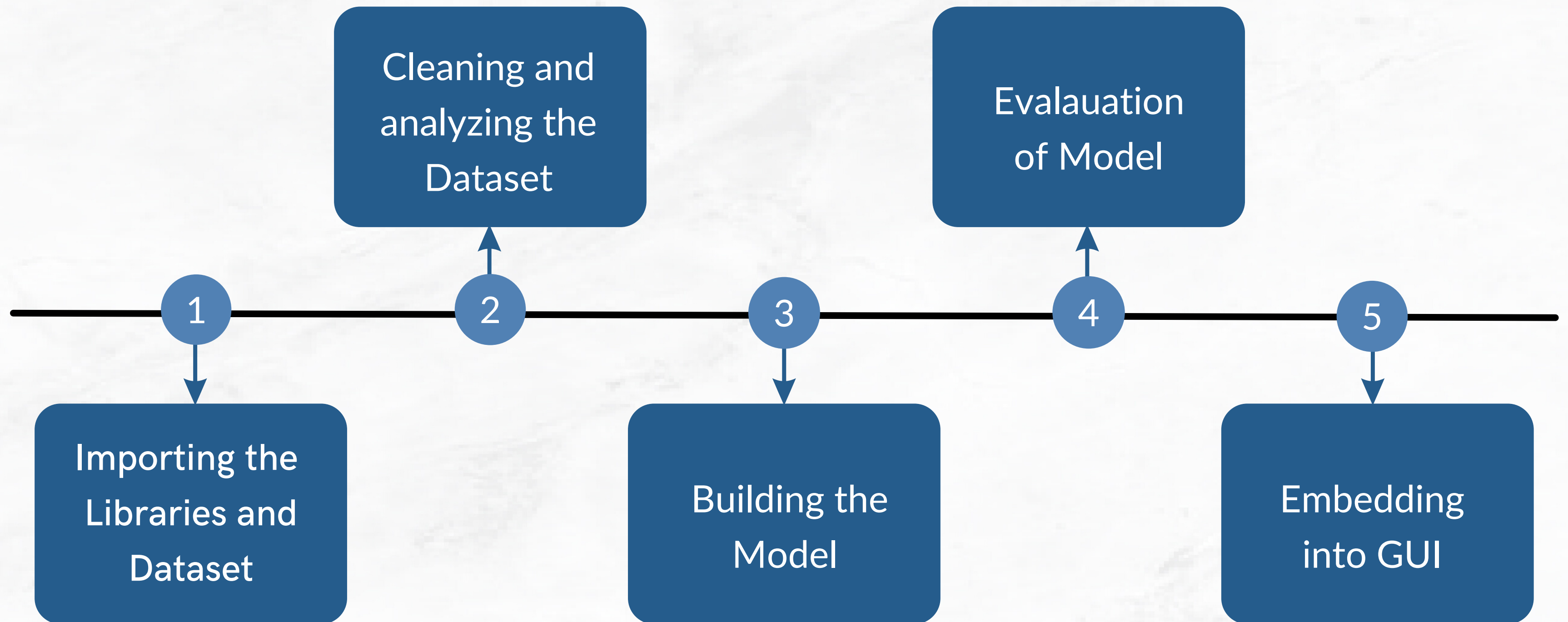6. A Nitheesh Shetty

Group 9

Introduction

The sinking of the Titanic is one of the most infamous shipwrecks in history.

The goal of the project is to predict the survival of passengers based on set of data. We took several approaches to this problem in order to compare and contrast the different ML techniques. Using different methods, we try to predict the survival of passengers using different combinations of features.

Approach

1

Importing the Libraries and Dataset

2

Cleaning and analyzing the Dataset

3

Building the Model

4

Evalauation of Model

5

Embedding into GUI

Learnings

1

Analyzing :

- Numpy
- Pandas
- Scikit-Learn

2

Visualization :

- Matplotlib
- Seaborn

3

ML Algorithm's :

- Logistic Regression
- KNN
- Decision Tree
- Random Forest
- Linear SVM
- Gaussian Naive Bayes

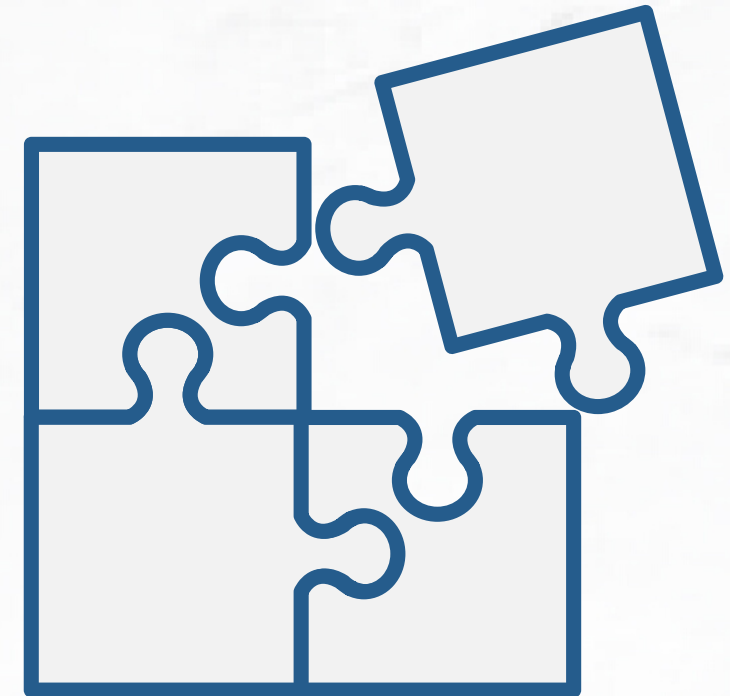**4**

GUI :

- Tkinter
- Pillow

Challenges

1 **Tkinter**

2 **Data Cleaning :**

Analyze the Parent Child Column

Handling with Targeted Features

3 **Naive Bayes classifiers**

Statistics
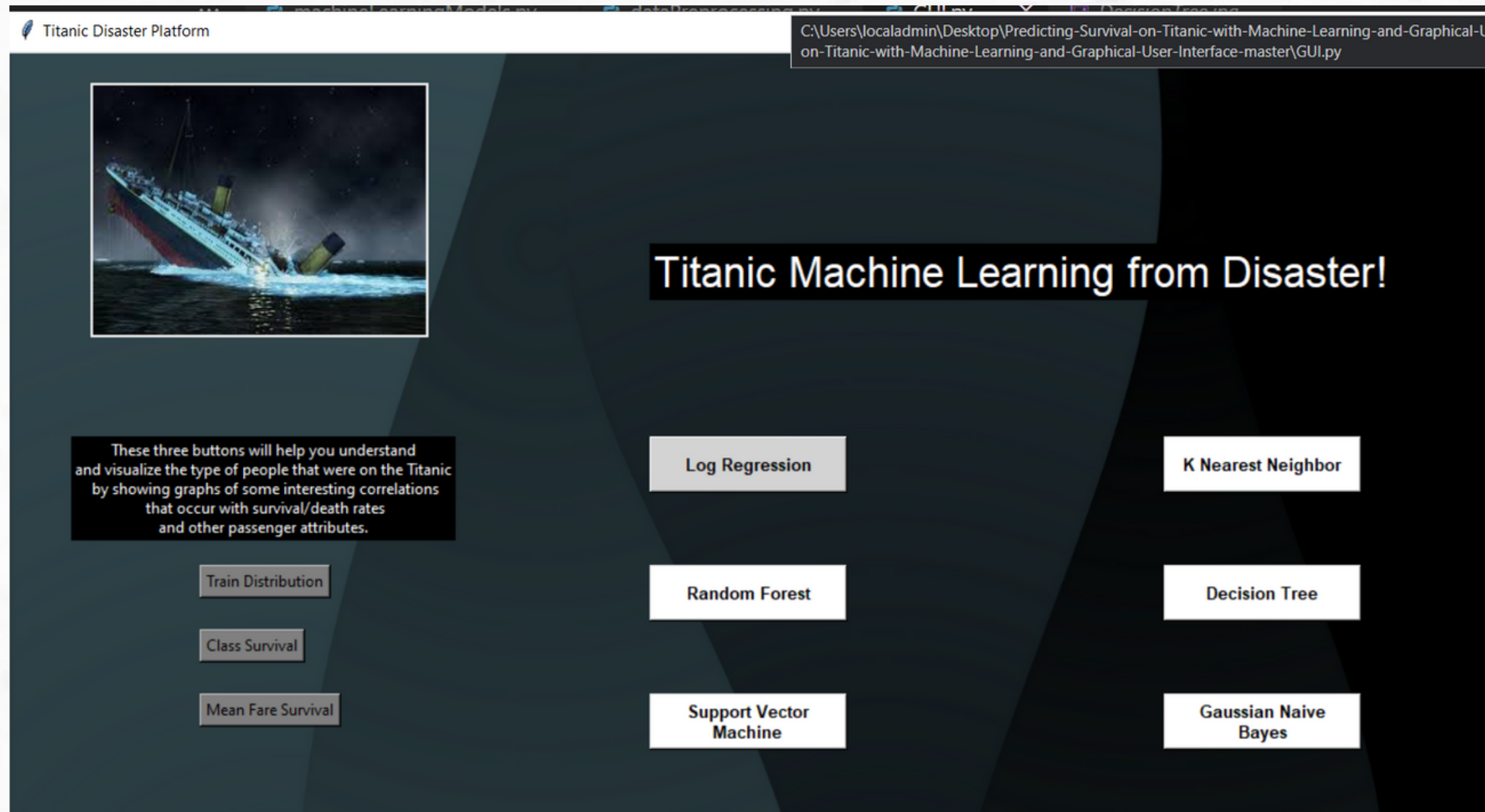
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① **Number of lines of code :**

- GUI : **320**
- Python code : **110**

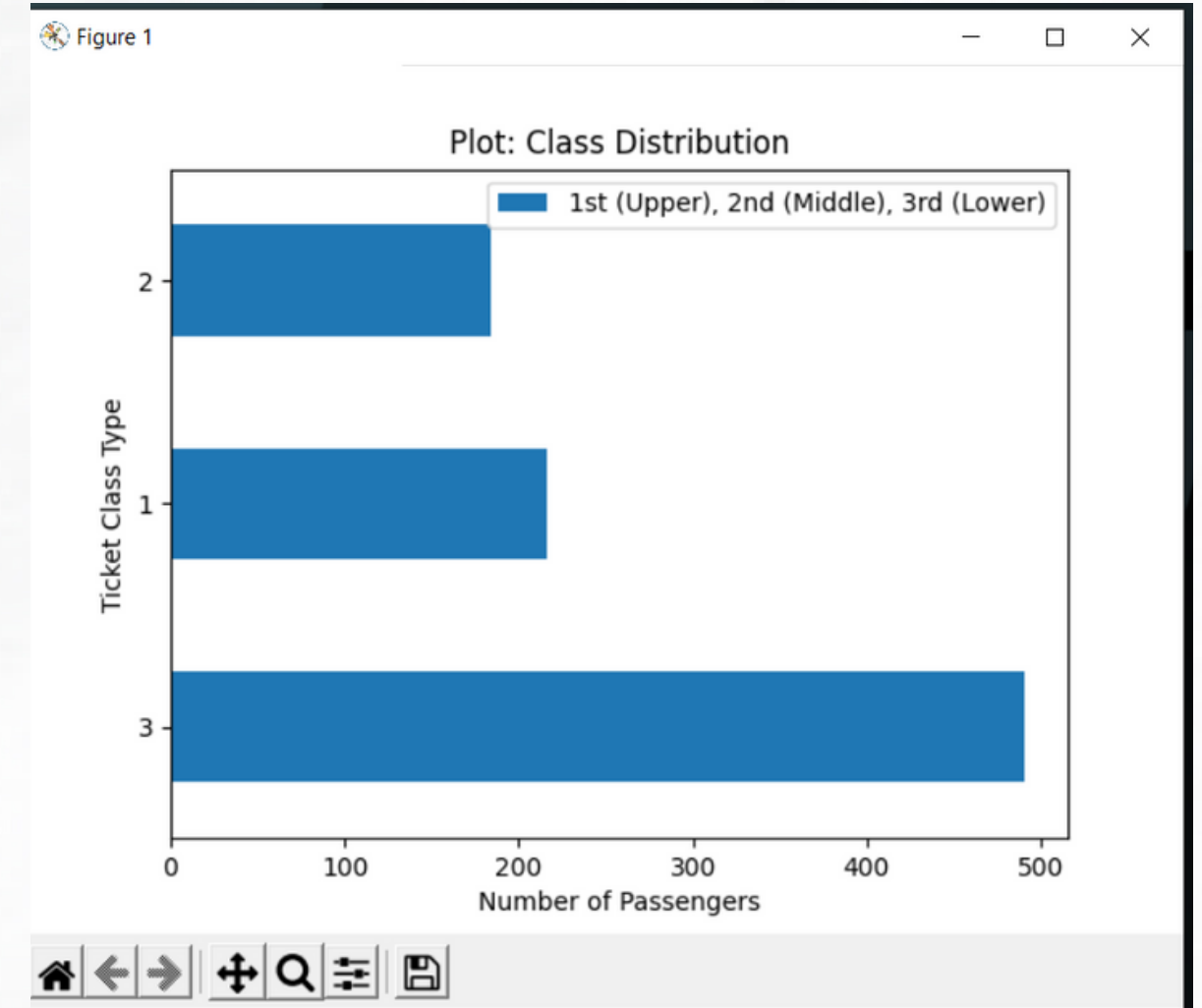**②** **Number of functions :**

- prePROCESS()
- sType()
- KNN()
- rFOREST()

- precep()
- lsvm()
- logRegression()
- dTree()

- printPrediction()
- trainclassDistr()
- gNaiveBayes()

Outputs

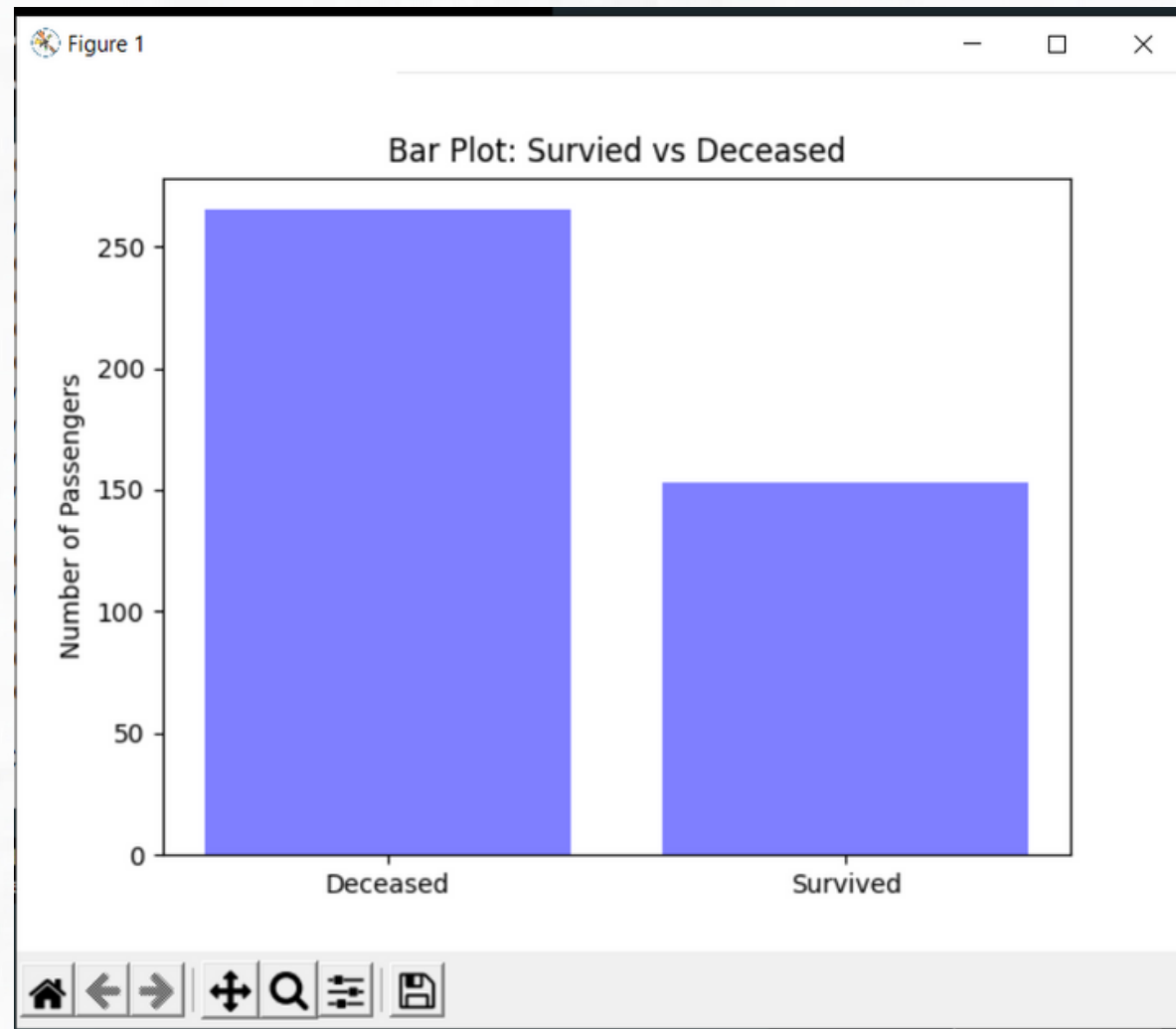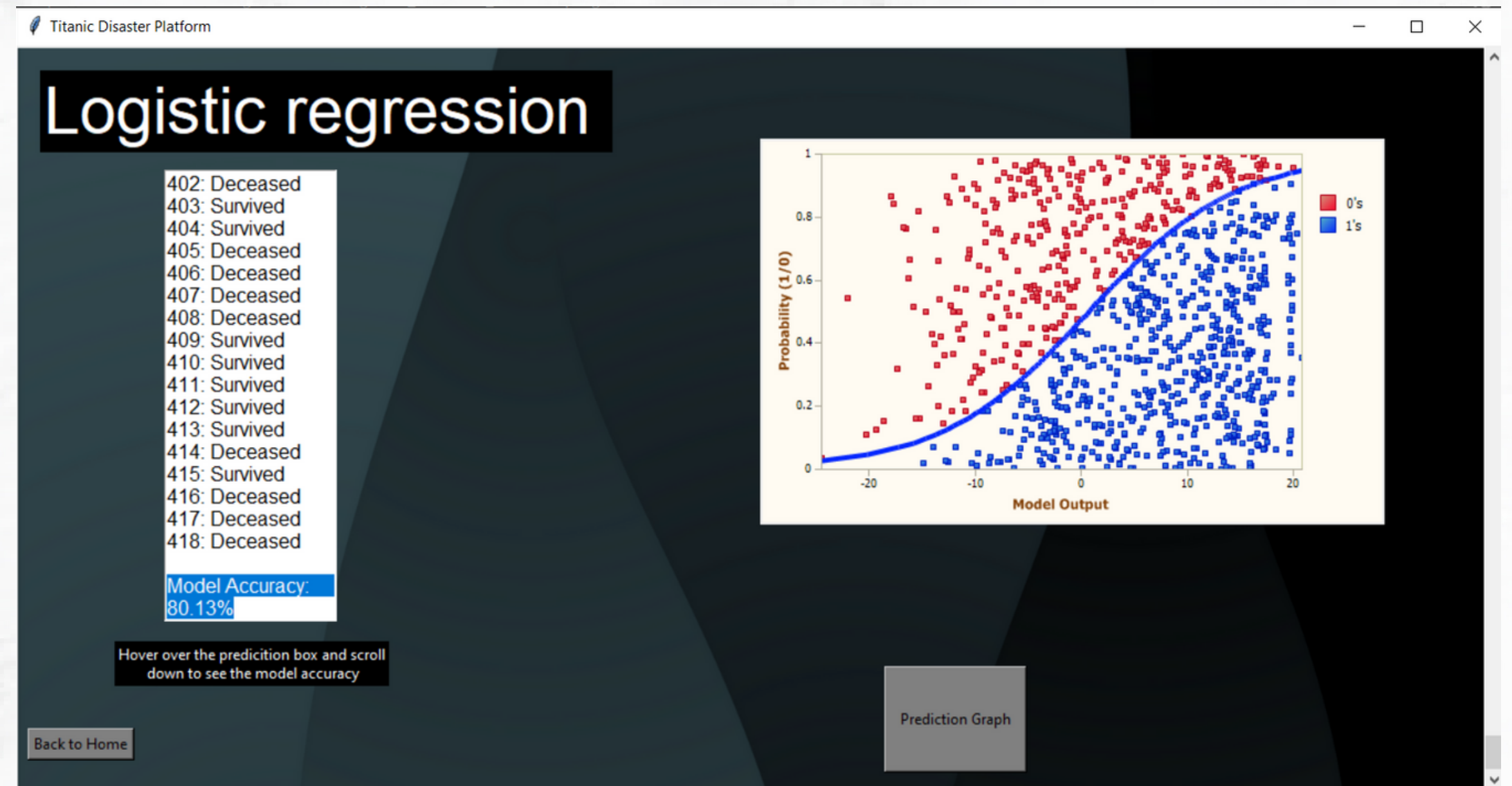

Main Screen

Train Distribution

Prediction Graph

Logistic Regression

Thank you!