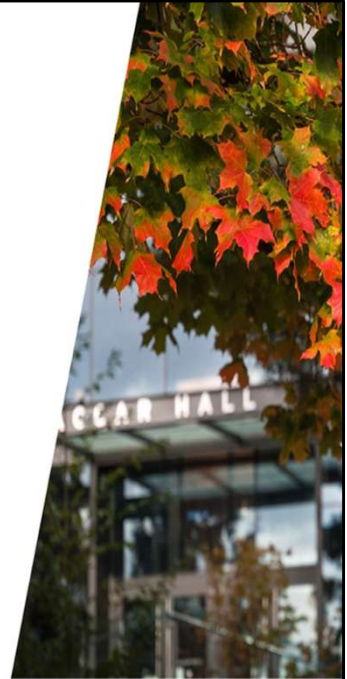


EDGAR EXPLORER: XBRL AND APIs

Data Analytics for Professional Accountants
(ACCTG 522)

Class 8 | MPAcc Class of 2026



Welcome!

Class Agenda

- **Review**
- XBRL Filings
- Mini-Lab:
 - EDGAR Explorer Case: Examine a company XBRL filing.
- Labs (both XBRL based):
 - Accessing the SEC EDGAR Filings API
 - Accessing the SEC Company Facts
- Conclusion and look ahead.

Core Capabilities: Doc & Data Intelligence

Doc Intelligence

- Automated understanding and summarization of documents
- Quick extraction of important points and data from any text
- Comparison of document contents to identify key differences
- Accurate language translation for diverse document types
- Trend and pattern detection within large volumes of text

Data Intelligence

- Connect to any data source, integrating seamlessly with AI.
- Utilize AI to uncover deep insights from complex datasets.
- Empower finance to do real-time decision-making with dynamic, AI-driven data analysis.
- Leverage predictive analytics to forecast trends and guide strategic planning.



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XBRL Filings

In assessment teams:

- Pick a stock you believe is over or undervalued
- Update the Table below:

Sock selected	Under/Over Valued	Sock selected	Under/Over Valued

XBRL Filings

Use the EDGAR Search Tool

- [SEC.gov | Search Filings \(www.sec.gov/search-filings\)](http://www.sec.gov/search-filings).
- Obtain the most recent 10-K of your target company.
- Access the **XBRL instance** of the 10-K.

[Home](#) / [Search Filings](#)

Search Filings



Enjoy free public access to millions of informational documents filed by publicly traded companies and others in the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system.

Company Search

Search By

microsoft

SUBMIT

[more search options](#)

Search By

SUBMIT

EDGAR | Filings

MICROSOFT CORP. (MSET)	CIK 0000789019
MICROSOURCEONLINE INC	CIK 0001170824
Microsonic Systems Inc.	CIK 0001461553
MICROSOURCEONLINE COM INC	CIK 0001175010
Microsoft AVN Holdings, Inc.	CIK 0001356955

 [Search for "Microso" in EDGAR filings](#)

[+] Company Information

Latest Filings (excluding insider transactions)

- October 16, 2025 - PX14A6G: Notice of exempt solicitation submitted by non-management [Filing](#)
- October 16, 2025 - PX14A6G: Notice of exempt solicitation submitted by non-management [Filing](#)
- September 30, 2025 - 8-K: Current report [Filing](#)
5.02 - Departure of Directors or Certain Officers Election of Directors Appointment of Certain O...
- September 11, 2025 - PX14A6G: Notice of exempt solicitation submitted by non-management [Filing](#)
- September 3, 2025 - 144: Report of proposed sale of securities [Filing](#)

[View filings](#)

Selected Filings

[+] 8-K (current reports)

[-] 10-K (annual reports) and 10-Q (quarterly reports)

- July 30, 2025 - 10-K: Annual report for year ending June 30, 2025 [Filing](#)
- April 30, 2025 - 10-Q: Quarterly report for quarter ending March 31, 2025 [Filing](#)
- January 29, 2025 - 10-Q: Quarterly report for quarter ending December 31, 2024 [Filing](#)
- October 30, 2024 - 10-Q: Quarterly report for quarter ending September 30, 2024 [Filing](#)

[View all 10-Ks and 10-Qs](#)[How to read a 10-K/10-Q](#)

[+] Proxy (annual meeting) and information statements

[+] Ownership disclosures

Form 10-K - Annual report [Section 13 and 15(d), not S-K Item 405]:

SEC Accession No. 0000950170-25-100235

Filing Date

2025-07-30

Accepted

2025-07-30 16:11:40

Documents

127

Period of Report

2025-06-30

Interactive Data

Document Format Files

Seq	Description	Document	Type	Size
1	10-K	msft-20250630.htm	XBRL 10-K	8158067
2	EX-10.7	msft-ex10_7.htm	EX-10.7	202307
3	EX-10.8	msft-ex10_8.htm	EX-10.8	291957
4	EX-21	msft-ex21.htm	EX-21	15901
5	EX-23.1	msft-ex23_1.htm	EX-23.1	5383
6	EX-31.1	msft-ex31_1.htm	EX-31.1	12363
7	EX-31.2	msft-ex31_2.htm	EX-31.2	12604
8	EX-32.1	msft-ex32_1.htm	EX-32.1	8729
9	EX-32.2	msft-ex32_2.htm	EX-32.2	8430
	Complete submission text file	0000950170-25-100235.txt		34889671

Data Files

Seq	Description	Document	Type	Size
10	XBRL TAXONOMY EXTENSION SCHEMA WITH EMBEDDED LINKBASES DOCUMENT	msft-20250630.xsd	EX-101.SCH	2066295
130	EXTRACTED XBRL INSTANCE DOCUMENT	msft-20250630.htm.xml	XML	10533273

Mailing Address ONE MICROSOFT WAY REDMOND WA 98052-6399

Business Address ONE MICROSOFT WAY REDMOND WA 98052-6399 425-882-8080

MICROSOFT CORP (Filer) CIK: 0000789019 (see all company filings)

EIN: 911144442 | State of Incorporation: WA | Fiscal Year End: 0630

Type: 10-K | Act: 34 | File No.: 001-37845 | Film No.: 251167157

SIC: 7372 Services-Prepackaged Software

(CF Office: 06 Technology)

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Accessing the SEC EDGAR Filings API

Goal: To obtain a **specific filing** (e.g., most recent 10-K) in complete submission format.

Seq	Description	Document	Type	Size
1	10-K	msft-20250630.htm	XBRL 10-K	8158067
2	EX-10.7	msft-ex10_7.htm	EX-10.7	202307
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9	EX-32.2	msft-ex32_2.htm	EX-32.2	8430
	Complete submission text file	0000950170-25-100235.txt		34889671

For human viewing online

For downloading and computer processing

Accessing the SEC EDGAR Filings API

Three main steps:

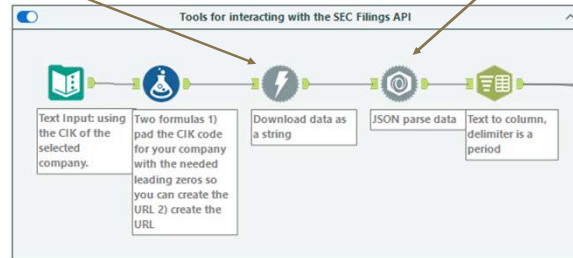
1. Request the list of filings for a specific CIK.
2. Save and parse the filings data
3. ID the file of interest and download it.

Requests are made using the *submissions* API, the file is downloaded directly from the SEC/Archives.

Download tool

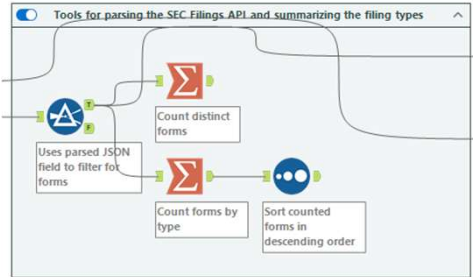
The steps here include using the input text tool to provide the URL for the download tool to connect to the API, the JSON data returned by the download tool is the parsed using the JSON tool which can then be deserialized further using the text to columns tool.

JSON data parsing tool
(JSON is the data
format we receive
from SEC APIs and
many others)



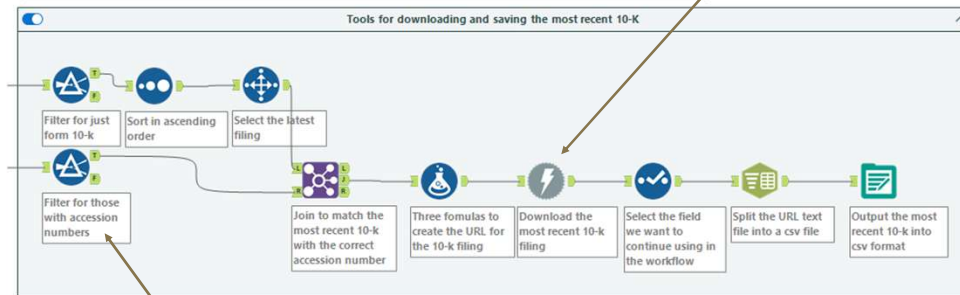
The steps here are to identify all of the components needed to answer the questions about the filings (the filter and summarize tools).

Check into the files for a sanity check
Should be 8-ks and form 4's filed
frequently, one 10-K per year and 3
Q's, /A for amended filings.



The tools in this step are used to identify the most recent 10-K filing components. First the components to construct the URL which can be used to download the most recent 10-K filing uses the filter tool, the sort and select records tools. Then using a join tool, and a formula tool, to construct the URL the download tool is used to interact with the SEC's website to download the most recent 10-K. A select tool and text to columns tool are then used to create a csv formatted 10-K which is saved using the output data tool.

Downloads the full submission file as plain text.



Accession number is a unique SEC filing key (unique per filing)

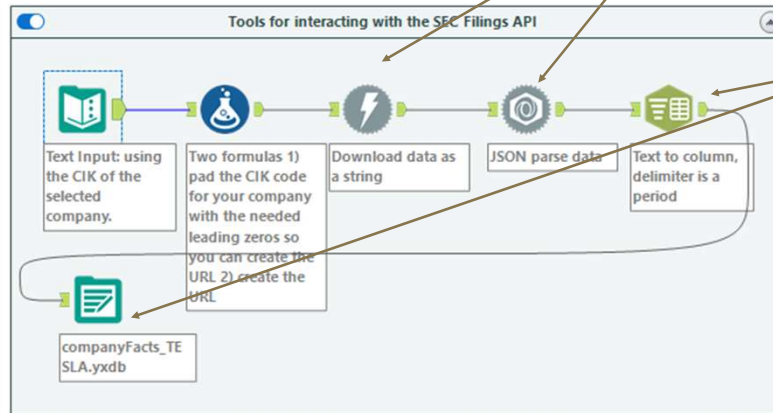
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Use this step first to download the SEC API data from company facts. It will provide output in the form of a json file with all of the XBRL data stored and indexed with some summary filings information (e.g., form filed 10-K/Q and dates).

Company Facts Data API returns JSON variables with historical XBRL tags and value pairs (and other indexing information like year, currency etc).



Parse and save as a flat file.

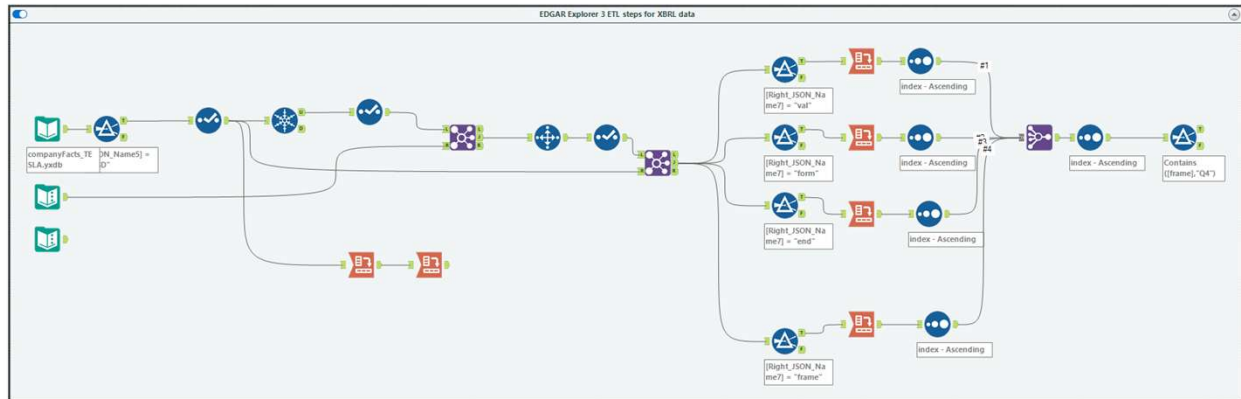
Welcome!

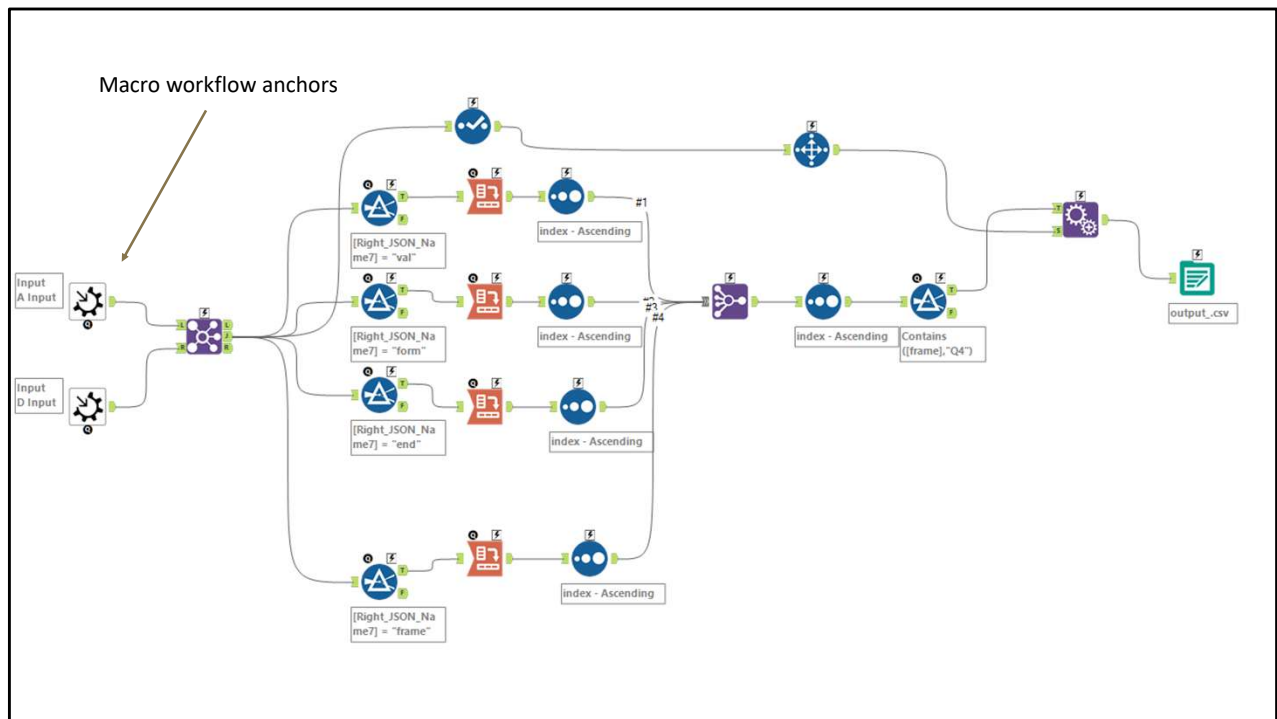
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The analysis workflow is currently split into two approaches to gather 1. Shareholders Equity and details about which time frame the data is from, and then using this to filter out the quarterly and overlapping data to just give a time-series of annual amounts and 2. all XBRL data but only with the index to highlight another potential approach. In both cases, to use these workflows you need to know the names of the accounts you plan on retrieving for analysis.

- An example workflow for examining company facts, ID specific XBRL tags and output them (below).
- For the full-text filing, an example further analysis is the sentiment analysis (e.g., in the Enron case), we'd typically run it on the MD&A.





Team Deliverable Today

One submission per assessment team:

1. Proposed analyses of EDGAR data:
 1. Outline the goal of the analyses.
 2. Identify the API to connect to.
 3. Identify the data challenges to be address (use the example output from today's lab).
2. You can propose more than one analysis.
3. One email submission on behalf of your team
abcurtis@uw.edu

Thank you!

