K. K. Wagh Institute of Engineering Education and Research, Nashik.
Department of Computer Engineering
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Course Name: Laboratory Practice-III **Course Code:** 410246
Class: BE **Div:** A

Name of Students: Tanuja Baliram Kaklij (65)
Gauri Kailas Bankar (66)
Srushti Bhausaheb Hire (67)
Digvijay Bhaupatil Wagh (68)

Name of Faculty: Prof. K.P.Birla

Mini-Project Report

Title of Mini-Project: - Build a machine learning model that predicts the type of people who survived the Titanic shipwreck using passenger data (i.e. name, age, gender, socio-economic class, etc.). Dataset Link: https://www.kaggle.com/competitions/titanic/data

Objective:

1. Apply preprocessing techniques on datasets.
2. Implement and evaluate K-Nearest Neighbors and random forest regression models.

Introduction of Mini-Project:

We all know about the historical, world in famous [Titanic] (https://en.wikipedia.org/wiki/Titanic) disaster which was happened on 15 April 1912 in North Atlantic Ocean. Many of the passengers were died in this incident. So [this dataset] (https://www.kaggle.com/competitions/titanic/data) is a collection of the passengers data in the boat. It also consist (only in training data) of whether they are survived or not. So we need to build a model which can predict the outcome (survived or not) given the respective features.

Library Used:

1. Numpy
2. Pandas
3. Matplotlib.pyplot
4. Seaborn
5. Sklearn
6. Cufflinks
7. Plotly

Conclusion:

From this miniproject, we learned the concept of preprocessing techniques for datasets, k-nearest neighbors and random forest regression models. We have successfully built a machine learning model that predicts the type of people who survived the Titanic shipwreck using passenger dataset.