## **EULYTIX HOME ASSIGNMENT**

### **Task 1: Data Collection**

- **Objective**: Collect all roll call votes from the U.S. Senate for the year 2024 from the following webpage: U.S. Senate Roll Call Votes.
- Data Requirements:
  - Date of the vote
  - Vote result (e.g., passed/failed)
  - Measure number and measure title
  - Senator's voting record (i.e., how each senator voted)
  - Senator's party affiliation (D for Democrat, R for Republican)
  - Senator's state (e.g., WY for Wyoming, CO for Colorado)
- Format: The final dataset should be in a tabular format (CSV, Excel, or similar).
- Code Requirements:
  - o The code should be reusable to collect future data.
  - o Preferably store the code in a Git repository.

# **Task 2: Machine Learning Model**

- Objective: Build a classification model to predict whether a vote will pass or fail.
- Instructions:
  - Use any data collected from the above task or additional information that can be scraped from the website.
  - Focus on the process; we understand the dataset is not large, so the model might not be very strong. The goal is to see how you approach the problem.

### **General Guidelines:**

- You don't need to invest more than a few hours in this assignment. We're primarily interested in how you approach and solve these tasks.
- Feel free to add a writeup explaining your approach, any assumptions you made, and additional steps you would take if you had more time or resources.

#### **Submission:**

- Please submit your code and the final results within one week of receiving this assignment.
- If you require more time, let us know, and we will be happy to accommodate.

Thank you for your participation! We look forward to reviewing your work.

Best regards, The Eulytix Team