
Tableau – Data Visualization

Duration: 40 hours

Prerequisites

- There are no pre-requisites for this course, Basic knowledge of SQL is advantageous.

Course Content

1. SQL & DWH Basics

- SQL Introduction
- SQL Syntax & Commands
- SQL: Create DB, Delete DB, Create Table, Delete Table, Update Table, Primary Key, Foreign Key
- SQL Joins
- Data warehouse Introduction
- Data warehouse Architecture, OLAP, OLTP
- Starflake & Snowflake Schema
- Slowly Changing Dimensions (Type 0, Type I, Type II)

Tableau: Data Visualization

1. Content Introduction

- Basic Knowledge of DWH Concepts
- BI Overview

2. Tableau Introduction

- Why Tableau?
- Tableau Products
- Tableau File Types
- Tableau Architecture
- Tableau Desktop Installation & Licensing
- Explore Tableau Start Page
- Tableau User Interface
- Basic Tableau Visualization

3. Working with Data in Tableau

- Data Interpreter – Pivot
- Data Extraction
- Data Blending
- Join vs Blend
- Cross Database joins

4. Tableau Data Manipulation

- Dimensions & Measures
- Continuous & discrete Data
- Creating hierarchies
- Grouping by Folder
- Marks Card in Tableau
- Tableau Formatting
- Sorting in Tableau-Manual & Custom Sorting

5. Tableau Filtering

- Tableau Filtering
- Quick Filters
- Conditional Filters
- Top/Bottom Filter
- Context Filter
- Wildcard Filter
- Parameters in Tableau
- Tableau Worksheet Actions
- User Filter
- Data Source Filter

6. Tableau Groups, Sets & Calculations

- Groups in Tableau
- Creating set in tableau (Constant, Computed & Combined)
- Basic Calculations
- Quick Table Calculations
- Level of Detail Calculations

7. Basic Charts in Tableau

- Bar Chart
 - Line Chart
 - Text Tables
 - Heat Map
 - Scatter Plot
 - Dual Axis Chart
 - Bubble Chart
-

8. Maps in Tableau

- Symbol Maps
- Filled Maps
- Editing Location in Maps
- Custom Geocoding
- Using Shape files in Map
- Map Options

9. Statistical Analytics in Tableau

- Using Reference lines, Bands & Distribution in visualization
- Linear Regression in Tableau
- Trend lines
- Forecasting (Why, who & Strategy)
- Using Totals
- K- Means Clustering
- Average, mean & Median in Tableau

10. Dashboards & Story

- Creating My First Dashboard
- Formatting a Dashboard
- Using Actions in Dashboard
- Linking Multiple Dashboards
- Layout Container
- Creating Story in Tableau

11. Advance Charts in Tableau

- Histograms
- Gantt Chart
- Bump Chart, Waterfall Chart, Bullet Graph, Lollipop Chart

12. Working with Various Tableau Products

- Exporting Worksheets, Workbooks
- Tableau Reader, Tableau Public, Tableau Online

13. Tableau Server

- Tableau Server Installation
- Content Management
- Publishing to Tableau server/Tableau online
- Creating Users, Groups & Roles

14. SQL & DWH Basics

- SQL Introduction
- SQL Syntax & Commands
- SQL: Create DB, Delete DB, Create Table, Delete Table, Update Table,
- Primary Key, Foreign Key
- SQL Joins
- Data warehouse Introduction
- Data warehouse Architecture, OLAP, OLTP
- Starflake & Snowflake Schema
- Slowly Changing Dimensions (Type 0, Type I, Type II)

15. Best Practices / Guidelines

- Resume Modification
- Interview Preparation
- Dummy Project
- Self-Curated Notes for Associate Exam(certification) & Interview Cracking