

Here is a sample **README.md** file you can use for your **Titanic EDA Project** submission. It explains the objective, setup, steps, and outputs for your GitHub or zipped submission.

README.md — Titanic EDA Project

Titanic EDA Project

This project performs **Exploratory Data Analysis (EDA)** on the Titanic dataset to uncover insights about the passengers and factors influencing survival.

Objective

To analyze the Titanic dataset using Python and visualize trends to identify meaningful patterns in passenger demographics, ticket class, and survival rates.

Dataset

- Dataset used: [tested.csv]
- Source: [Kaggle Titanic Dataset](<https://www.kaggle.com/c/titanic/data>)

Tech Stack

- Python 3.x
- Pandas
- NumPy
- Matplotlib
- Seaborn
- Jupyter Notebook

Steps Performed in Notebook

- Data Loading and Inspection
- Data Cleaning (null handling, removing duplicates)
- Summary Statistics
- Visualizations:
 - Histograms, Box Plots, Count Plots
 - Violin Plot (Bonus)
 - Pair Plots & Correlation Heatmap

- Group-based analysis using groupby()
 - Feature Engineering (FamilySize)
 - Top 5 Insights in Markdown
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Top 5 Insights

1. Women had higher survival rates than men.
 2. First class passengers were more likely to survive.
 3. Children and elderly showed variable survival odds.
 4. Family size played a role in survival probability.
 5. Fare and ticket class were strongly correlated with survival
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Submission

- Submit this project as a .zip file or push it to your GitHub repo.
- Ensure the dataset and notebook are included and executable.