Project01: WWW as a Rube Goldberg machine

The project tries to express *Sipping wine, reciting verse, gazing at the starry sky,*
Yet mindful of six pennies passing by, broadening horizons

It uses six open API as follows:

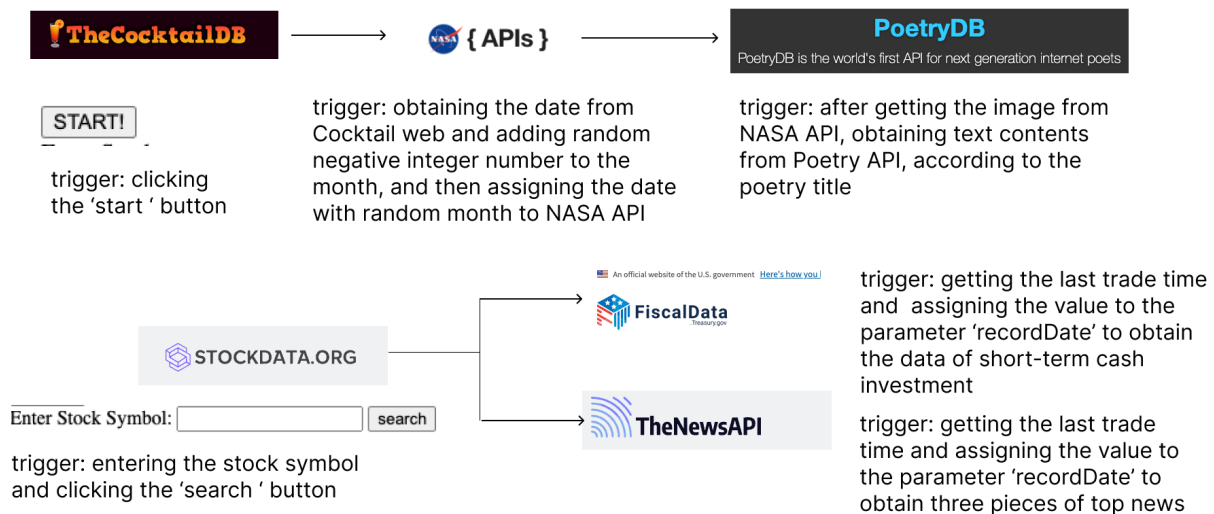www.thecocktaildb.com/api/json/v1/1/search.php?s=margarita

https://api.nasa.gov/

https://poetrydb.org/index.html

https://www.stockdata.org/

https://fiscaldata.treasury.gov/

https://www.thenewsapi.com/

Diagram:

https://www.figma.com/file/WwPEwJKn7SYyny6zrwcojj/Untitled?type=design&node-id=0-1&mode=design&t=gJLjCv66b6f9050C-0

Sipping wine, reciting verse, gazing at the starry sky,
Yet mindful of six pennies passing by, broadening horizons

trigger: clicking
the 'start ' button

trigger: obtaining the date from
Cocktail web and adding random
negative integer number to the
month, and then assigning the date
with random month to NASA API

trigger: after getting the image from
NASA API, obtaining text contents
from Poetry API, according to the
poetry title

trigger: entering the stock symbol
and clicking the 'search ' button

trigger: getting the last trade time
and assigning the value to the
parameter 'recordDate' to obtain
the data of short-term cash
investment

trigger: getting the last trade
time and assigning the value to
the parameter 'recordDate' to
obtain three pieces of top news

video: https://youtu.be/49TZJOrIF6M

codes: https://github.com/yuliniris/creative-tech-4

file name: index09

Trigger 1: clicking the 'start' button

```html
<header>
  <button id="startButton">START!</button>
  <section id="mainElement"></section>
```

```javascript
startButton.addEventListener("click", fetchCocktailData)
```

Trigger 2: getting the date value from cocktail web and adding the random negative integer number to the month, and then passing the new date value to NASA API

```javascript
let a = new Date(drink.dateModified)
let randomMonthOffset = Math.floor(Math.random() * (-2 - (-6) + 1)) - 6
let adjustedMonth = a.getUTCMonth() + 1 + randomMonthOffset
let dataForNASAAPI = `${a.getUTCFullYear()}-${adjustedMonth.toString().padStart(2, '0')}-$
{a.getUTCDate().toString().padStart(2, '0')}`
```

Trigger 3: after getting image from NASA API, obtaining poetry text from Poetry

```javascript
let appendNASAData = (data) => {
    console.log(data)

    let picTitle = data.title
    let imgURL = data.url

    let picHeader = document.createElement('h3')
    picHeader.innerText = picTitle
    NASAsection.appendChild(picHeader)

    let nasaImg = document.createElement('img')
    nasaImg.src = imgURL
    NASAsection.appendChild(nasaImg)

    fetchPoetryAfterNASA();
```

```
let fetchPoetryAfterNASA = () => {
    fetchPoetryDB();

}
```

Trigger 4: entering the stock symbol button, and clicking 'search' button

```
<section id="stockdata">
    <label for="stockInput">Enter Stock Symbol:</label>
    <input type="text" id="stockInput">
    <button onclick="searchStock()">search</button>
</section>

let stockSymbols
function searchStock(params) {
  stockSymbols = document.getElementById('stockInput').value
  console.log('Stock Symbol:', stockSymbols)

  if (stockSymbols.trim() !== '') {
    fetchstockData();
```

Trigger 5&6: getting the value from 'last trade value' and assigning the value to the parameter 'recordDate' to grasp information from fiscal web and News web.

```
  let recordDate = new Date(lastTradeTime).toISOString().split('T')[0]


    console.log(recordDate)
    fetchfiscalData(recordDate)
    fetchtheNews(recordDate)
```

Problems:

It cannot get data from fiscal API.

First, I used the endpoint of 'average interest rate', and it showed no data. Then, I checked the website, and it showed the latest data is 12/31/2023, whereas the value of 'recordData' is 01/31/2024.

Therefore, I changed to the endpoint of 'daily treasury statement: short-term cash investment', and it updates the data in time.

But it response no data, which seems to be inconsistent with the web.

Average Interest Rates on U.S. Treasury Securities

Average Interest Rates on U.S. Treasury Securities

/v2/accounting/od/avg_interest_rates

```
1  {
        "data": [],
        "meta": {
            "count": 0,
            "labels": {
                "country_currency_de
                "exchange_rate": "Ex
                "record_date": "Reco
            },
            "dataTypes": {
                "country_currency_de
                "exchange_rate": "NUI
                "record_date": "DATE
            },
            "dataFormats": {
                "country_currency_de
                "exchange_rate": "10
                "record_date": "YYYY
            },
            "total-count": 0,
            "total-pages": 0
        },
        "links": {
            "self": "&page%5Bnumber%
```

Line 1, Column 1

Console   What's new   Issues

top ▾

Filter   Default levels ▾   No Issues

```
  ▶ [[Prototype]]: Object
    length: 1
  ▶ [[Prototype]]: Array(0)
▶ meta: {requested: 1, returned: 1}
  ▶ [[Prototype]]: Object
2024-01-31                                          index06(drink NASA p…ock price).html:273
https://api.fiscaldata.treasury.gov/services/api/fiscal_se  index06(drink NASA p…ock price).html:286
rvice/v1/accounti… currency_desc,exchange_rate,record_date&filter=record_date:gte:2024-01-31
1                                                   index06(drink NASA p…ock price).html:141
                                                    index06(drink NASA p…ock price).html:211
▼ {data: Array(0), meta: {…}, links: {…}} ⓘ
  ▼ data: Array(0)
      length: 0
    ▶ [[Prototype]]: Array(0)
  ▶ links: {self: '&page%5Bnumber%5D=1&page%5Bsize%5D=100', first: '&page%5Bnumber%5D=1&page%5Bsize⁹
  ▶ meta: {count: 0, labels: {…}, dataTypes: {…}, dataFormats: {…}, total-count: 0, …}
  ▶ [[Prototype]]: Object
```

FiscalData

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Average Interest Rates on U.S. Treasury Securities

Introduction   Preview & Download   Dataset Properties   API Quick Guide   Related Datasets

Introduction

📅 01/31/2001 — 12/31/2023   🔄 Released Monthly   ✏️ Last Updated 01/05/2024

The Average Interest Rates on U.S. Treasury Securities dataset provides average interest rates on U.S. Treasury securities on a monthly basis. Its primary purpose is to show the average interest rate on a variety of marketable and non-marketable Treasury securities. Marketable securities consist of Treasury Bills, Notes, Bonds, Treasury Inflation-Protected Securities (TIPS), Floating Rate Notes (FRNs), and Federal Financing Bank (FFB) securities. Non-marketable securities consist of Domestic Series, Foreign Series, State and Local Government Series (SLGS), U.S. Savings Securities, and Government Account Series (GAS) securities. Marketable securities are negotiable and transferable and may be sold on the secondary market. Non-marketable securities are not negotiable or transferrable and are not sold on the secondary market. This is a useful dataset for investors and bond holders to compare how interest rates on Treasury securities have changed over time.

Preview & Download

Date Range (Record Date):

Dec 2023   1 Year   5 Years   10 Years   All   Custom

Data Table:
Average Interest Rates on U.S. Treasury Securities
Date Range:
01/01/2023 - 12/31/2023

CSV   JSON   XML

⬇ Download CSV File

Download Data Dictionary (4 KB)

Operating Cash Balance

Hide Pivot Options

Pivot View: Complete Table Pivot Value: — N / A —

Table Chart

Reset Filters

Record Date	Type of Account	Closing Balanc...	Opening Balan...	Opening Balan...
2/2/2024	Treasury General Account (TGA) Opening Balance		$813,657	$865,481
2/2/2024	Total TGA Deposits (Table II)		$16,721	$292,211
2/2/2024	Total TGA Withdrawals (Table II) (-)		$44,198	$371,513
2/2/2024	Treasury General Account (TGA) Closing Balance		$786,179	$786,179
2/1/2024	Treasury General Account (TGA) Opening Balance		$865,481	$865,481
2/1/2024	Total TGA Deposits (Table II)		$275,490	$275,490
2/1/2024	Total TGA Withdrawals (Table II) (-)		$327,315	$327,315
2/1/2024	Treasury General Account (TGA) Closing Balance		$813,657	$813,657
1/31/2024	Treasury General Account (TGA) Opening Balance		$863,278	$768,590
1/31/2024	Total TGA Deposits (Table II)		$245,337	$3,167,036