

CSCE 5320 Scientific Data Visualization

ICE-3

Interactions

Using the given dataset and analyze the data. Give explanation based on your understanding

- **Create and Use the data calculated fields**

1. Click on the downward arrow on the top left corner, choose Create Calculated Field, open the calculate field editor
2. Rename the calculated field as Cost and type the function Sales - Profit, click Apply.
3. Use Cost, Subcategory, and Category on the left to create visualization. Choosing anyone type of the graphs and analyzing the data.

- **Interactivity with text and visual tooltips**

4. Add Profit, Discount, Quantity to the Tooltip. Analyzing any two sub-categories from the same Category. For example, Chairs and Tables from furniture.

- **Interactivity with actions (filter)**

5. Create a new sheet (Sales-Category) as the source sheet, put sales in the rows and Category in the column. Create another new sheet (Sales-Subcategory) as the destination sheet, put sales in the rows, sub-category and category in the columns. Also apply color to category.
6. Go to Worksheet on the top, choose Actions, click Add Action, select filter, follow the tutorial, create connection between the source sheet and destination sheet.
7. Select any two categories in the source sheet simultaneously by using the control key, and give a screen shot on the destination sheet. No analyze needed for this part, just the screen shot.

- **Interactivity with actions - highlight**

8. Go back to the source and destination sheet, apply Region with color. Remove previous action and create a new action, choose highlight. Follow the tutorial, create connection between the source sheet and destination sheet.

9. Create a dashboard, move the two sheets to the dashboard and apply actions to the dashboard. Select dashboard on the top, click actions. Giving a screen shot of the dashboard and analyze any two different blocks. For example (office supply in south/ Furniture in east)

- **Interactivity with actions – URL**

10. Create a new worksheet (state sale), follow the tutorial, and create a map-based visualization. Apply URL actions to the new worksheet. When you click on the state, the corresponding webpage (ex, Wikipedia) will be show in the browser. Select any one state and provide a screenshot of the worksheet with the webpage for this part. No analyze needed.

ICE Submission Guidelines

1. ICE Submission is individual.
2. ICE code (if there is any) has to be properly commented.
3. The documentation should include the screenshots of your code/results.
4. Provide the explanation of the exercise as per your understanding.
5. The similarity score for your document should be less than 15%.
6. Submit the documentation (.pdf/.doc) with visual images of the data with explanation.
7. Submission after the deadline is considered as late submission.