*Word Count API Solution.*

The sample module uses spring security for authentication and a restful API to perform various task. The following are the system requirement.

1. Jdk 1.8
2. Tomcat 1.6 or later
3. PostMan plugin for testing or Curl command utility
4. Eclipse IDE (or other, this project configured as eclipse project)
5. Maven Build using spring 4
6. Jackson library for various format of data.
7. Jersey

API details:

Rest services is implemented using spring security. Firstly, we generate an authentication token with username “vinod” and password “sharma”. The token is valid for 120 seconds. Now we use this token for calling various services. Here is the details of service calls and urls used :-

1. Get the authentication token
2. **POST** Url is

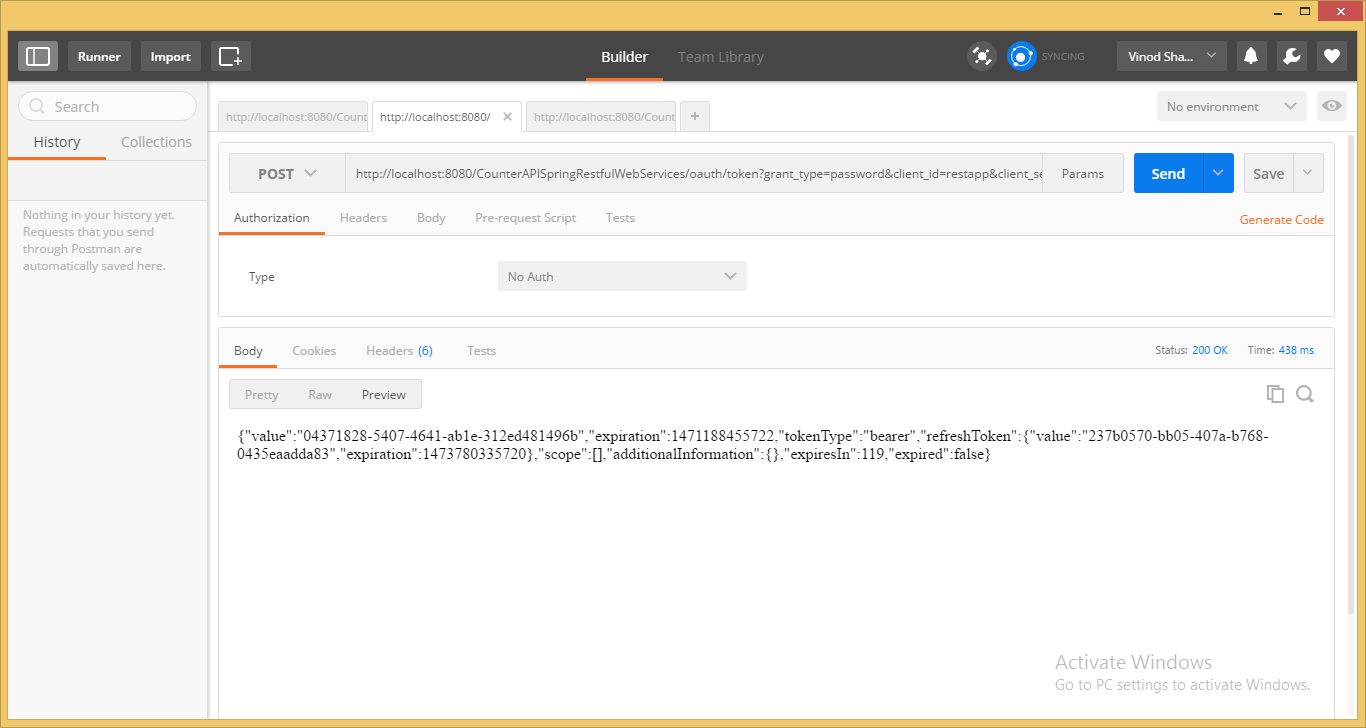
<http://localhost:8080/CounterAPISpringRestfulWebServices/oauth/token?grant_type=password&client_id=restapp&client_secret=restapp&username=vinod&password=kumar>

1. The output is

{"value":"04371828-5407-4641-ab1e-312ed481496b","expiration":1471188455722,"tokenType":"bearer","refreshToken":{"value":"237b0570-bb05-407a-b768-0435eaadda83","expiration":1473780335720},"scope":[],"additionalInformation":{},"expiresIn":119,"expired":false}

In the above jeson string, the value of token is **04371828-5407-4641-ab1e-312ed481496b** which we will use in other service calls**.**

1. **Call in Action is**



**2.) Passing a list of words and getting their occurrence in the given paragraph.**

1. The **POST** url is as

<http://localhost:8080/CounterAPISpringRestfulWebServices/search/wordcount/?access_token=04371828-5407-4641-ab1e-312ed481496b>

with input json body as

{

"searchText":["Duis", "Sed", "Donec", "Augue", "Pellentesque", "123"]

}

1. The output in json format is as

{

"counts": [

{

"word": "123",

"count": 0

},

{

"word": "Sed",

"count": 16

},

{

"word": "Donec",

"count": 8

},

{

"word": "Augue",

"count": 7

},

{

"word": "Pellentesque",

"count": 6

},

{

"word": "Duis",

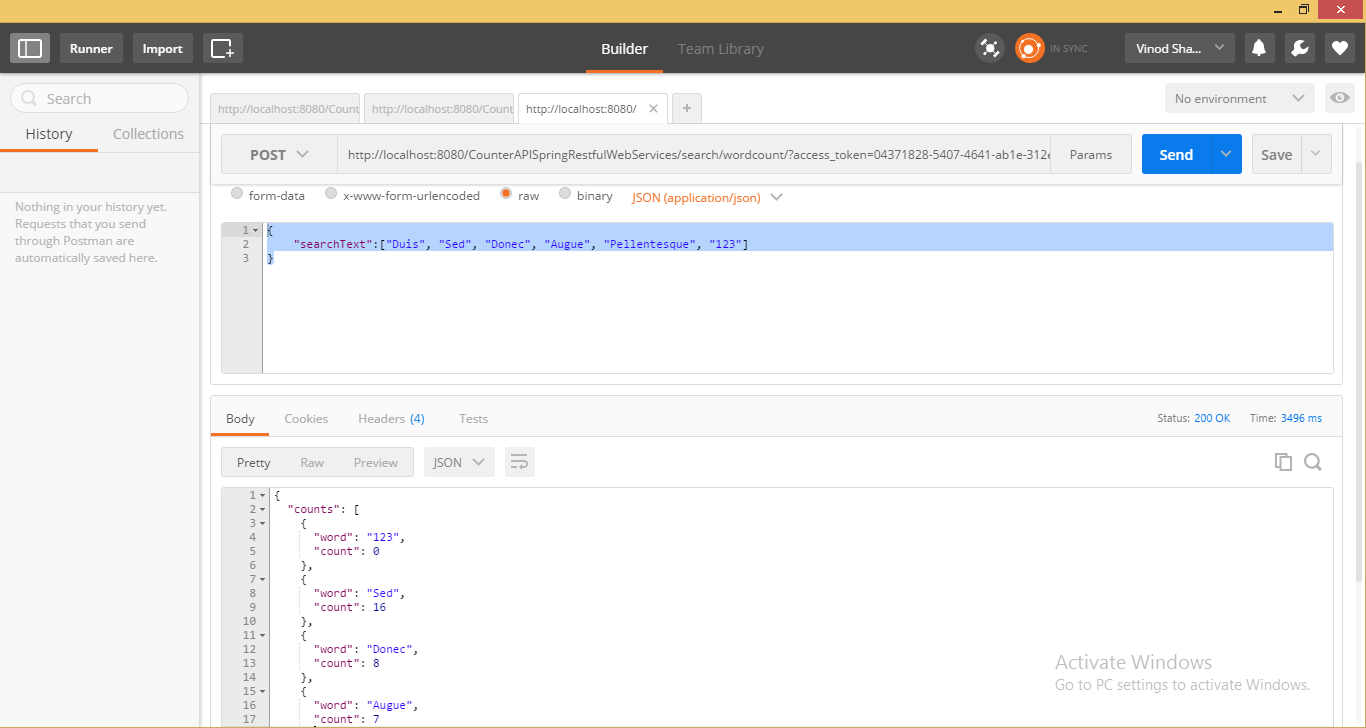
"count": 11

}

]

}

1. The request in action is as



3.) The get top occurring words in the paragraph. Here we will pass a parameter which will determine how many words we have to find

a.) The **Post url is**

<http://localhost:8080/CounterAPISpringRestfulWebServices/search/top/20/?access_token=04371828-5407-4641-ab1e-312ed481496b>

b.) The output in CSV format is as :-

word,count

vel,17

eget,17

sed,16

in,15

et,14

ut,13

eu,13

id,12

ac,12

metus,12

sit,12

amet,12

nulla,12

at,11

ipsum,11

duis,11

nec,11

vitae,11

dolor,10

aliquam,10

1. The request call was as

