

Exploratory Data Analysis (EDA) Project: World Happiness Report Dataset

Objective:

Conduct an exploratory data analysis (EDA) on the World Happiness Report dataset to uncover insights and patterns related to global happiness.

Dataset:

Download from World Happiness Report on Kaggle.

Instructions:

1. **Introduction**
 - Download and load the dataset into pandas.
 - Display the first few rows.
2. **Data Understanding**
 - Show data types and summary statistics.
3. **Data Cleaning**
 - Handle missing values (impute/drop).
 - Remove duplicates.
 - Standardize categorical data and ensure correct data types.
4. **Exploratory Data Analysis (EDA)**
 - **Univariate:** Histograms of happiness scores and features.
 - **Bivariate:** Correlation matrix and scatter plots.
 - **Multivariate:** Pair plots and facet grids.
 - **Time Series (if applicable):** Line plots for trends.
5. **Data Visualization**
 - Create a choropleth map of happiness scores.
 - Visualize distributions by region or income group.
 - Use bar or box plots for factor impacts.
6. **Additional Notes**
 - Feel free to explore other analyses and visualizations that you think are relevant and interesting.
 - Work in pairs and share your final work on GitHub.
7. **Conclusion**
 - Summarize findings and insights.
 - Discuss implications for global happiness.

Tools/Libraries:

pandas, numpy, matplotlib, seaborn, Jupyter Notebook

Deliverables:

- A Jupyter Notebook or report documenting the entire EDA process.
- Include code, visualizations, and written observations.
- Clearly convey insights about global happiness and factors influencing it.