Updated project plan due to data availability

1. Project Overview with Driving Question

Goal: Provides an overview that clearly states the driving question and links the question to the data approach.

Approach: Start by identifying a central question that is relevant to the dataset. For instance, you could explore how library services and accessibility vary across different regions or demographic characteristics. The driving question could be, "How do library services and their accessibility vary across different U.S. counties and what factors influence these variations?"

Link to Data Approach: Explain how the dataset columns such as LIBNAME, ADDRESS, CITY, CNTY, LOCALE, CNTYPOP, HOURS, and WKS_OPEN will help in answering this question through spatial and quantitative analysis.

2. Data Description

Goal: Describe the data sources, quality, and structure used in the project.

Approach: Detail the source of your dataset, likely a national database tracking library statistics. Assess the quality by discussing any missing data, potential biases, or limitations in data collection (like inconsistent reporting across libraries). Describe the structure, highlighting key columns and their data types, as well as how the dataset is organized (e.g., rows representing individual libraries).

3. Data Handling Documentation

Goal: Documents the collection, wrangling, and analysis, and development of an interactive data visualization.

Approach: Outline the steps taken from data collection to processing. Detail how you cleaned and prepared the data, including handling missing values, merging data points, and transforming data for analysis. Discuss the tools and techniques used for data analysis and how you developed an interactive visualization (using software like Tableau, Power BI, or a programming library like D3.js).

4. Application of Course Concepts

Goal: Accurately applies course concepts for organizing and analyzing data and for visually presenting data.

Approach: Apply the concepts learned in the course such as data normalization, aggregation, and statistical analysis. Use these concepts to organize the data for better analysis (e.g., normalizing

library hours across different time zones) and for visual presentation (e.g., creating histograms, scatter plots, or choropleth maps to show data distribution and trends).

5. Audience-Centric Design

Goal: Prioritizes the audience's needs and priorities in the design and development decisions.

Approach: Design the data presentation and interactive elements considering the target audience (e.g., policymakers, library managers, or the general public). Ensure that visualizations are intuitive and informative, providing easy-to-understand insights and actionable information. Accessibility should also be considered, ensuring that the visualizations are usable by people with disabilities.

6. Project Reflection and Future Steps

Goal: Reflects on limitations of the final project and discusses alternative approaches and next steps for the future.

Approach: Critically evaluate the project, acknowledging any limitations due to data quality, analysis methods, or interpretation. Discuss alternative methods that could have been used and propose future steps for further research, such as expanding the dataset with additional variables, using advanced analytical techniques, or conducting longitudinal studies to observe changes over time.

By addressing each of these goals systematically, you can ensure that your final project is robust, insightful, and well-received. This approach not only demonstrates your mastery of the course content but also your ability to apply these concepts practically and thoughtfully.