# Cyclistic Bike-Share Case Study

## Business Task

* Define the clear business task based on the case study
* Identify key stakeholders and their needs

## Data Preparation

* Download the previous 12 months of Cyclistic trip data
* Organize data in appropriate folders with proper naming conventions
* Assess data organization and structure
* Evaluate data credibility (ROCCC)
* Address data integrity, privacy, and security concerns

## Data Processing

* Choose appropriate tools for analysis
* Check data for errors and clean as needed
* Create ride\_length column to calculate trip duration
* Create day\_of\_week column to identify ride days
* Document all cleaning and transformation steps

## Data Analysis

* Combine data into a single dataset for analysis
* Perform descriptive analysis (mean, max, mode)
* Create pivot tables for comparative analysis
* Analyze differences between annual members and casual riders
* Identify trends and patterns in the data

## Data Visualization

* Determine appropriate visualization types
* Create visualizations showing key differences between user types
* Ensure visualizations are clear, professional, and accessible
* Add proper titles, labels, and explanations

## Recommendations

* Develop top three recommendations based on analysis
* Ensure recommendations address the business task
* Support recommendations with data insights

## Final Report

* Compile all deliverables into a comprehensive report
* Include clear statement of business task
* Include description of data sources
* Document data cleaning process
* Summarize analysis findings
* Present supporting visualizations
* Present top three recommendations