Tableau : Visual Analytics

Overview:

This course will help you discover how to visualize data in Tableau Desktop. In this course, you will learn how to effectively display data insights in Tableau, tailor visualizations based on data type and avoid data misrepresentation.

Audience:

This course is designed for experienced Tableau users who are responsible for visualizing data with Tableau Desktop. Students should have a solid understanding of Tableau Desktop. This course exclusively covers how to visualize data with Tableau and does not instruct students how to use Tableau. If you are interested in gaining experience with Tableau Desktop, we highly recommend Tableau Desktop I: Fundamentals and Tableau Desktop II: Intermediate.

Course Objectives:

This course will enable you to:

- Design visualizations that reduce cognitive load to effectively leverage short-term memory.
- Build visualizations that align with pre-attentive attributes to effectively harness sensory memory.
- Craft visualizations to inform viewers without misleading them.
- Harness appropriate chart types to answer specific questions.
- Construct dashboards and stories using visual best practices.

Course Content:

Module 1: Visual Analytics Process

- Define Visual Analytics
- Follow the Visual Analytics Process
- Recognize Advantages of Visual Analysis

Module 2: Memory and Processing

- Distinguish Between Memory and Processing Types

Module 3: Short-Term Memory

- Define Cognitive Load

- Focus and Guide the Viewer
- Remove Visual Distractions
- Organize Information into Chunks
- Design for Contiguity

Module 4: Sensory Memory: Overview

- Describe Pre-attentive Attributes
- Define Quantitatively Perceived Attributes
- Understand Categorically Perceived Attributes

Module 5: Sensory Memory: Form

- Describe Key Form Attributes
- Define Length
- Measure Width
- Understand Size
- Determine Orientation
- Apply Shape
- Build an Enclosure

Module 6: Sensory Memory: Color

- Define Color Attributes
- Describe Color Relativity
- Understand Color Vision Deficiency
- Select a Color Hue
- Determine Color Intensity

Module 7: Sensory Memory: Position

- Define Position Attributes
- Describe 2-D Position
- Understand Spatial Grouping

Module 8: Informing Without Misleading

- Follow Gestalt Principles
- Test Visual Area Assumptions
- Determine Axis Assumptions
- Assess Color Assumptions
- Decide an Appropriate Amount of Detail

Module 9: Ask Questions, Selecting Chart types and best practices

- Charts for Viewing Specific Values
- Charts for Comparing and Ranking Categories
- Charts for Comparing Parts to Whole
- Charts for Comparing Measures
- Charts for Viewing Correlation
- Charts for Viewing Distributions
- Charts for Viewing Data Over Time
- Charts for Mapping

Module 10: Dashboards and Stories

- Follow the Development Process for Dashboards and Stories
- Plan the Visualization
- Create the Visualization
- Test the Visualization