



DAT 560E Data Visualization for Business Insights

Individual Assignment 4 (SP2024-MiniA)

Due Date: TBD

120 points

1. (77 points) Use the Tableau tool to connect to the **“Global Superstore 2024A.xlsx”** data.
 - (a) Create a connected scatter plot for Profit (y-axis) vs. Sales (x-axis) by Quarter (Order Date). Add labels. (6 points)
 - (b) Create a line chart for Sales by Quarter (Order Date). Add forecast for the Year 2024. (6 points)
 - (c) Create a parameter for selecting a measure from a list of four measures: Profit, Quantity, Sales, and Shipping Cost. **Name this parameter “Select a Measure”** (3 points)
 - (d) **Create a corresponding calculated field. Name this calculated field “Selected Measure.”** (3 points)
 - (e) Create a rank (bump) chart for the Selected Measure by the Sub-Category from 2020 to 2022. (8 points)
 - (f) Create a quadrant chart for the Sales (x-axis) and the Profit (y-axis) by the Country. Add a filter for the Market. (7 points)
 - (g) Create a slope graph for comparing the Selected Measure by the Sub-Category for any two years. Create three calculated fields: Delta, Better or Worse, and Magnitude for adding color and width to the lines. (12 points)
 - (h) Create a dynamic dashboard for charts in (e)-(f) using a parameter (8 points)
 - (i) Create a dynamic dashboard for charts in (e)-(f) using two buttons. (8 points)
 - (j) Create a dashboard including a world map showing counties and cities and a web page linking to Google Maps. (7 points)
 - (k) Create a dashboard including a world map and a web page linking to the Wikipedia webpage. (7 points)
2. (36 points) Use the Tableau tool to connect to **“Europe Superstore 2024A.xlsx”** data.
 - (a) Create a circle (symbol) map with the Sales as size for all European countries. Add colors to circles by Region. Edit the tooltip to include a line chart of Profit vs. Quarter (Order Date) by the Segment (Color). (7 points)
 - (b) Create a scatter plot for the Profit (y-axis) and the Sales (x-axis) by Country. Show the

map for each European country as a data point on the scatter plot. Add a regression line. (7 points)

(c) Create a dual-encoded map showing a pie chart for each country on top of a map. The symbol (pie) size is based on the Sales, and the pie chart is for the Quantity by the Ship Mode (angle). (7 points)

(d) Create a dual-axis map showing a pie chart for each country on top of a filled map. In addition, create a parameter and a corresponding calculated field to allow viewers to select one of the following measures to explore the filled map: Quantity, Profit, and Sales. Duplicate this parameter and rename it so that it can be used to explore the pie chart. Create a parameter and a corresponding calculated field to allow viewers to select one of the following dimensions to explore the pie chart: Category, Region, Segment, and Ship Mode. Show your control parameters. (15 points)

3. (7 points) Use the **Tableau tool to connect to the “US Zip Codes Points.xlsx” data**. Create a map displaying real-time weather in the US. (7 points)