Mastering Tableau Desktop for Data Analysis & Visualization

Duration: 5 Days (40 Hours)

Overview

This 5-day Tableau Desktop training program is designed to provide participants with a comprehensive understanding of data analysis and visualization using Tableau. Through hands-on exercises and real-world scenarios, participants will learn how to connect to data sources, build insightful visualizations, design interactive dashboards, apply advanced analytics, and publish insights securely for enterprise consumption.

Audience Profile

This course is intended for:

- Aspiring data analysts and business intelligence professionals
- Report developers, data visualization specialists, and dashboard designers
- Business users seeking self-service analytics using Tableau

Prerequisites

To get the most out of this training, participants should have:

- Basic understanding of data concepts (rows, columns, joins)
- Familiarity with Excel or any tabular data format
- No prior Tableau experience required (helpful but not mandatory)

Day 1: Tableau Fundamentals & Data Connectivity

Module 0: Revisit Tableau Basics

Module 1: Get Started and Connect to Data

- Introduction to Tableau Desktop
- Connecting to different data sources
- Customizing data sources
- Working with data extracts

Module 2: Create Core Visualizations

- Comparing multiple measures in a single view
- Scatter plots, text tables, highlight tables
- Symbol maps, filled maps, and density maps
- Bar-in-bar charts and bullet graphs

Day 2: Filters, sorting and analytics pane

Module 3: Organize Data and Create Filters

- Creating groups and hierarchies
- Filtering and sorting data
- Working with date fields
- Creating custom date calculations and hierarchies

Module 4: Apply Analytics and Modify Data Connections

- Reference lines and reference bands
- Histograms and box-and-whisker plots
- Relationships between tables

- Joining and unioning datasets

Day 3: Advanced Visual Analytics and Cohort Analysis

Module 5: Advanced calculations

- Blending data sources
- Trend lines and forecasting techniques
- FIXED LOD calculations for cohort-based analysis

Module 6 : Sets and Parameters

- Parameters and dynamic interactivity
- Date and aggregate function use cases
- Using sets in tableau

Day 4: Dashboard Building and Interactivity

Module 7 : Dashboard building basics

- Using layout containers for scalable dashboards
- Dashboard design principles: usability, layout, efficiency
- Interactive dashboards using actions
- Storytelling with data for business impact
- Performance tuning best practices

Day 5: Publishing, Security, & Application Integration

Module 8: Publishing, Securing, and Certifying Data Sources

- Publishing data sources

- Managing permissions and certifications

Module 9: Publishing Workbooks

- Publishing dashboards to Server / Cloud
- Version control and ownership

Module 10: Recommended Data Sources & Revision History

- Using recommended data sources
- Tracking workbook and data source changes

Module 11: Schedules, Tasks, and Jobs

- Extract refresh schedules
- Subscriptions and alerts

Module 12: Tableau Integration with Spring Boot Applications

- Overview of Tableau integration patterns in enterprise applications
- Using Tableau views inside Spring Boot applications
- Common enterprise use cases and best practices