Hands on Exercise for Data Visualization and Reporting – Part 1

Log on to elab using your eID credentials.

Create a new folder, PowerBI, in your class folder for CIS 570 (i.e., "S: drive"). Save the files (CO2 Emissions in kt.csv, GDP in Current US Dollars.xlsx, Globe Background.jpg) to this folder.

Use Power BI Desktop to complete the following "Learn by Doing" modules from Larson's Delivering BI book:

1. **Loading the World Population Data from the Internet (Chapter 15; Pages: 648-654)**

Notes:

- **Steps to Transform the Data in the Query Editor (Page 650)**
  - Steps 1 and 2 – If you do not see the N$^{\circ}$ column, ignore these steps.

2. **Completing the Population, GDP, and CO$_2$ Data Model (Chapter 15: Pages: 672-677)**

Notes:

- **Steps to transform the Data in the Query Editor (Page 673)**
  - Step 1 - If you do not see the N$^{\circ}$ column, ignore this step.

3. **Completing the Population, GDP, and CO$_2$ Data Model (Chapter 16: Pages: 689-695)**

Notes:

- **Steps to Create the Year Intermediate Table (Page 689)**
  - Step 2 - If you do not see the "Population-GDP-CO2 by County.pbix" filename listed on the left side of the dialog box, select File→Open to locate (in your PowerBI folder) and open this file.
- **Steps to Create the Country Intermediate Table (Pages 690-691)**
  - Step 3 – Enter **buscissql\cisbi** for server.
  - Step 4 – Enter **CountryInfo** for database. Ensure the Import option is selected and click OK. The SQL Server Database dialog box appears. Makes sure the Use my current credentials options is selected and click Connect. In the Encryption Support dialog box that appears, click OK.
  - Step 5 – The Navigator appears.
- **Steps to Create Relationships in the Model (Pages 691-693)**
  - Ignore statements about bi-directional filtering and inactive relationships.
  - Ignore steps 8 to 19. By default the relationships should be active and single-directional.

4. **Interactivity Between Charts (Chapter 16: Pages: 712-716)**
5. **Creating a Scatter Chart (Chapter 16: Pages: 717-718)**
6. **Creating a Map (Chapter 16: Pages: 718-719**
7. **Creating a Bubble Map (Chapter 16: Page: 720)**

Include your name in each chart. Use screen capture to prepare a document with images of the five charts (see attached sample document). Submit this document and indicate that you have completed the exercise.