Final Project
SEIS 632-02 Data Analytics and Visualization
Spring 2025
University of St. Thomas

* Project submissions due via Canvas on Tuesday, May 6th by 5:30 pm Central Time *
* In-Class Presentations are scheduled during the regular class period on Wednesday May 7th *

Objective

In this final project, you will apply the data analytics and visualization skills you've developed throughout the course to create an end-to-end project similar to what you may encounter as a member of a professional data analytics team. You will work in teams of 4 or 5 students and have **3 weeks** to complete the project. Groups will work together to examine a topic, curate and analyze data, construct intuitive visualizations, develop a cohesive report/dashboard, generate actionable insights, and present findings through a clear and compelling story.

Project Deliverables:

Deliverable 1: Group .pbix file

- Copy of the group .pbix file (individual working files should not be submitted)
- Includes consistent branding, fonts, colors, etc.
- There should be as many data sources as there are group members

Deliverable 2: Presentation Video

- Includes brief discussion of, at a minimum:
    - Data curation, preparation, and exploration process (including any caveats or limitations with your data)
    - Visuals and key takeaways presented by each group member
        - **Group members must be seen and heard when they are speaking/presenting, and every group member must present**
    - At least one actionable recommendation from the group
- **Maximum** 15 minutes in length for groups of 4, 17 minutes for groups of 5
- You may either upload a file or provide a link to your video (just make sure I can access it ahead of time if you're providing a link)

Deliverable 3: Individual Summary and Reflection Document

- **Maximum** 2 double-spaced pages in length
- Includes:
    - A link to your data source, and a brief description of the dataset – what it represents and how it fits in with the overall project

- o A screenshot of the visual you contributed, and a brief description of your key takeaway
- o Brief reflection (1-2 paragraphs) on your experience with this process.
  - E.g., What went well in your group, what challenges did you face, how did you resolve any issues you encountered, what did you learn, etc.?

Submission Requirements:

Upload these deliverables through Canvas no later than Tuesday, May 6th at 5:30 pm: **All group members must upload all three deliverables into Canvas.** Late submissions will not be accepted.

General Tasks (including, but not necessarily limited to)**:**

Group	Individual
Create a central repository to store your data and any working files you may need to share	Choose an appropriate dataset, and explore and clean your data
Create a data model with appropriate relationships, and connect your data sources in Power BI	Identify one key takeaway related to the data you're contributing, and create at least one supporting data visualization
Build your report in Power BI, incorporating individual visuals and ensuring consistent branding/formatting	Write a short summary of the dataset you chose, the visual(s) you created, and your reflection on this process
Construct your group's story and prepare your presentation	Engage in the question/answer/feedback time during in-class presentations

Grading Criteria:

Group Components (150 points)
- Complementary and Relevant Data Sources **(30 points)**
- Well-Structured Data Model **(30 points)**
- Intuitive, Consistent, and Visually Engaging Report Design **(30 points)**
- Analytical Insights, Appropriate and Actionable Key Takeaways **(30 points)**
- Cohesive Storytelling **(30 points)**

Individual Components (150 points)
- Individual contributions **(70 points)**:
  - o Data source selection and data preparation
  - o Visualization Accuracy and Design, Relevant Key Takeaway
- Individual summary/reflection document **(50 points)**
- Participation in group role and final presentation **(30 points)**

<u>In-Class Presentations:</u>

During our regularly scheduled class period on May 7th, we will view each video and discuss projects. I will play each group's video, and the class will discuss for up to an additional 5 minutes each. During the final hour of class, we'll debrief and discuss any general questions or items in preparation for the final exam on May 14th.