

SESSION PLAN

Session Name

Data Visualization with Matplotlib

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

Prerequisites for the Student

- Python Programming
- Data Wrangling with Pandas

Student Activities

- Why is visualization important? (30 mins)
 - <https://www.digitalvidya.com/blog/introduction-data-visualization-in-python/>
 - <https://towardsdatascience.com/data-science-with-python-intro-to-data-visualization-and-matplotlib-5f799b7c6d82>
- Overview of Data Visualization with Matplotlib (60 min)
 - Matplotlib basics
 - Histograms
 - Box Plots
 - Scatter Plots
- Practice problems on Matplotlib basics, Histograms, Box Plots, Scatter Plots , Plot Customization.(10 min)
 - Refer the GitHub repo for problems
- Quiz on Data Visualization with Matplotlib. (10 min)
- Code Along (125 min)
- Questions and Discussion on doubts - AMA (30 mins)

Next Session

- Concept - Summarizing data with statistics (30 mins)
- 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