



## Data Visualization using Matplotlib

### **Description:**

In this course, you will learn Data visualization using the matplotlib library. Hands-on practical oriented course in which you will learn various plots such as Bar graphs, Pie charts, Line charts, Scatter plots, histograms. After completion of this course, you will be able to visualize the data and find the underlying pattern.

### **Start Date:**

### **Doubt Clear Time:**

### **Course Time:**

### **Features:**

- # Online Instructor-led learning
- # Practical Implementation
- # Integrate academic knowledge with the tech
- # Real-time Project

- # Live Class Recording
- # Doubt Clearing
- # Assignment in all the Module
- # Quiz in every Module
- # Career Counselling
- # Completion Certificate

### **What we learn:**

- # Introduction to matplotlib
- # Data visualization
- # Visual Analysis
- # Different types of Chart using Matplotlib

### **Requirements:**

- # System with Internet Connection
- # Interest to learn
- # Dedication

### **Instructor:**

#### **>Introduction to the course :**

- >>Course Introduction
- >>Who is this course for?
- >>Course overview and course outcome
- >>Course Pre-requisites
- >>Overview of Python
- >>What are Graphs?

>>What can we depict from graphs?

>>What are the different types of graphs?

>>What is Matplotlib?

>>Why is Matplotlib used?

### **>Installation of Matplotlib :**

>>Installing in Google Colab

### **>Different Types of Plot :**

>>What is a Bar graph?

>>What can we understand from the Bar graph?

>>Apply Bar graph on chess dataset

### **>Assignment 1:**

>>Apply Bar graph on your own datasets and write down your observations from it.

### **>Different Types of Plot:**

>>What is a Pie chart?

>>What can we understand from the Pie chart?

>>Applying Pie chart on chess dataset

>>What is a Box plot?

>>What can we understand from the Box plot?

>>Applying Box plot on chess dataset

>>What is a line chart?

>>What can we understand from the line chart?

>>Applying line charts on Chess dataset

>>What is a Scatter plot?

>>What can we understand from the Scatter plot?

>>Applying Scatter plot on chess dataset

>>What is Histogram?

>>What can we understand from the Histogram?

>>Applying Histogram on chess dataset

### **>Assignment 2:**

>>Apply Pie chart on your own datasets and write down your observations from it.

### **>Assignment 3:**

>>Apply Box plot on your own datasets and write down your observations from it.

### **>Assignment 4:**

>>Apply line chart on your own datasets and write down your observations from it.

### **>Assignment 5:**

>>Apply Scatter plot on your own datasets and write down your observations from it.

### **>Assignment 6:**

>>Apply Histogram on your own datasets and write down your observations from it.

### **>Project :**

>>Using matplotlib analyze geographical datasets and write down your observations from

## >**Assignment 7:**

>>Using matplotlib analyze historical datasets and write down your observations

## >**Course Summary:**

>>Course outro

>>Future learning Path