

SESSION PLAN

Session Name

Data Visualization with Matplotlib
Git, Production Code.

Learning Outcomes

- Build custom plots with matplotlib and Pandas
- Catch trends, anomalies and patterns in data with visualizing data
- Know which plot is suitable for different types of data and use accordingly
- Learn about version control using Git and get acquainted with the coding standards for writing production grade code.

Prerequisites for the Student

- Data Visualization with Matplotlib - Go through the concept and solve the tasks and assessments.

Student Activities

- Discuss with the Mentor what you have learned.
- Overview of Data Visualization with Matplotlib
 - Stacked Bar Chart
 - Histogram
 - Scatter Plot
 - Drawing Multiple Plots
- Why is visualization important?
 - <https://www.digitalvidya.com/blog/introduction-data-visualization-in-python/>
 - <https://towardsdatascience.com/data-science-with-python-intro-to-data-visualization-and-matplotlib-5f799b7c6d82>
- Practice problems on Matplotlib basics, Histograms, Box Plots, Scatter Plots, Plot Customization
 - Refer the GitHub repo for problems
- Quiz on Data Visualization with Matplotlib.
- Code Along
- Learn about version control and get acquainted with using Git for creating and making changes in a repository on GitHub.
- Get to learn about the importance of coding standards in Python such as PEP8, PEP257 also learn to implement them.
- Questions and Discussion on doubts - AMA

Next Session

- Concept - Summarizing data with statistics
- Key topics to be highlighted - highlight where they would need to spend more time and importance w.r.t Data Science.
 - Introduction to types of data
 - Measures of Central Tendency
 - Measures of Dispersion
 - Skewness, Kurtosis and Correlation