

## 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

- 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
- 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