### Section 1: Introduction to Geovisualization

#### I. Definition and Importance

A. Introduction to geovisualization

B. Significance in spatial data science and decision-making

#### II. Types of Geovisualization

A. Static vs. Interactive

B. 2D vs. 3D

C. Temporal and Spatiotemporal Visualization

### Section 2: Exploring Geovisualization Libraries

#### I. Matplotlib and Basemap

A. Basics of Matplotlib for static maps

B. Introduction to Basemap for map projections

#### II. Folium

A. Creating interactive web maps with Folium

B. Adding layers and customizing maps

#### III. Plotly Express

A. Overview of Plotly Express for interactive plots

B. Creating geographical plots with Plotly Express

#### IV. Kepler.gl

A. Introduction to Kepler.gl for large-scale geospatial visualization

B. Creating visually appealing and informative maps

### Section 3: Building a Geovisualization Dashboard with Streamlit

#### I. Introduction to Streamlit

A. Overview of Streamlit for creating data applications

B. Installation and setup

#### II. Designing the Dashboard

A. Defining the purpose and scope of the dashboard

B. Identifying key components and data sources

#### III. Integration with Geovisualization Libraries

A. Embedding Matplotlib, Folium, and Plotly Express in Streamlit

B. Creating a unified and interactive geovisualization experience

#### IV. CEDEAO Project: West African Geovisualization Dashboard

A. Acquiring and preparing CEDEAO data

B. Implementing geographical insights and visualizations

C. Customizing the dashboard layout and user interface

#### V. Real-time Data Integration

A. Exploring possibilities of real-time data updates

B. Connecting the dashboard to live geospatial data sources

#### VI. Deployment and Sharing

A. Deploying the geovisualization dashboard with Streamlit sharing

B. Discussing options for sharing the dashboard with stakeholders

### Section 4: Conclusion

#### I. Summary of Geovisualization Libraries

A. Recap of Matplotlib, Folium, Plotly Express, Kepler.gl, and Streamlit

B. Reflecting on the importance of geovisualization in spatial data science

#### II. Next Steps

A. Encouraging further exploration and learning

B. Teasing upcoming chapters or advanced topics

This structured plan aims to guide you through the exploration of various geovisualization libraries and culminate in a practical project: building a geovisualization dashboard with Streamlit using West African data from CEDEAO.