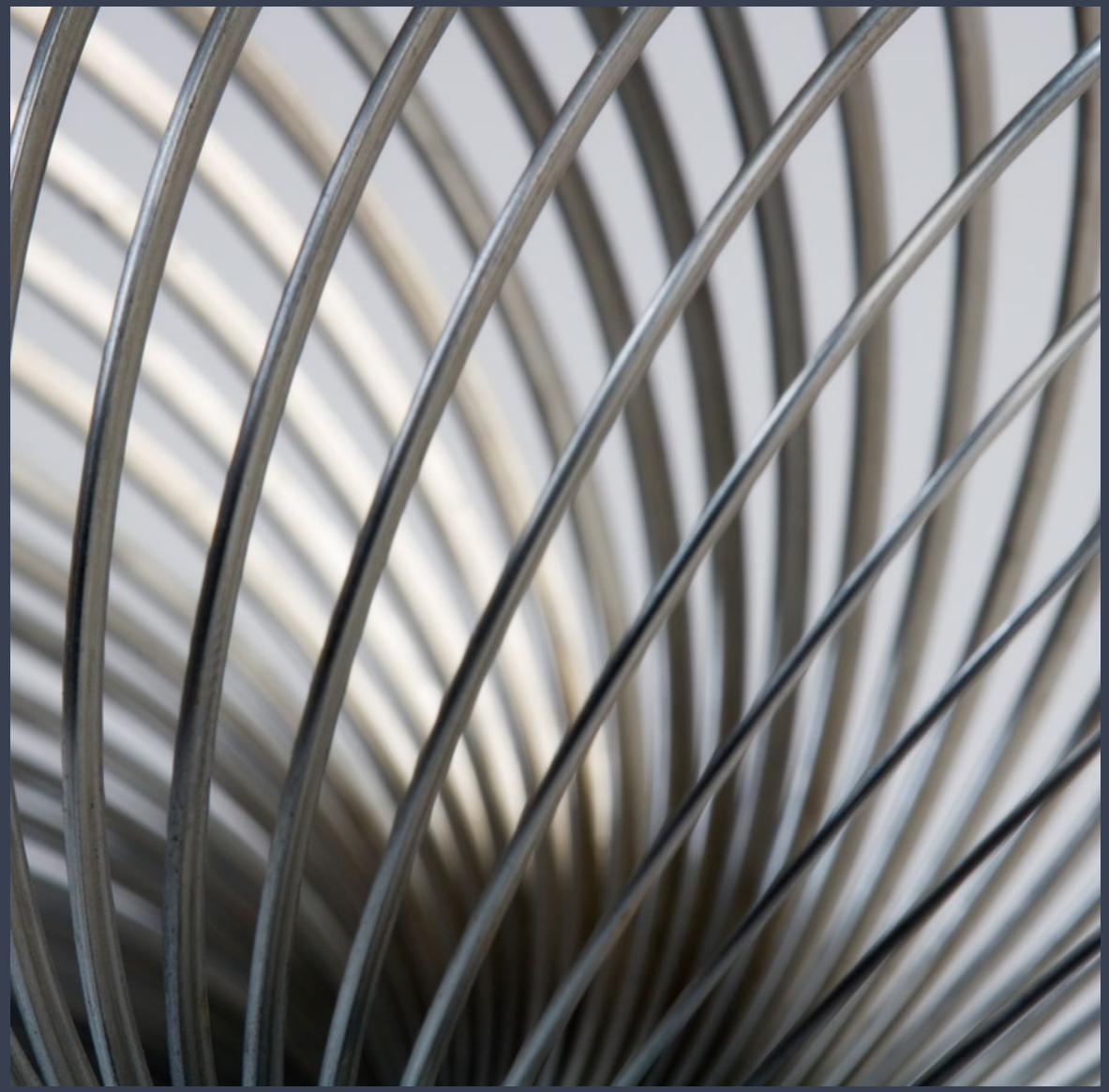
NUGM 2024

MANAGE 2000 AS A REST SERVICE PROVIDER



Peter Newby, Epicor

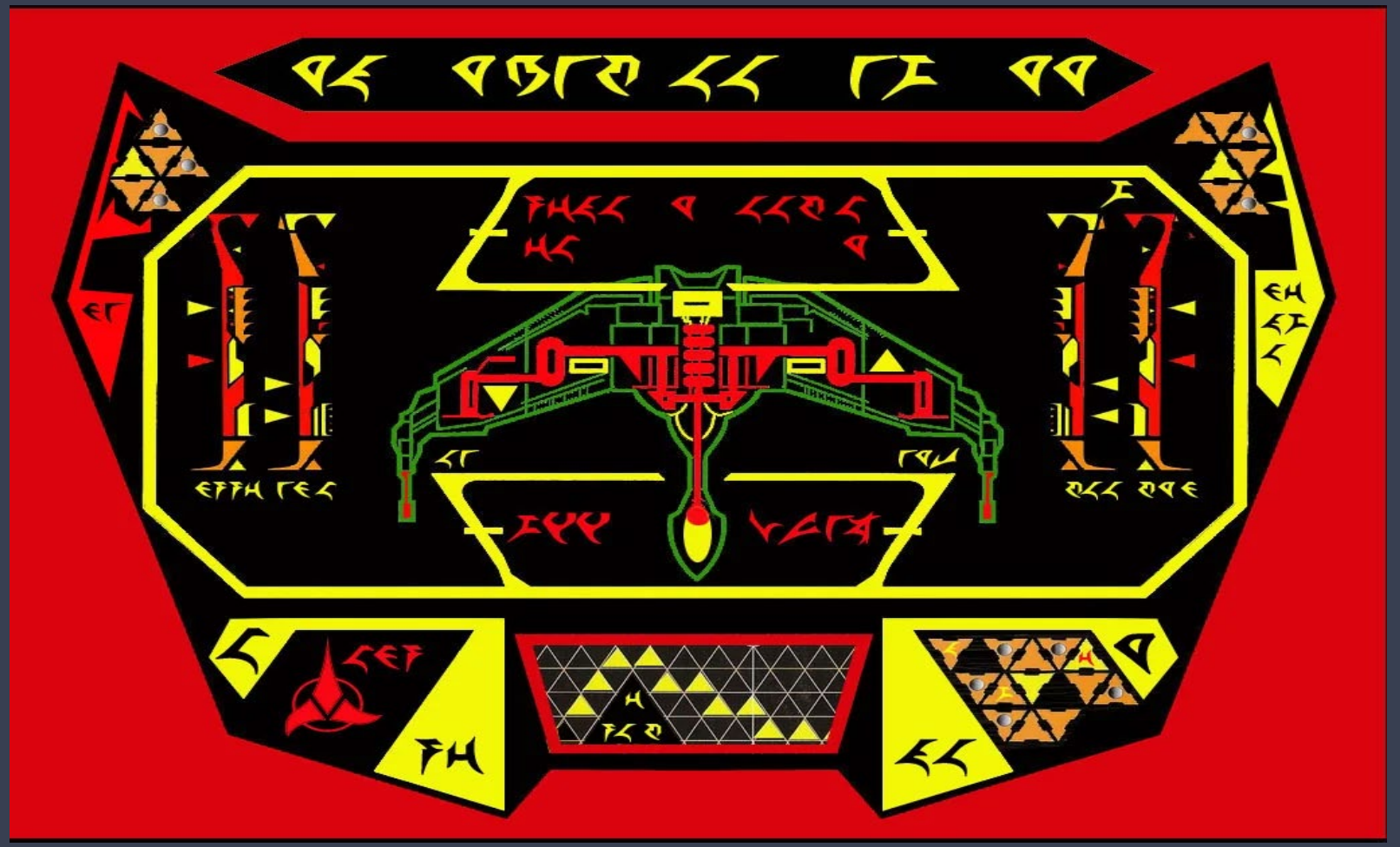
AGENDA

1. The End Game
2. REST Fundamental Concepts
3. Manage 2000 M2K.REST.SERVICES
4. An Introduction to Postman
    1. Selecting and Configuring the Environment
    2. Authenticating User Credentials
    3. Testing Services
5. Copying REST calls from Postman to a web project
    1. Accessing Manage 2000 without a web server
    2. Accessing Manage 2000 without a browser

THE END GAME

Accessing ERP Data from Out There

Way out there



POSSIBLE REST SERVICE INTEGRATIONS

- Power BI, Excel
- CAD (Computer Aided Design)
- MES (Manufacturing Execution System)
- NODE.js microservices hub
- Parent company / sister company systems

REST FUNDAMENTAL CONCEPTS

Manage 2000 REST Infrastructure

MANAGE 2000 REST INFRASTRUCTURE

- URL Endpoint – http://{Webserver}/{Manage 2000 web site} /MT/JSONServices/{service id}
- Submit a CID Authentication Ticket named M2k_Auth_Token in the HTTP Header
- Use HTTP GET or HTTP POST
- Supply GET parameters as Querystring variables and POST parameters as Form variables
- Return will contain JSON in the HTTP Body

ACCESSING ERP DATA FROM OUT THERE

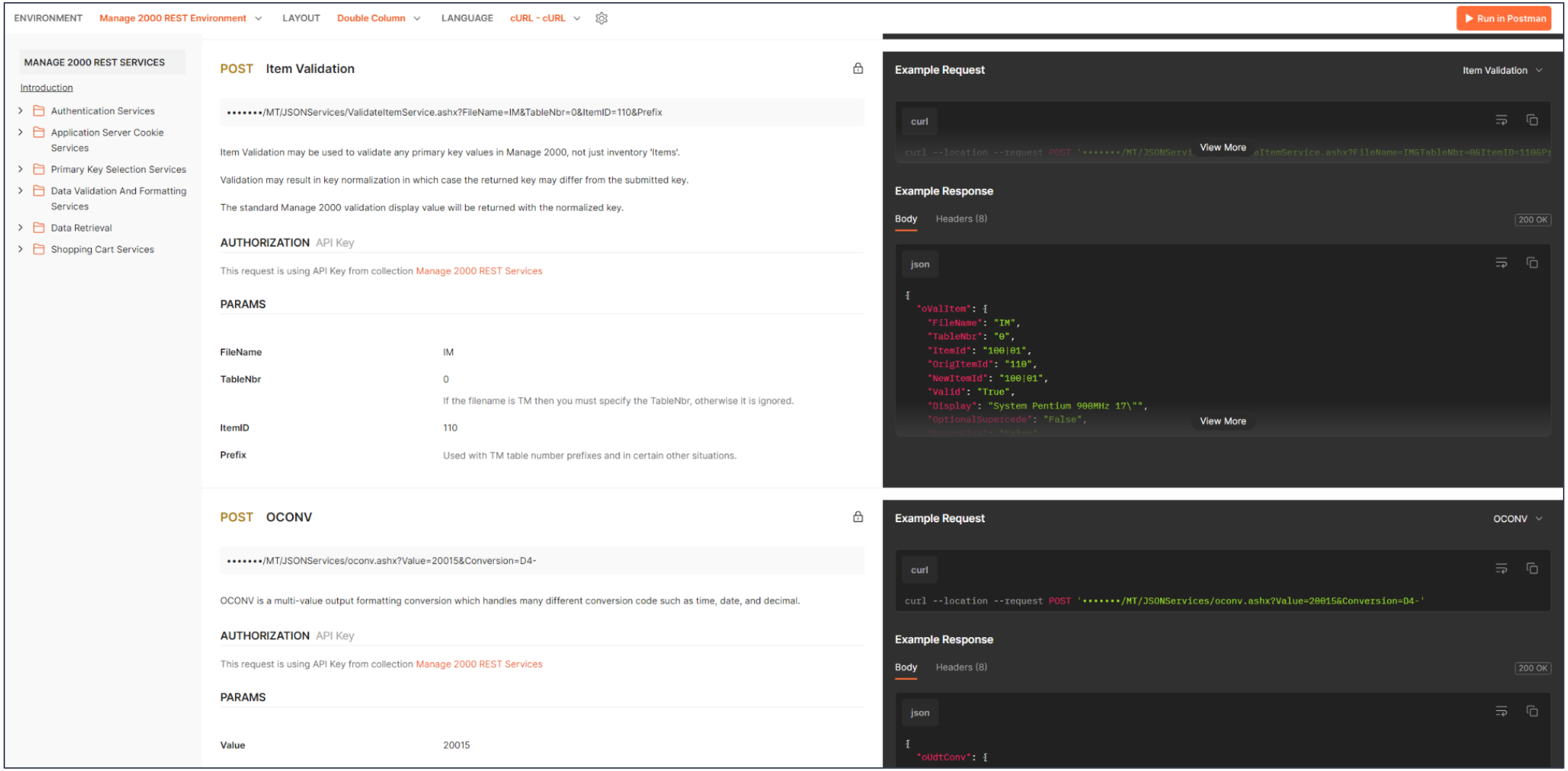
- From somewhere outside of Manage 2000
- You want to develop an application using information from inside Manage 2000
- You want a test bench for experimenting with access to information
- You want documentation explaining how to make REST calls to Manage 2000 and what the input and output strings will look like
- After testing the REST service, you want to copy and paste it into your project outside of Manage 2000

INTRODUCTION TO POSTMAN

WHAT IS POSTMAN?

- An open source REST development community collaboration platform
- A platform for designing and building APIs
- A documentation development platform
- A documentation presentation and publishing interface
- A REST source generator for Copy/Paste example code in multiple languages
  - From the documentation use the Language dropdown menu to select your client language
  - From the documentation method example request use the copy icon to copy code to the clipboard
- A REST service test bench

M2K.REST.SERVICES IN POSTMAN



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IMPORTING COLLECTIONS AND ENVIRONMENTS

- Sign up with Postman
- Create a blank workspace name Manage 2000
- Run M2K.REST.SERVICES
- Click on the orange “Run in Postman” button in the upper right.
- Select Postman for Web
- Select Manage 2000
- Click on orange “Import” button

MANAGE 2000 REST FROM POSTMAN

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SELECTING THE MANAGE 2000 ENVIRONMENT

1. On Environments tab, Set Manage 2000 REST Environment as active
2. Set serviceroot variable to your webserver's main or train account website
3. On Collections tab, go to Manage 2000 REST Services > Login CID
4. Set variable UserId to your Manage 2000 web login
5. Set variable Password to your Manage 2000 web password
6. Click Send
7. Copy CIDToken result
8. on Environment tab, paste into Current value of the M2k_Auth_Token variable
9. on the Collections tab, explore Manage 2000 REST Services methods

M2K.REST.SERVICES CATEGORIES

1. Authentication
2. Application Server Cookies
3. Primary Key Selection
4. Data Validation and Formatting
5. Data Retrieval
6. Shopping Cart

USING POSTMAN

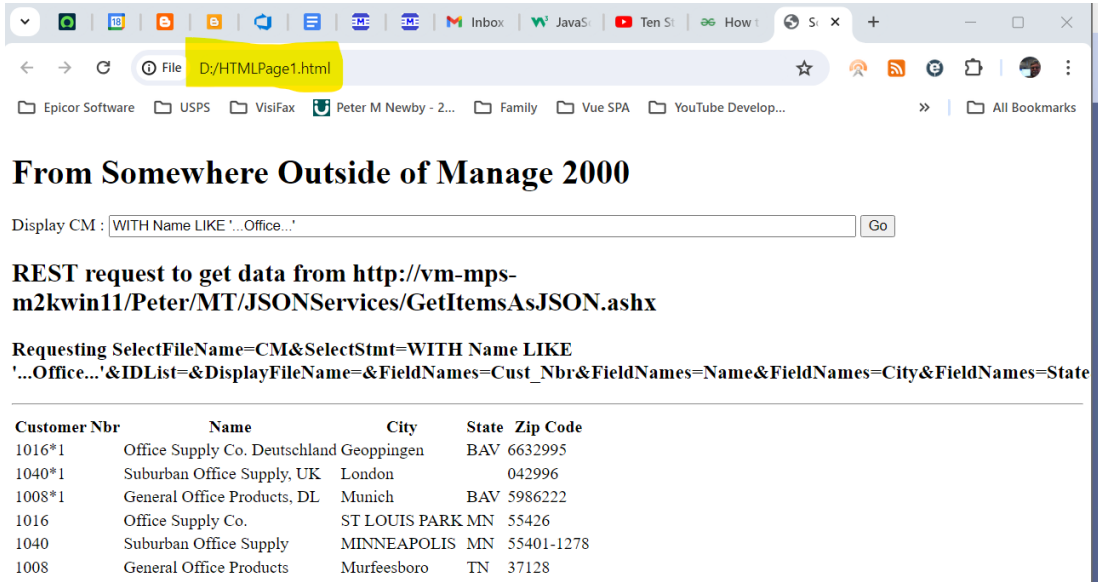
- Environments
  - Be sure to select the active environment
  - Make sure the « serviceroot » variable points to your webserver
- Collections
  - Expand Manage 2000 REST Services to types of services
  - Expand a particular type of service to see detail service endpoints
- Documentation
  - From a particular service endpoint, click on the ellipses and select « View documentation »
- Test Examples
  - Use the « Language » pull down to select the language the examples are presented in.

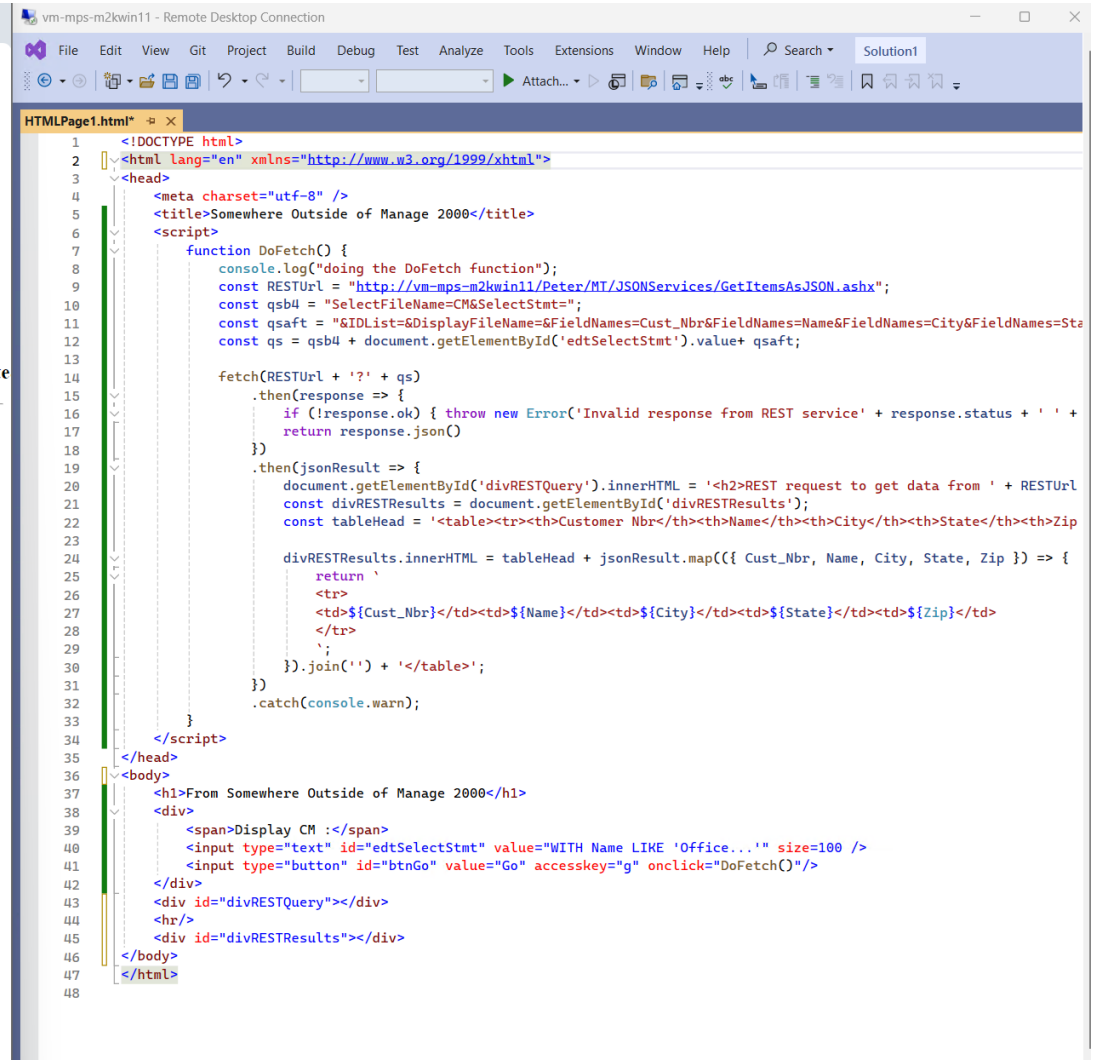
EXAMPLE TESTING

1. Selecting Keys to a server cookie
2. Retrieving validation displays from the ids in the cookie

COPYING FROM POSTMAN TO VISUAL STUDIO PROJECT

DROP CODE FROM POSTMAN INTO JAVASCRIPT





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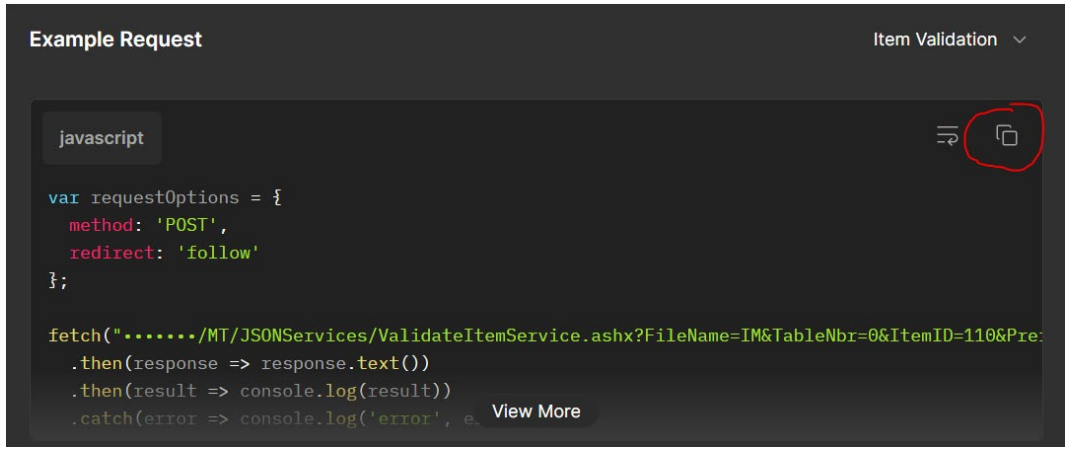
DROP CODE FROM POSTMAN INTO NODE.JS FILE




```
1  const serviceroot = "http://aus-dev-mnlab2022/CLASS_TRAIN";
2  const filename = process.argv[2];
3  const key = process.argv[3];
4
5  console.log('validate filename '+filename+' key '+key);
6
7  const requestOptions = {
8      method: "POST",
9      headers: {
10         "Content-Type": "application/x-www-form-urlencoded",
11         "M2k_Auth_Token":"lLR4VEWp76E%3d"
12     }
13 }
14
15   fetch(`${serviceroot}/MT/JSONServices/ValidateItemService.ashx?FileName=${filename}&TableNbr=0&ItemID=${key}`, requestOption
16     .then(response => response.json())
17     .then(result => console.log(JSON.stringify(result)))
18     .catch(error => console.log('error', error));
19
20
```

QUESTIONS AND ANSWERS

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THANK YOU