

Lab- Explore Rest APIs with API Simulator and Postman

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Required Resources

1 PC with operating system of your choice

Virtual Box or VMWare

DEVASC Virtual Machine

Explore API Documentation Using the API Simulator

List books using the GET /books API.

Parameters - There are several optional API parameters. These can be used to filter, sort, or paginate the output.

Response content type - Click application/json to see a list of the different types of data formats the information can be viewed.

Code - The code displays 200 by default, which indicates the API request from the sever was a success as displayed in the Description.

Use the Try it out feature in the API documentation.

Curl: The curl command you can use to access the same information for the /books API.

Request URL: This URL is used in the API request, which can be used to request the same information using curl, Postman, and Python.

Code: This is the HTTP response code. 200 indicates a successful call.

Response body: List of books in JSON format.

Response headers: Information about the API returned from the server.

Use Python to Add 100 Books to the API Simulator

Open Visual Studio (VS) Code and navigate to the school-library directory.

Faker: is a Python library that generates 'fake' data for you. This program uses the Python faker library to generate random book titles, authors, and ISBNs

```
print('My name is {}'.format(fake.name())) : generates a fake name
```

My name is Katherine Ross.

```
for i in range(10): ... print(fake.name())          loop to generate 10 fake names
```

```
python3 add100RandomBooks.py                      runs the 100 random book script and adds these to the library
```

how does the script work:

addAuthToken function is invoked and the results are stored in the variable

```
apiKey. apiKey = getAuthToken()
```

three variables hold the value of methods invoked from the **Faker()** module:

catch_phrase(), name(), and isbn13().

```
fakeTitle = fake.catch_phrase()                   generates a catch phrase
```

```
fakeAuthor = fake.name()                          generates a name
```

```
fakeISBN = fake.isbn13()                          generates a ISBN number
```

The **book** variable is built using the three required keys for the payload parameter and values from the three fake variables.

```
book = {"id":i, "title": fakeTitle, "author": fakeAuthor, "isbn": fakeISBN}
```

this is also the output for the script.