

INTERN PROJECT PHASE – 1

Data Analyst Projects: Exploring Data Insights

Project 1: Iris Dataset Basic Analysis

Documentation: -

1. Document your approach

Documents that are approached by me - Iris Dataset

2. Methodologies used in the analysis.

Methodologies used in the analysis are :-

- Used Python libraries such as Pandas to load, clean, and explore your dataset.
- Data Cleaning and Preprocessing, handle null values, outliers, and other data quality issues
- Calculate summary statistics (mean, median, standard deviation, etc.) to understand the basic characteristics of your data.
- Utilized libraries like Matplotlib and Seaborn to create informative visualizations.
- Exploratory Data Analysis
- Plotted scatter plots, line charts, bar charts, and other relevant plots to gain insights into the relationships within the data.
- Used Markdown cells to document in each step of analysis, explaining the methodology and the reasoning behind decisions.

LIBRARY USED – Pandas | NumPy | Seaborn | Matplotlib

WEB APPLICATION USED - Jupyter Notebook

3. Explanations for the patterns identified in the Iris dataset.

- Graph show Species with higher Petal length are
Iris – virginica > Iris-versicolor > Iris-setosa

Sepal width of Iris-setosa varies from 1.0 to 2.0

Sepal width of Iris-versicolor varies from 3.0 to 5.0

Sepal width of Iris-virginica varies from 4.2 to 7.0

Most variation in Petal Length = **Iris-virginica > Iris-versicolor > Iris-setosa**

- Graph show Species with higher Sepal length are
Iris-setosa < Iris-versicolor < Iris – virginica

Sepal length of Iris-setosa varies from 4.0 to 6.0

Sepal length of Iris-versicolor varies from 5.0 to 7.0

Sepal length of Iris-virginica varies from 5.0 to 8.0

Most variation in Sepal length = **Iris-virginica > Iris-versicolor > Iris-setosa**

- Graph show Species with higher Petal Width are
Iris – virginica > Iris-versicolor > Iris-setosa

Petal width of Iris-setosa varies from 0.0 to 0.6

Petal width of Iris-versicolor varies from 1.0 to 1.7

Petal width of Iris-virginica varies from 1.4 to 2.5

Most variation in Petal Width = **Iris-virginica > Iris-versicolor >>> Iris-setosa**

- Graph show Species with higher Sepal Width are
Iris-setosa > Iris – virginica > Iris-versicolor

Sepal width of Iris-setosa varies from 2.5 to 4.5

Sepal width of Iris-versicolor varies from 2.0 to 3.5

Sepal width of Iris-virginica varies from 2.5 to 4.0

Most variation in Sepal width = **Iris-setosa > Iris-virginica > Iris-versicolor**