

Feedback on the assignment, including any comments you may want to add on how your expertise / skillsets fit this assessment.

My coding background is mainly in backend coding, specifically algorithm design and security analysis. Until recently I had done very little frontend coding. I've used the Streamlit library for projects before so that was slightly familiar to me. I am also familiar with making API calls but had never built my own API endpoints before this. Information specific to the project (function, usage) can be found in the readme included in the project files.

Duration it took you to complete it.

This took me approximately ten hours to complete, including setup.

Screenshots of your UI.

Default page:

The screenshot shows the default page of the 'Federal Regulation Analyzer' web application. The interface is dark-themed with white text. It features two main sections: 'Download eCFR XML Files' and 'Analyze Titles Per Agency'. The 'Download' section includes a date selector set to '2024/07/01', a multi-select dropdown for CFR titles showing '2' selected items, and a 'Download Selected Titles' button. The 'Analyze' section includes an agency selector set to 'Administrative Committee of the Federal Register', date range inputs for 'Start Date' (2020/07/01) and 'End Date' (2025/07/01), and an 'Analyze' button.

Federal Regulation Analyzer

Download eCFR XML Files

Select a date for XML download

2024/07/01

Select CFR Titles to Download

2 x

Download Selected Titles

Analyze Titles Per Agency

Select an Agency

Administrative Committee of the Federal Register

Start Date: 2020/07/01

End Date: 2025/07/01

Analyze

For Analyzing Titles Per Agency:

Agency Selection Dropdown:

Analyze Titles Per Agency

Select an Agency

Administrative Committee of the Federal Register

Administrative Committee of the Federal Register

Administrative Conference of the United States

Advisory Council on Historic Preservation

African Development Foundation

Agency for International Development

Air Transportation System Stabilization

American Battle Monuments Commission

Appalachian Regional Commission

Date Entry:

Analyze Titles Per Agency

Select an Agency

Administrative Committee of the Federal Register

Start Date

2020/07/01

End Date

2025/07/01

< July 2020 >

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Metrics:

Metrics for Administrative Committee of the Federal Register

2020-07-01

```
{
  "Word Count" : 10700
  "Complexity" : 10.423195788016997
  "Checksum" : "5a52d1f3ae147d95e2eaaac16c2a6327cfda8ec5d6c0039682aa51a24f2bb42c"
}
```

2025-07-01

```
{
  "Word Count" : 10452
  "Complexity" : 10.348897892687322
  "Checksum" : "bfe34a3f04871aea47dca7b1ff39077d7d6921a5580d3921d7df8079a8e770ad"
}
```

Delta (Change Between Dates)

```
{
  "Word Count Change" : -248
  "Complexity Change" : -0.0742978953296749
}
```

Relevant Chapter Texts:

Latest chapters for Administrative Committee of the Federal Register as of 2025-07-01

1: CHAPTER I—ADMINISTRATIVE COMMITTEE OF THE FEDERAL REGISTER

Full Chapter Text

CHAPTER I—ADMINISTRATIVE COMMITTEE OF THE FEDERAL REGISTER SUBCHAPTER A—GENERAL PART 1—DEFINITIONS Authority: 44 U.S.C. 1506; sec. 6, E.O. 10530, 19 FR 2709; 3 CFR, 1954-1958 Comp., p.189. § 1.1 Definitions. As used in this chapter, unless the context requires otherwise— Administrative Committee Agency Document Document having general applicability and legal effect Filing Regulation rule [37 FR 23603, Nov. 4, 1972, as amended at 50 FR 12466, Mar. 28, 1985] PART 2—GENERAL INFORMATION Authority: 44 U.S.C. 1506, 4101; sec. 6, E.O. 10530, 19 FR 2709; 3 CFR, 1954-1958 Comp., p. 189; 1 U.S.C. 112, 113. Source: 37 FR 23603, Nov. 4, 1972, unless otherwise noted. § 2.1 Scope and purpose. (a) This chapter sets forth the policies, procedures, and delegations under which the Administrative Committee of the Federal Register carries out its general responsibilities under chapter 15 of title 44, United States Code. (b) A primary purpose of this chapter is to inform the public of the nature and uses of Federal Register publications. § 2.2 Administrative Committee of the Federal Register. (a) The Administrative Committee of the Federal Register is established by section 1506 of title 44, United States Code.

For Downloading Specific XML Documents

****Note** you do NOT need to download any XML files before analyzing an agency, the analyzer checks for the relevant XML files and downloads them automatically.

Date and title selections for downloading specific XML documents:

Federal Regulation Analyzer

Download eCFR XML Files

Select a date for XML download

2024/07/01

< July 2024 >

Su Mo Tu We Th Fr Sa

1 2 3 4 5 6

7 8 9 10 11 12 13

14 15 16 17 18 19 20

21 22 23 24 25 26 27

28 29 30 31

Agency

Start Date

2020/07/01

End Date

2025/07/01

Analyze

Federal Regulation Analyzer

Download eCFR XML Files

Select a date for XML download

2024/07/01

Select CFR Titles to Download

2 x 5 x

1

3

4

6

7

8

9

10

Analyze

Downloading selected titles:

Federal Regulation Analyzer

Download eCFR XML Files

Select a date for XML download

2024/07/01

Select CFR Titles to Download

2 x 5 x

Download Selected Titles

Downloading selected XML files from eCFR.gov...

Select an Agency

Administrative Committee of the Federal Register

Start Date End Date

2020/07/01 2025/07/01

Analyze

Federal Regulation Analyzer

Download eCFR XML Files

Select a date for XML download

2024/07/01

Select CFR Titles to Download

2 x 5 x

Download Selected Titles

Downloaded 2 XML file(s): [2, 5]

Analyze Titles Per Agency

Select an Agency

Administrative Committee of the Federal Register

Start Date End Date

2020/07/01 2025/07/01

Analyze