API Testing



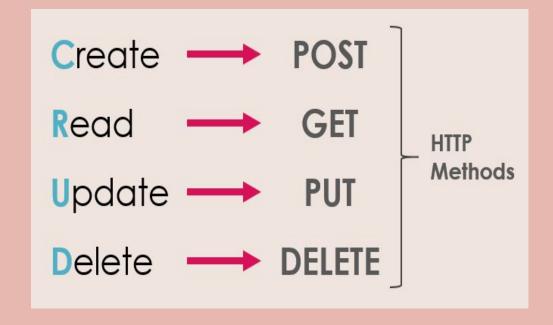
- 1. HTTP Methods?
- 2. What things do we test?
- 3. Practice
- 4. Review day 7
- 5. Project tasks & Interview questions



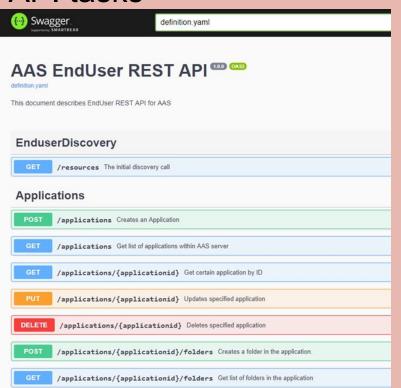
Review day 7



1. HTTP Methods?



API tasks

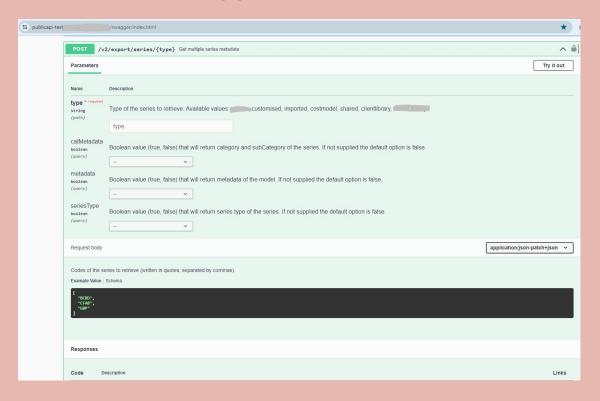


/applications/{applicationid}/tasks Creates a task in the application.

Task	Method	Path
Create a new task	POST	/tasks
Delete an existing task	DELETE	/tasks/{id}
Get a specific task	GET	/tasks/{id}
Search for tasks	GET	/tasks
Update an existing task	PUT	/tasks/{id}



Example API on swagger





2. What things do we test?

Request Params Headers Hex POST: insecure meothd /userinfo.php: path traverl/idor HTTP/1.1: out of date Host: testphp.vuinweb.com: open redrection, orginatal source... User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:72.0) Gecko/20100101 Firefox/72.0 command injection Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8 Accept-Language: en,vi-VN;q=0.8,vi;q=0.5,en-US;q=0.3 Content-Type: application/x-www-form-urlencoded: malwere, file extention Content-Length: 31 Origin: http://testphp.vulnpeb.com: SOP, CORS... Connection: close Referer: http://testphp.vulnweb.com/login.php:... Upgrade-Insecure-Requests: 1

```
Raw Headers Hex

HTTP/1.1 302 Found
Server: nginx/1.4.1
Date: Sat, 08 Feb 2020 02:11:26 GMT
Content-Type: text/html
Connection: close
X-Powered-By: PHP/5.3.10-1~lucid+2uwsgi2
Location: login.php
Content-Length: 14

you must login
```

```
Request
 Raw Params Headers Hex
POST /comment.php HTTP/1.1
Host: testphp.vulnweb.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:74.0)
Gecko/20100101 Firefox/74.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0
Accept-Language: en.vi-VN;q=0.8,vi;q=0.5,en-US;q=0.3
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded
Content-Length: 100
Origin: http://testphp.vulnweb.com
Connection: close
Referer: http://testphp.vulnweb.com/comment.php?aid=2
Cookie: login=test#2Ftest
Upgrade-Insecure-Requests: 1
 name=$3Cyour+name+here$3E&comment=nhan+comment&Submit=Submit&phpaction=
 ho+$24 POST$5Bcomment$5D$3B
```

uname=fdgdgdgdg: xxs, sqlinject&pass=gfdgfdgfdg: databalse, source...

```
Raw Headers Hex HTML Render
Server: nginx/1.4.1
Date: Wed, 11 Feb 1970 01:49:19 GMT
Content-Type: text/html
Connection: close
X-Powered-By: PHP/5.3.10-1~lucid+2uwsgi2
Content-Length: 565
<html>
<head>
<title>
<your name here> commented</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<style type="text/css">
body 1
     margin-left: Opx;
     margin-top: Opx;
     margin-right: 0px;
     margin-bottom: Opx;
</style>
link href="style.css" rel="stylesheet" type="text/css">
</head>
</html>
```



3. Practice

Rental:

- 1. Create API: get all tools, get a single tool, create an order, get all orders
- 2. Create test case: get all tools, get a single tool

5. Interview question

- 1. How many kind of http methods? The meaning of each one?
- 2. What elements do you test with an API?
- 3. Why do people need to test api when people done UI testing before?

Project tasks

Rental Project: Please see .doc requirement on share Driver: /Document

(The API is available at https://simple-tool-rental-api.glitch.mg

Create test case:

- Get all tools
- Get a single tool
- Get all orders

