

Titanic Dataset Exploratory Data Analysis Report

1. Project Overview

This report presents Exploratory Data Analysis (EDA) on the Titanic dataset. The aim is to analyze passenger data and identify factors affecting survival during the Titanic disaster.

2. Dataset Description

The dataset contains passenger demographic and travel information including age, gender, ticket class, fare, and boarding port.

Feature	Description
Survived	0 = No, 1 = Yes
Pclass	Passenger ticket class
Sex	Gender
Age	Passenger age
Fare	Ticket price
Embarked	Boarding port

3. Data Cleaning

Missing values in Age were filled using median, Embarked using mode, and Cabin column was removed due to excessive missing data.

4. Key Findings

- Female passengers had higher survival rate
- First class passengers survived more
- Higher fare increased survival probability
- Children had better survival chances
- Third class males had lowest survival rate

5. Conclusion

EDA shows survival was strongly influenced by gender, passenger class, and fare. These insights help understand real world patterns in disaster datasets.