Titanic Survival Prediction

Features of input data: ['PassengerId', 'Survived', 'Pclass', 'Name', 'Sex', 'Age', 'SibSp', 'Parch', 'Ticket', 'Fare', 'Cabin', 'Embarked']

Features of X data: ['Age', 'SibSp', 'Parch', 'Fare', 'Pclass_1', 'Pclass_2', 'Pclass_3', 'Sex_female', 'Sex_male', 'Embarked_C', 'Embarked_C', 'Embarked_S']

Features of y data: ['Survived']

Model used: XGBoostClassifier(objective='binary:logistic')

 $\textbf{Best hyperparameters: } \{ \text{'subsample': 0.8, 'n_estimators': 2000, 'min_child_weight': 1, 'max_depth': 7, 'learning_rate': 1, 'max_depth': 7, 'learning_rate': 2000, 'min_child_weight': 2, 'mi$

0.2, 'gamma': 0.4, 'colsample_bytree': 0.8}

Accuracy: 80.33%



Fig 1: Flask app- Index page

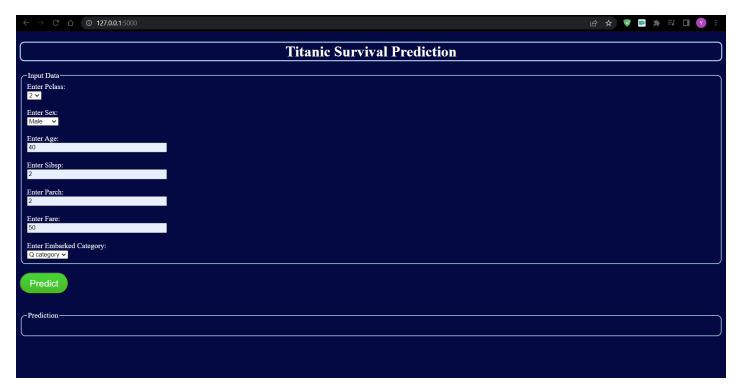


Fig 2: Flask app- Input values entered

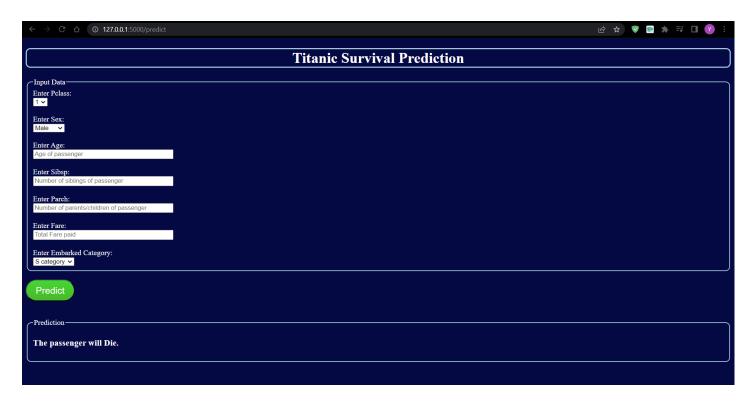


Fig 3: Flask app- Prediction displayed