Tableau® Desktop (4 days)

Tableau® Desktop: Part 1 (2 days)

Course Description **Overview:**

As technology progresses and becomes more interwoven with our businesses and lives, more and more data is collected about business and personal activities. This era of "big data" has exploded due to the rise of cloud computing, which provides an abundance of computational power and storage, allowing organizations of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and competitive advantages.

The creation of data-backed visualizations is a key way data scientists, or any professional, can explore, analyze, and report insights and trends from data. Tableau® software is designed for this purpose. Tableau was built to connect to a wide range of data sources, and allows users to quickly create visualizations of connected data to gain insights, show trends, and create reports. Tableau's data connection capabilities and visualization features go far beyond those that can be found in spreadsheets, allowing users to create compelling and interactive worksheets, dashboards, and stories that bring data to life and turn data into thoughtful action.

Course Objectives:

In this course, you will visualize data with Tableau. You will:

- Identify and configure basic functions of Tableau.
- Connect to data sources, import data into Tableau, and save Tableau files.
- Create views and customize data in visualizations.
- Manage, sort, and group data.
- Save and share data sources and workbooks.
- Filter data in views.
- Customize visualizations with annotations, highlights, and advanced features.
- Create maps, dashboards, and stories.

Target Student:

This course is designed for professionals in a variety of job roles who are currently using desktop or web-based data-management tools to perform numerical or general data analysis. This includes capturing and reporting on data to peers, executives, and clients. These professionals must also provide data visualizations in reports, or explain data analysis through visualizations.

Prerequisites:

To ensure your success in this course, you should have experience managing data with Microsoft® Excel® or Google Sheets™.

Hardware:

For this course, you will need one computer for each student and one for the instructor. Each computer will need the following minimum hardware configurations:

- 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
- 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
- 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
- Keyboard and mouse (or other pointing device)
- 1,024 x 768 resolution monitor recommended
- Network cards and cabling for local network access
- Internet access (contact your local network administrator)
- Printer (optional) or an installed printer driver
- Projection system to display the instructor's computer screen

Software:

- Microsoft® Windows® 10
- Microsoft® Office 2016 (only Excel® is required)
- Adobe® Acrobat® Reader • Tableau® Desktop 2018.2.x
- Any web browser.
- Students will need a valid email address that they can access during the course.
- If necessary, software for viewing the course slides. (Instructor machine only.)

Course Content

Tableau Fundamentals

- Overview of Tableau
- Navigate the Tableau Interface and Configure Settings

Connecting to and Preparing Data

- Connect to Data
- Prepare Data for Analysis
- Save Workbook Files

Exploring Data

- Create a View
- Customize Data in Visualizations

Managing, Sorting, and Grouping Data

- Adjust Fields
- Sort Data
- Group Data

Saving and Sharing Data

- Save and Publish Data Sources
- Share Workbooks for Collaboration

Filtering Data

- Configure Worksheet Filters
- Apply Advanced Filter Options
- Create Interactive Filters

Customizing Visualizations

- Format and Annotate Views
- Highlight Data
- Create Advanced Visualizations

Creating Maps, Dashboards, and Stories

- Create Maps
- Create Dashboards
- Create Stories

Tableau® Desktop: Part 2 (2 days)

Course Description

Overview:

The advent of cloud computing and storage has ushered in the era of big data. With the abundance of computational power and storage, organizations and employees with many different roles and responsibilities can benefit from analysing data to find timely insights and gain a competitive advantage.

Data-backed visualizations allow anyone to explore, analyse, and report insights and trends from data. Tableau® software is designed for this purpose. Tableau was built to connect to a wide range of data sources, and allows users to quickly create visualizations of connected data to gain insights, show trends, and create reports. Beyond the fundamental capabilities of creating data-driven visualizations, Tableau allows users to manipulate data with calculations to show insights, make visualizations interactive, and perform statistical analysis. This gives users the ability to create and share data-driven insights with peers, executives, and clients.

Course Objectives:

In this course, you will perform advanced data visualization and data blending with Tableau. You will:

- Blend data to visualize relationships.
- Join data.
- Access data in PDFs.
- Refine visualizations with sets and parameters.
- Manipulate data with calculations.
- Visualize data with advanced calculations.
- Perform statistical analysis and forecasting.
- Enrich visualizations, dashboards, and maps.

Target Student:

This course is designed for professionals in a variety of job roles who are currently using Tableau to perform numerical or general data analysis, visualization, and reporting. They need to provide data visualizations from multiple data sources, or combine data to show comparisons, manipulate data through calculations, create interactive visualizations, or create visualizations that showcase insights from statistical analysis.

Prerequisites:

To ensure your success in this course you should have experience with importing data and creating data visualizations in Tableau. You can obtain this level of skill and knowledge by taking the following Logical Operations courses:

- *Tableau® Desktop: Part 1*

Course Content

Blending Data to Visualize Relationships

- Blend Data
- Troubleshoot and Refine Data Blends

Joining Data

- Create Joins
- Troubleshoot Joins
- Merge Data with Unions

Accessing Data in PDFs

- Connect to PDFs
- Clean Up and Organize PDF Data

Refining Visualizations with Sets and Parameters

- Create Sets
- Analyze Data with Sets
- Apply Parameters to Data to Refine Visualizations

Manipulating Data with Calculations

- Create Calculated Fields
- Manipulate Data with Functions
- Analyze Data with Table Calculations

Visualizing Data with Advanced Calculations

- Create Groups and Bins with Calculations
- Analyze Data with LOD Expressions

Performing Statistical Analysis and Forecasting

- Perform Statistical Analysis

- Forecast Data Trends

Enriching Visualizations, Dashboards, and Maps

- Customize Mapped Data
- Enhance Visualizations with Tooltips
- Enhance Dashboards with Actions