USDS Software Engineering Take-Home Assessment

Purpose

The United States Federal Government has over 200,000 pages of federal regulations across ~150 main agencies, all of which can be found within the eCFR at https://www.ecfr.gov/. There is a public API for it.

The goal of this assessment is to create a simple website to analyze Federal Regulations to allow for more digestible and actionable insights to be made on potential deregulation efforts across the government.

Instructions

1. Write code to download the current eCFR data, store the data server-side, create APIs that can retrieve the server-side stored data, and provide a UI to analyze 1) word count per agency, 2) historical changes over time, and 3) a checksum for each agency.
   - Please add at least one of your own custom metrics that you believe may help inform decision-making more effectively.
2. Create a web-based UI for users to review the results.
3. **Please submit this assignment by the deadline your USDS Recruiter provided. If you have questions or need more time, please let your Recruiter know.**
   - You will receive a separate email with a private GitHub repository link – please check your spam folder if you do not see it.
     - Please contact us if you do not receive the GitHub link within 24 hours of receiving this email.
   - When submitting, please include the following:
     - Source code
       - *We strongly prefer submissions with no more than 1,200 lines of code (excluding tests and auto-generated files).*
     - Document including:
       - Any comments you want to add on how your expertise / skillsets fit this assessment.
       - Duration it took you to complete it.
       - Link to frontend, if applicable.
       - Screenshots of your UI.
     - *Note: You may use AI to support your assignment but please be ready to describe how and why you used it. Please be ready to share your screen and walk through your code if you move onto the first technical interview.*
   - We designed this assignment to take around 4 hours, excluding setup. Please take more time if needed, but we recommend keeping the solution lightweight and focused.

Thank you and we look forward to reviewing your submission.