

## **Data Analytics Portfolio**

Welcome to my Data Analytics Portfolio! This repository showcases the projects and skills I have developed in the field of data analytics. Below, you will find details about my completed projects, including descriptions, tools used, and key insights.

### **Projects**

#### **1. Titanic Survival Prediction**

**Date:** December 2024 – January 2025

**Description:** Used the Titanic dataset to build a model that predicts whether a passenger on the Titanic survived or not. This classic beginner project involved data exploration, feature engineering, and machine learning model development.

**Tools and Techniques:**

- Python for data processing and model building
- Scikit-learn for machine learning
- Matplotlib and Seaborn for data visualization

**Dataset:** Titanic dataset containing details like age, gender, ticket class, fare, and survival status.

**Key Insights:**

- Engineered features like family size and cabin prefix to improve model accuracy.
- Achieved a significant accuracy score using logistic regression and decision trees.

#### **2. User Engagement Analysis on an Online Learning Platform**

**Date:** November 2024

**Description:** Analyzed user behavior to improve student engagement and course completion rates. Conducted a comprehensive case study and provided actionable recommendations.

**Tools and Techniques:**

- Python for data exploration, cleaning, and exploratory data analysis (EDA)
- Matplotlib and Seaborn for data visualization

**Key Insights:**

- Highlighted engagement patterns to optimize platform features.
- Suggested strategies to boost course completion rates.

### **Skills Demonstrated**

- Data preprocessing and cleaning
- Exploratory data analysis (EDA)
- Data visualization using Power BI, Matplotlib, and Seaborn
- Business insights and actionable recommendations
- Machine learning with Scikit-learn
- Handling large datasets efficiently

Thank you for visiting my portfolio!