greatlearning
Learning for Life

Week 2: Visualization of Data using different packages (Total video duration= 2 hours.You will be required to spend 25 min/day along with practice datasets and quizzes)

Learning Outcomes from Week 2

▶ Data visualization helps in making sense of complex data which can be presented to anyone from an Analytics/Non-Analytics domain and hence, is an integral aspect of learning Data Science and Business Analytics.

▶ Through the course of 2 hours of video lectures, you will get a strong working knowledge of what are the packages that help you perform different operations ranging from working on statistical data to dynamic visualization of data
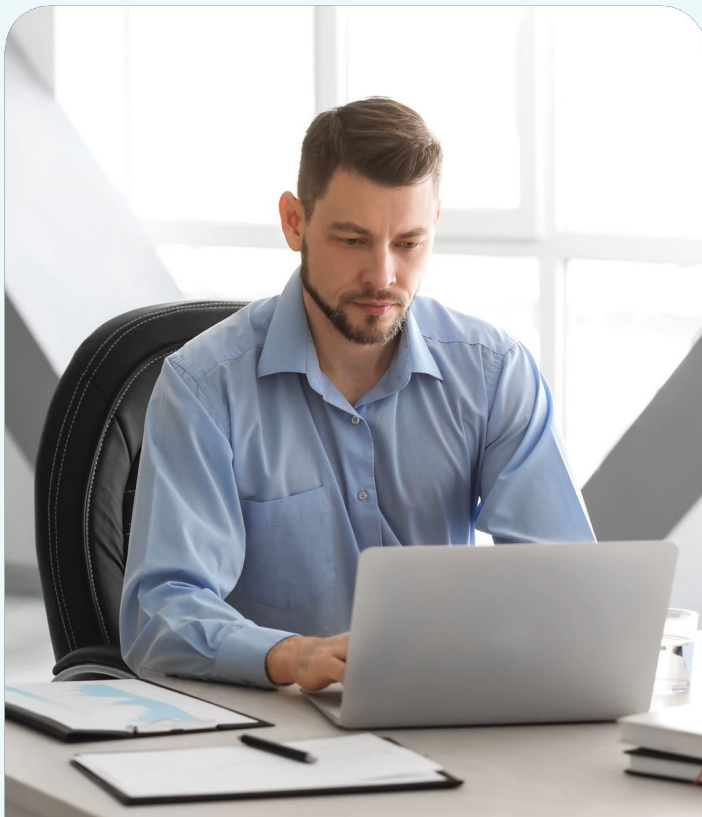
Mentor Session Duration:	Faculty Name:	No. of videos: 07
2 hours	Mr. Gurumoorthy Pattabiraman	Total Duration of videos: 02 hours

Video No.	Video Name	Duration of the video	Topics Covered	Conceptual or Hands On
1	Introduction to Visualization	2 minutes	Visualization can be done in Pandas too however for advanced visualization of data like creating dashboards, Matplotlib, seaborn and Plotly are better	Conceptual
2	Matplotlib, seaborn and Plotly	10 minutes	Matpoltlib is used for 2D visualization, Pyplot is a subset of matplotlib and used for statistical plotting Similarly, seaborn is a package based on matplotlib used for statistical data visualization but more advanced in its look and feel. Plotly is used for dynamic visualization eg dynamic dashboarding	Conceptual
3	Hands-on Visualization techniques_comparing plots	42 minutes	In Hands-On, seaborn as the route package would be used for the entire Data Visualisation topic. Dataset to be used is Automobile.csv.	Hands On
4	Numpy lab exercises	25 minutes	Generate output for different questions. Outputs might be present for a few questions but they are not the exact results.	Hands On

5	Pandas lab exercises	10 minutes	Using Automobile dataset from Kaggle and practising different functions using Pandas package	Hands On
6	Pandas Lab exercise - Visualizations	15 minutes	Using Games dataset from Kaggle to do descriptive part of Pandas and eventually performing Visualization of the data	Hands On
7	Pandas Lab exercise - Data visualization using seaborn	10 minutes	Using Games dataset to perform visualization using seaborn package	Hands-On

Additional Reading material:

▶ https://towardsdatascience.com/introduction-to-data-visualization-in-python-89a54c97fbed
https://www.kaggle.com/benhamner/python-data-visualizations

▶ https://www.geeksforgeeks.org/data-visualization-different-charts-python/

▶ Mastering Python Data Visualization by Kirthi Raman

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▶ Python Data Visualization Cookbook by Igor Milovanovic