

****Project Specifications Document: Visualization Project**

Key Aspects to Highlight in the Project

- Data Sources
- Basic Data Processing
- Data Formatting
- Visualizations and Analysis Tools
- Dashboard
- Analysis
- Project Publication

Data Sources

- Recommendations for Key Aspects to Highlight
- Use of Multiple Data Sources: files, online databases (ODATA), etc.
- Additional Data: either mergeable into a single data model or exploitable independently

Data Formatting

- Types of Processing: filtering, normalization, dimension reduction, etc.
- Use of External Tools: Python, C/C++, libraries, etc.

Data Formatting

- Handling Missing Values, Data Formats, Semantics, etc.
- Creating the Data Model: fusion or relation
- Operations to Perform in Tableau

Visualizations and Analysis Tools

- Basic Visualizations (at least 1 per category)
 - Relationship
 - Distribution
 - Comparison
 - Composition
- Example in Tableau:
 - Maps, scatter plots, bar/cumulative charts, heat maps, treemaps, etc.
 - Add the Category Name in Each Visualization Title (sheet in Tableau)
 - Use Analysis Tools: trends, clustering, etc.

Dashboard

- Create a Dashboard Integrating as Many Visualizations as Possible
At least 4 per dashboard
- Multiple Dashboards with Different Themes Can Be Created
- Use Filtering Mechanisms to Interact Logically with Visualizations
- Use Animation Along a Given Dimension

Analysis and Key Aspects to Highlight in the Project

- What are the trends and possible predictions
- What are the patterns
- What is the primary insight extracted from this database
 - Which visualization best represents it

Key Aspects to Highlight in the Project

- What is the value of the visualizations created
 - Who may be interested
 - How to add value to these results
- How could the visualizations influence the perception of observed processes/measures
- What are the limitations of the databases used?
 - What improvements would you suggest?
 - What new databases could you integrate and why?