Team: Spartan Developers

CMPE 172

Prof. Bond

HW2: Karaf / Twitter

November 4th, 2018

GitHub Repo for this homework:

https://github.com/RaghavGupta23/KarafTwitter.git

Team Member	Student ID last 4 digits
Raghav Gupta	3653
Wisam Matlob	5354
Tahsin Hossain	2996
Aaron John	8043
Nikita Voloshenko	0250

Abstract:

Our group Implemented 8 APIs by using Apache's HttpClient libraries for http requests. We used Apache-karaf-4.2.1 as the deployment environment. Besides these, Eclipse Java EE IDE was used to build the project.

How to get Twitter keys:

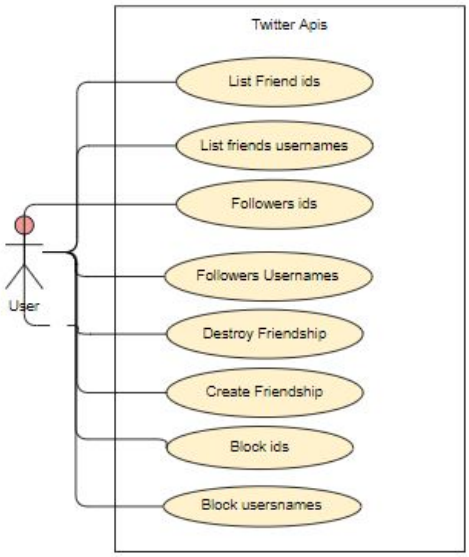
First, we applied for a twitter developer account since none of us had a developer account on twitter and it is required to use a developer account to get the twitter keys. After Twitter approved our twitter developer account, on the API keys tab we found Consumer key and Consumer secret keys. Then, we added the keys to the auth.java file.

Design Patterns

We followed the MVC design pattern of the Karaf/ Twitter project:

- M stands for Model. Auth.java, TwitterGet.java, and TwitterPost.java are the model components of the project. These files take care of the Http response and requesting data using Twitter Api's by executing GET and POST calls.
- V stands for View. index.jsp is the view component in the project. This file is responsible for the UI View of the project and communicates with the controller component.
- C stands for the controller. twitterServletApi.java is the controller component of the project which is a bridge between Model and View. It also takes cares of the flow of data between Model and View.

Use Case Diagram:



Tools Requirements:

a) Eclipse Java EE IDE

URL:

http://www.eclipse.org/downloads/packages/release/kepler/sr2/eclipse-ide-java-ee-developers

b) Apache-karaf 4.2.1

URL:

http://www.apache.org/dyn/closer.lua/karaf/4.2.1/apache-karaf-4.2.1.zip

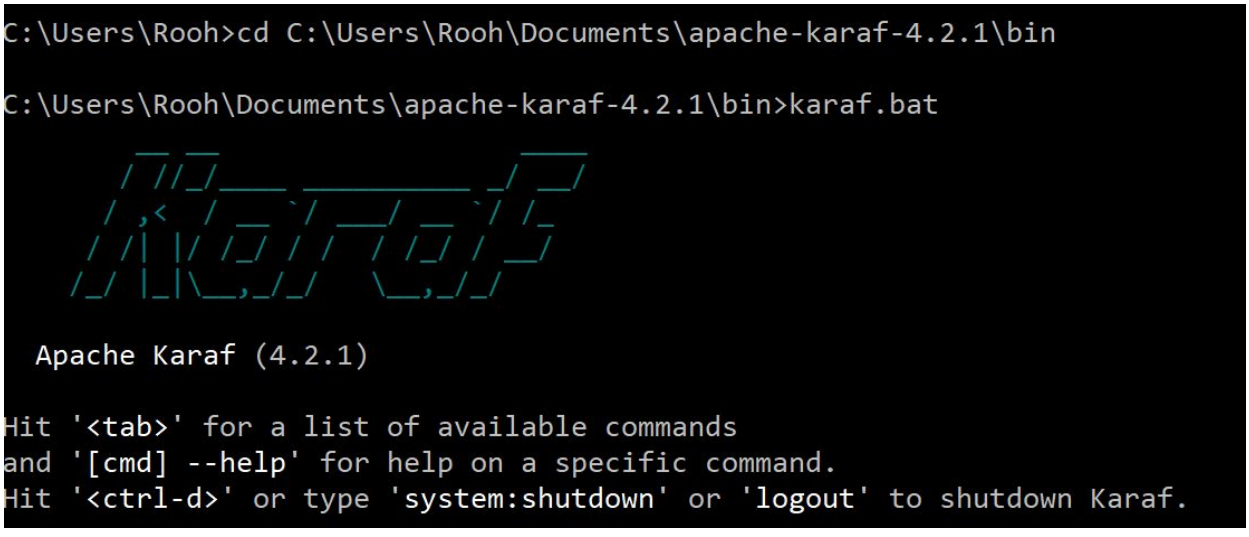
Steps to Run the Project

- Install Project from GitHub:

- Go to the GitHub repository given above.
- Download the project zip file on your computer directory and unzip it.
- Open Eclipse Java EE IDE.
- Import already existing Maven projects. To Do so you have to browse to the directory where you downloaded the GitHub project.
- After importing the Project to the Eclipse IDE; You will have to right click on the project file name and choose “Maven clean” to click from the dialog box to get rid of any build errors.

Install Apache Karaf 4.2.1

- Use the link given above to download the zip on your computer directory; then unzip the karaf download file
- Now, open Terminal/ cmd and go to the directory where the bin folder of the Apache-karaf-4.2.1 exist. Then run the command karaf.bat



- Now we have to install war, http and webconsole features; therefore run the following command respectively:

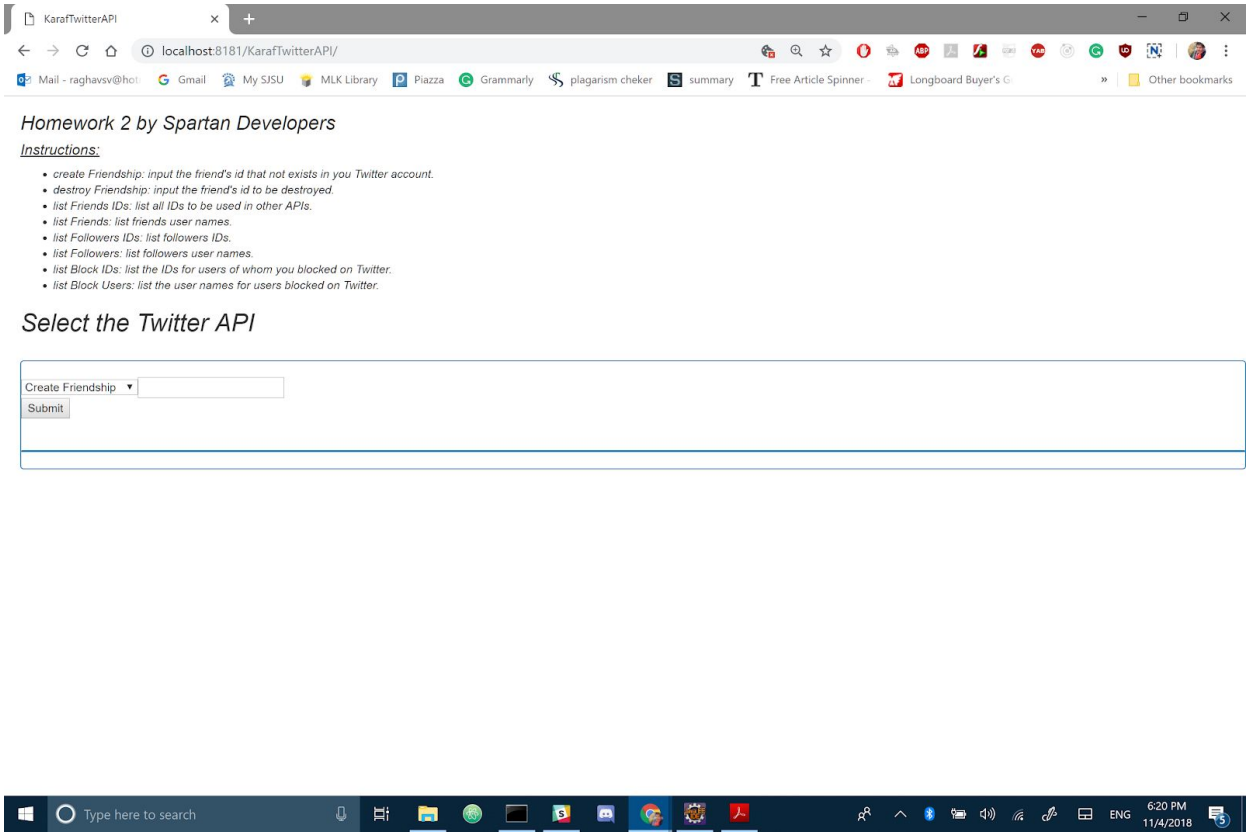
- feature:install war
- feature:install http
- feature:install webconsole

```
karaf@root()> feature:install war
karaf@root()> feature:install http
karaf@root()> feature:install webconsole
```

- Now we have to copy KarafTwitterAPI-0.0.1-SNAPSHOT.war file which is in the KarafTwitterApi project folder (KarafTwitterApi → target→ KarafTwitterAPI-0.0.1-SNAPSHOT.war)
- Paste this file in this directory: apache-karaf-4.2.1 → deploy
- Now go back to the terminal/ cmd and pass the command “LIST” in the karaf

```
karaf@root()> LIST
START LEVEL 100 , List Threshold: 50
 ID | State  | Lvl | Version        | Name
----+--------+-----+----------------+-----------------------------------------------------------------------------
 23 | Active |  80 | 4.2.1          | Apache Karaf :: OSGi Services :: Event
 58 | Active |  80 | 4.6.0          | Apache XBean OSGI Bundle Utilities
 59 | Active |  80 | 4.6.0          | Apache XBean :: Classpath Resource Finder
 87 | Active |  80 | 6.2.0          | org.objectweb.asm
 88 | Active |  80 | 6.2.0          | org.objectweb.asm.commons
 89 | Active |  80 | 6.2.0          | org.objectweb.asm.tree
111 | Active |  80 | 0.0.1.SNAPSHOT | KarafTwitterAPI
```

- Now open your favorite web browser and run the local host port 8181 with the extension on the name of the war file that was copy pasted in the (apache-karaf-4.2.1 → deploy) directory
- Now the Project will run:



Implementing the APIs:

After signing up for twitter developer, we retrieved all the Twitter account credentials to include in out project which include secret key and token.

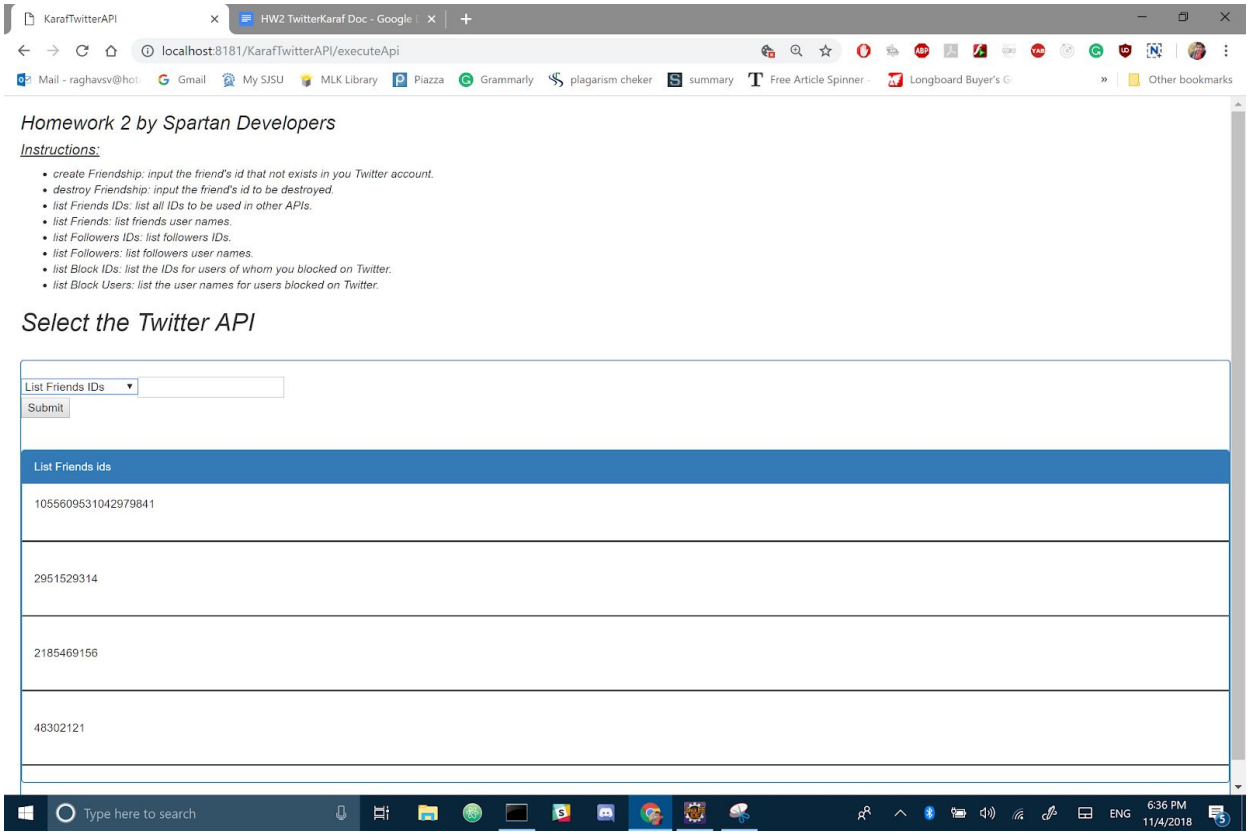
After wared, we got the APIs documentation from the twitter developer API reference:

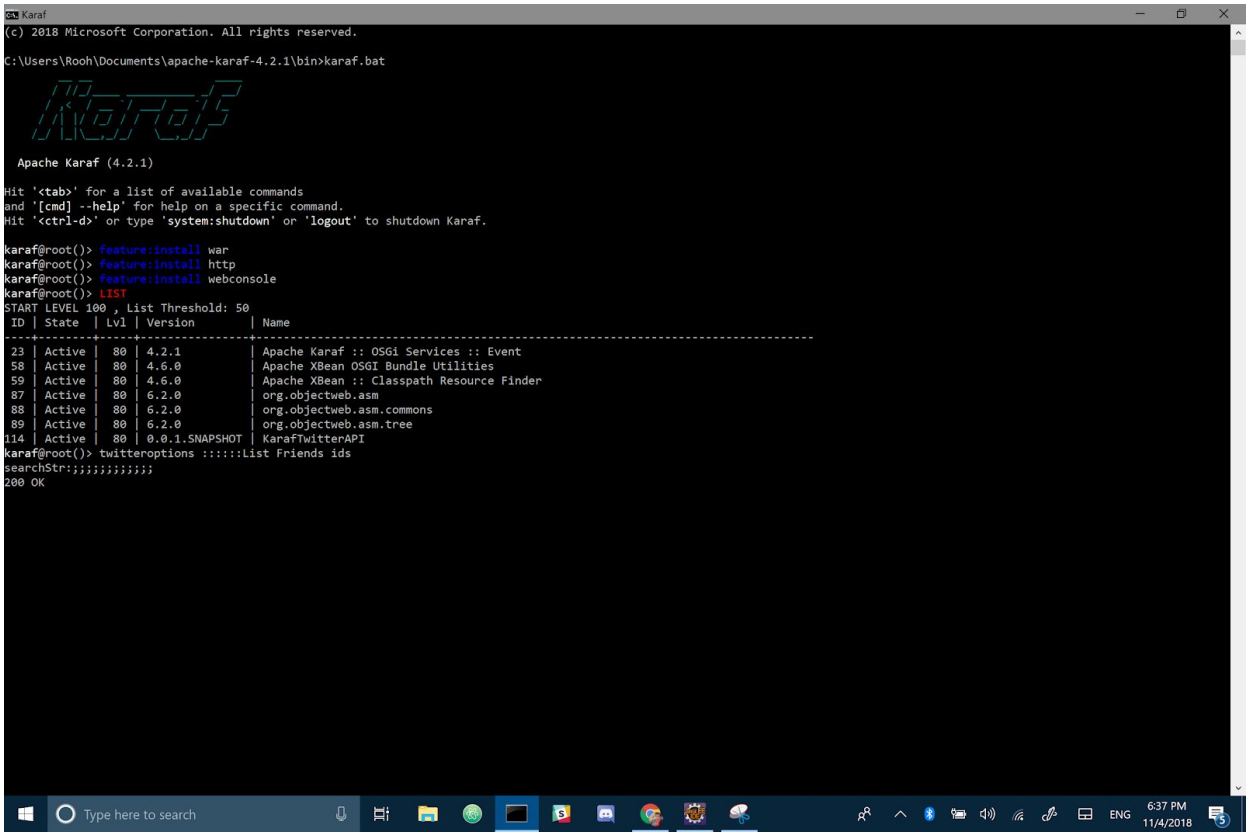
https://developer.twitter.com/en/docs/api-reference-index.html

Then we included the functionality as documented in out project APIs.

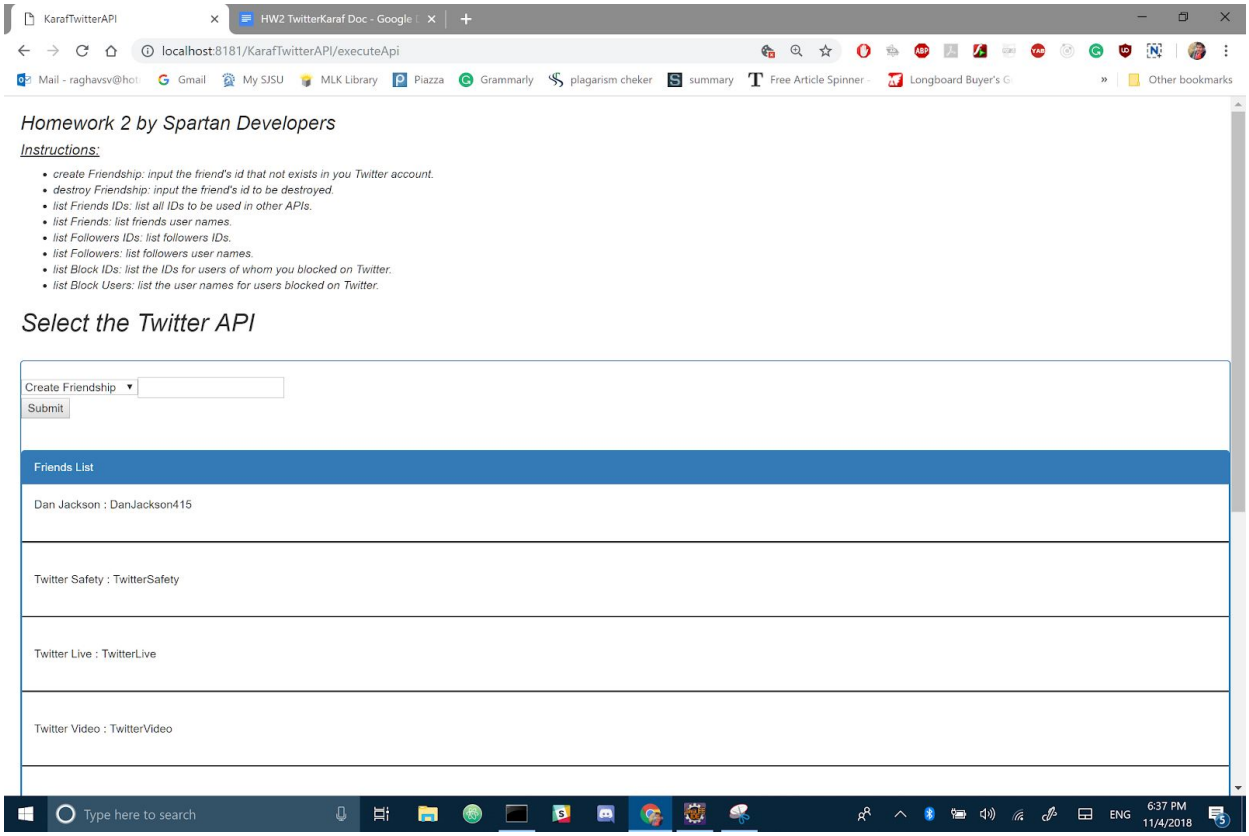
Use Cases; Test Cases with Screen shots:

Running list friends IDs:





List friends user names: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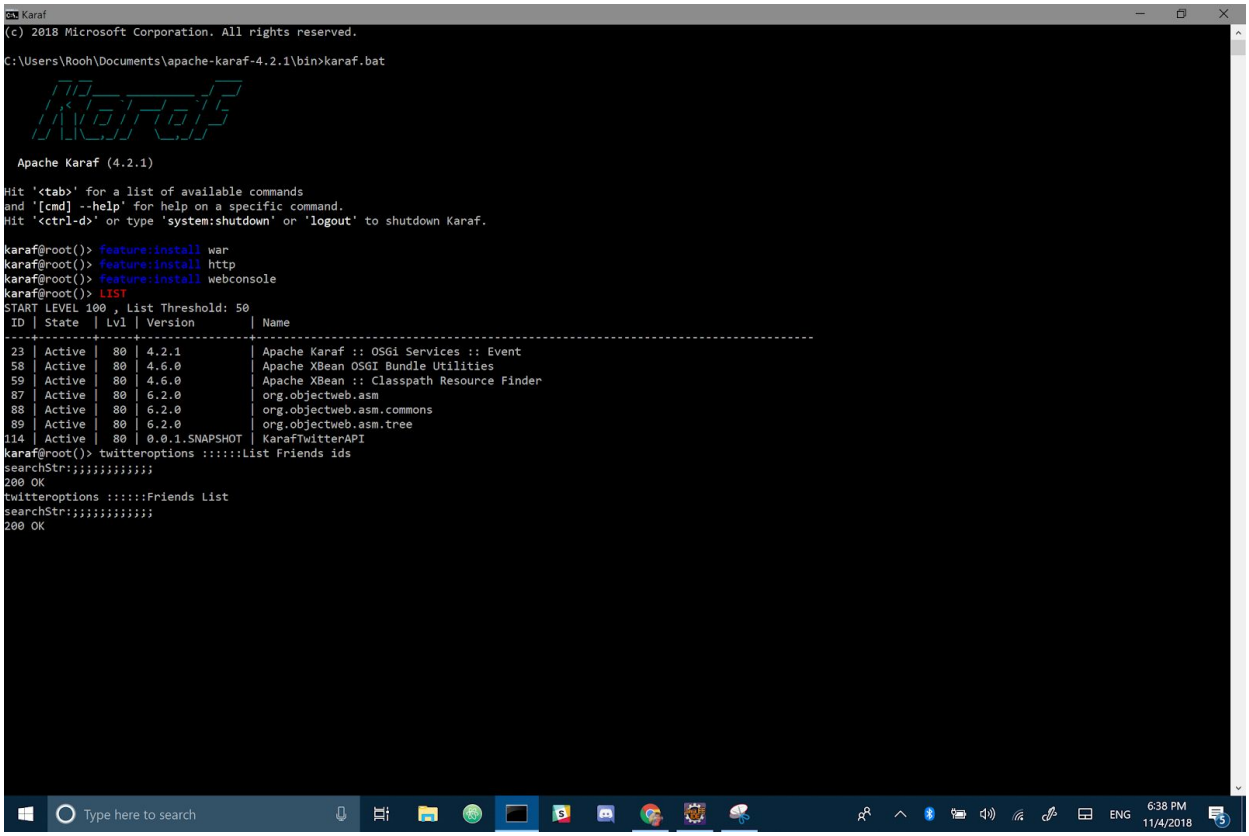
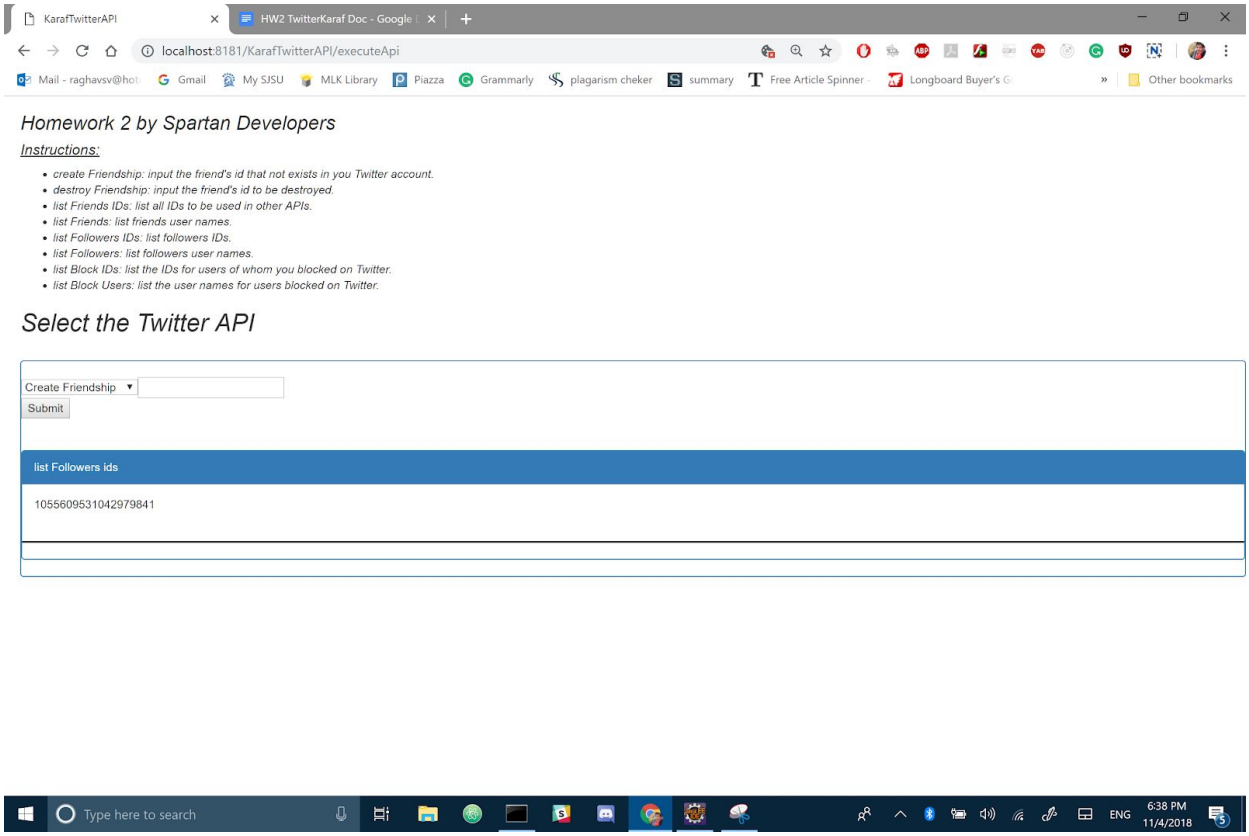
Other bookmarks
Homework 2 by Spartan Developers
Instructions:
create Friendship: input the friend's id that not exists in you Twitter account.
destroy Friendship: input the friend's id to be destroyed.
list Friends IDs: list all IDs to be used in other APIs.
list Friends: list friends user names.
list Followers IDs: list followers IDs.
list Followers: list followers user names.
list Block IDs: list the IDs for users of whom you blocked on Twitter.
list Block Users: list the user names for users blocked on Twitter.
Select the Twitter API
Create Friendship
Submit
Friends List
Dan Jackson : DanJackson415
Twitter Safety : TwitterSafety
Twitter Live : TwitterLive
Twitter Video : TwitterVideo
Type here to search
ENG
6:37 PM
11/4/2018



Running followers IDs: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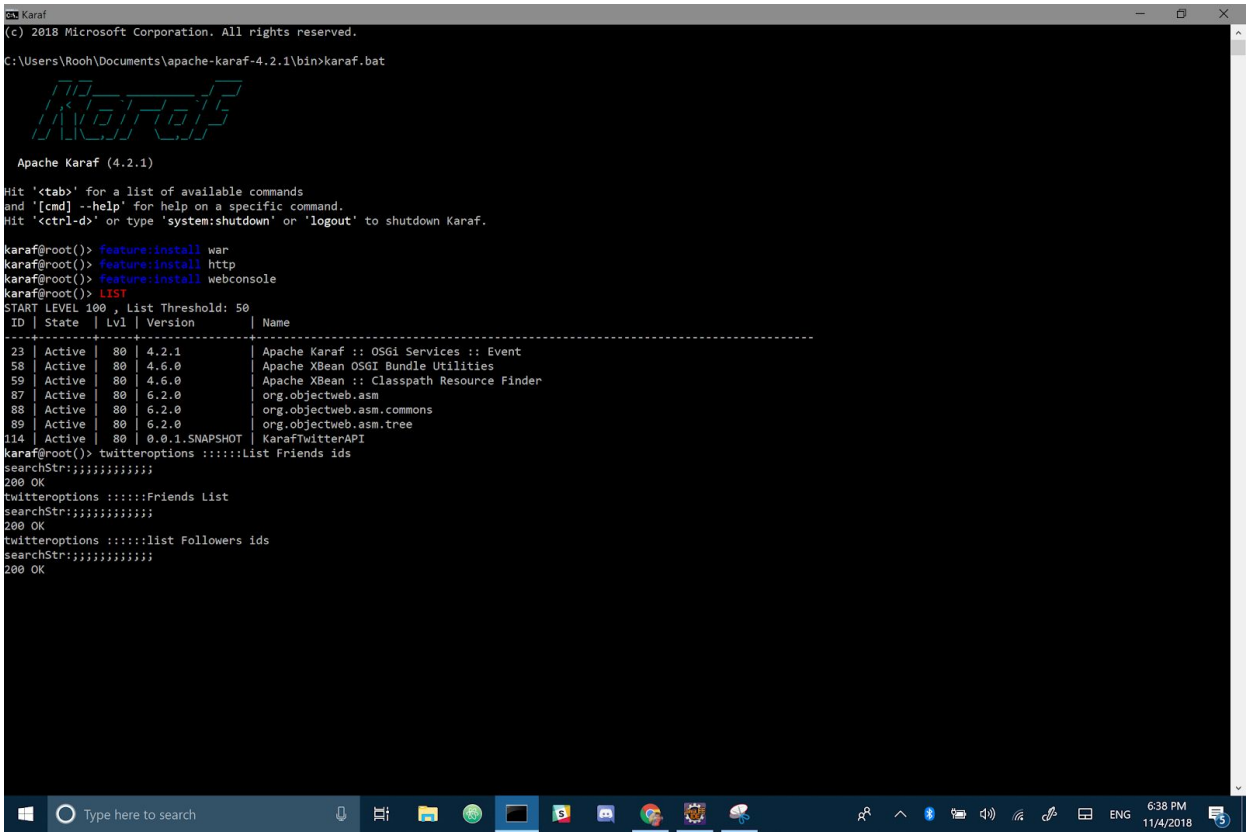
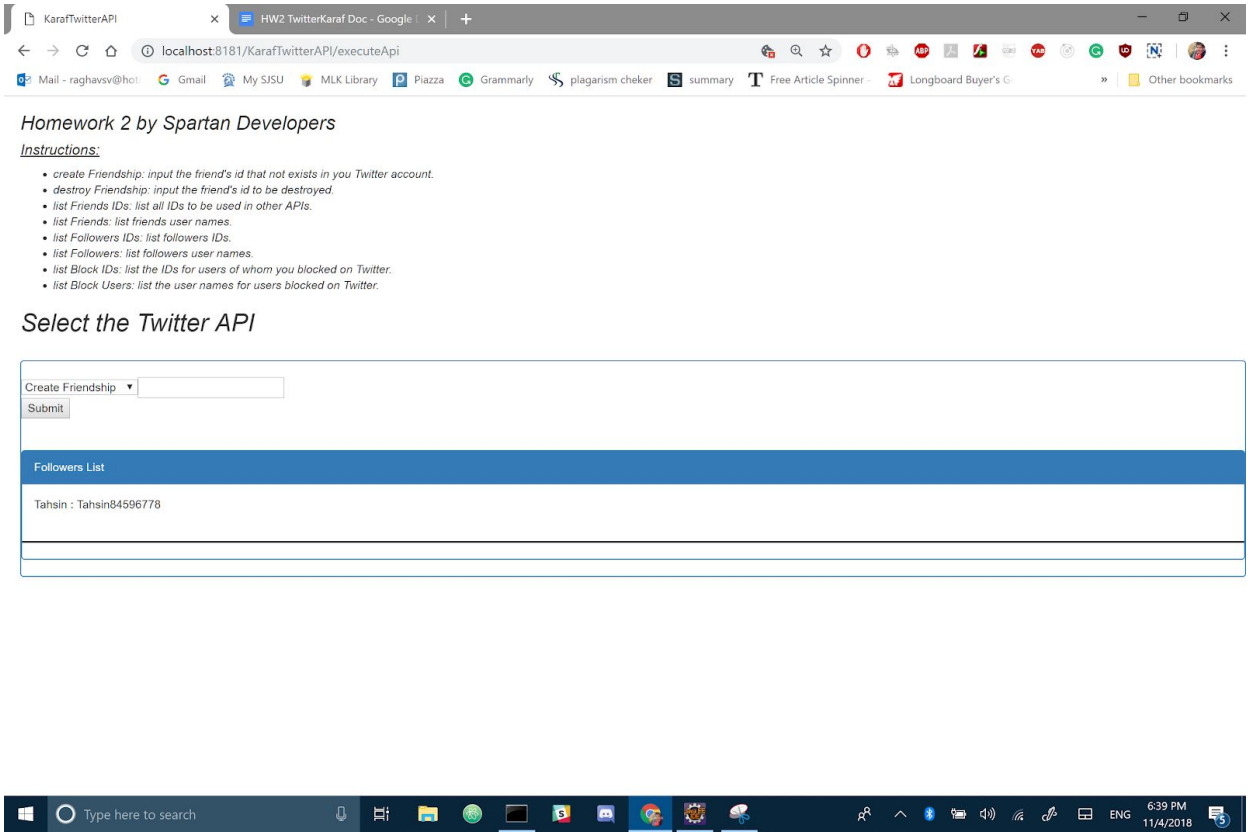
Select the Twitter API
Create Friendship
Submit
list Followers ids
1055609531042979841
Type here to search
ENG
6:38 PM
11/4/2018



Running followers usernames: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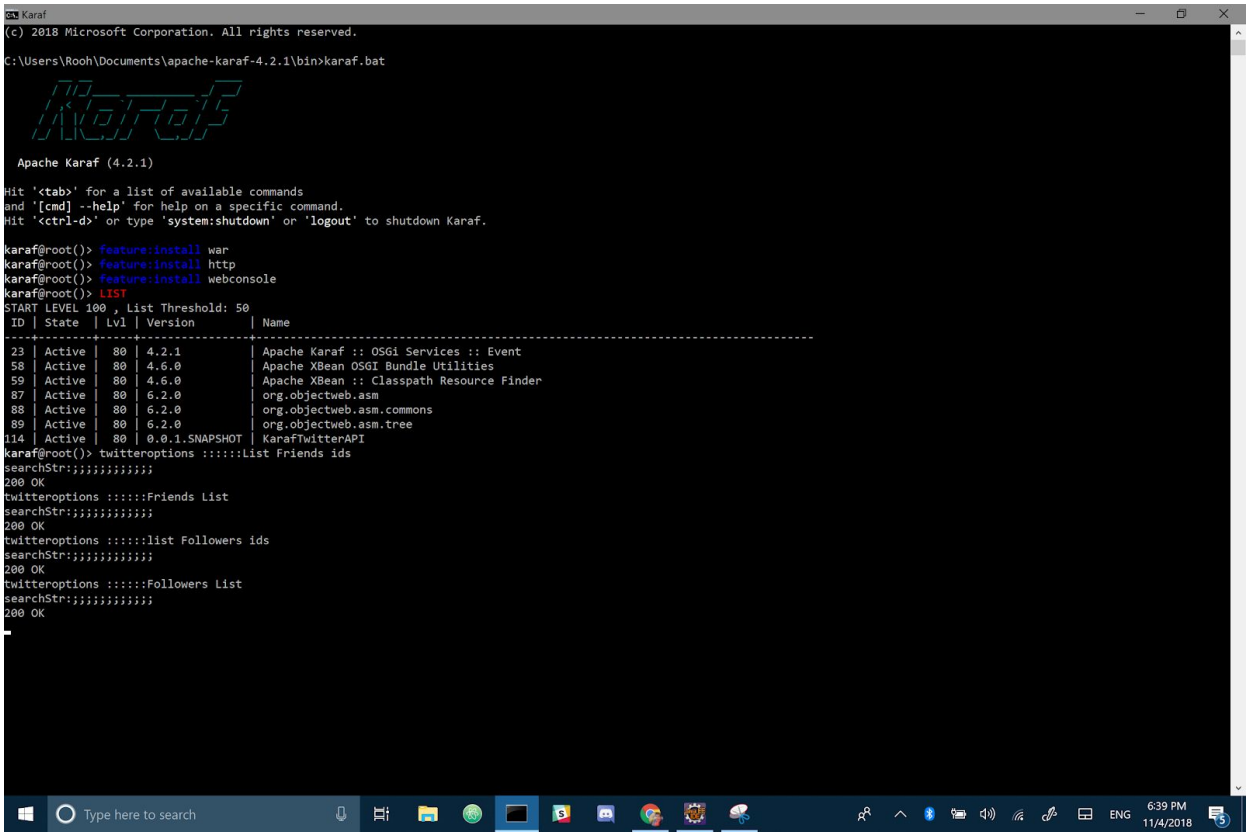
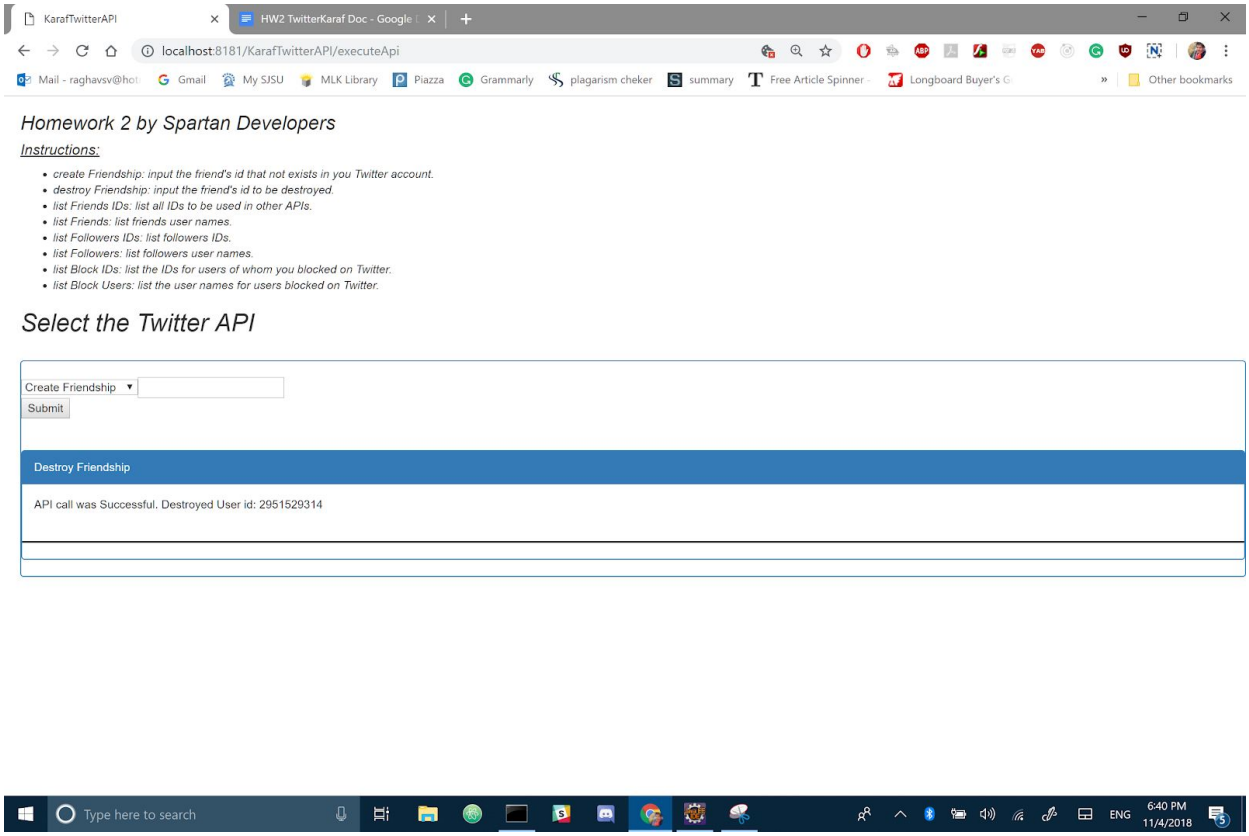
Select the Twitter API
Create Friendship
Submit
Followers List
Tahsin : Tahsin84596778
Type here to search
ENG
6:39 PM
11/4/2018



Running destroy friendship for the id (2951529314):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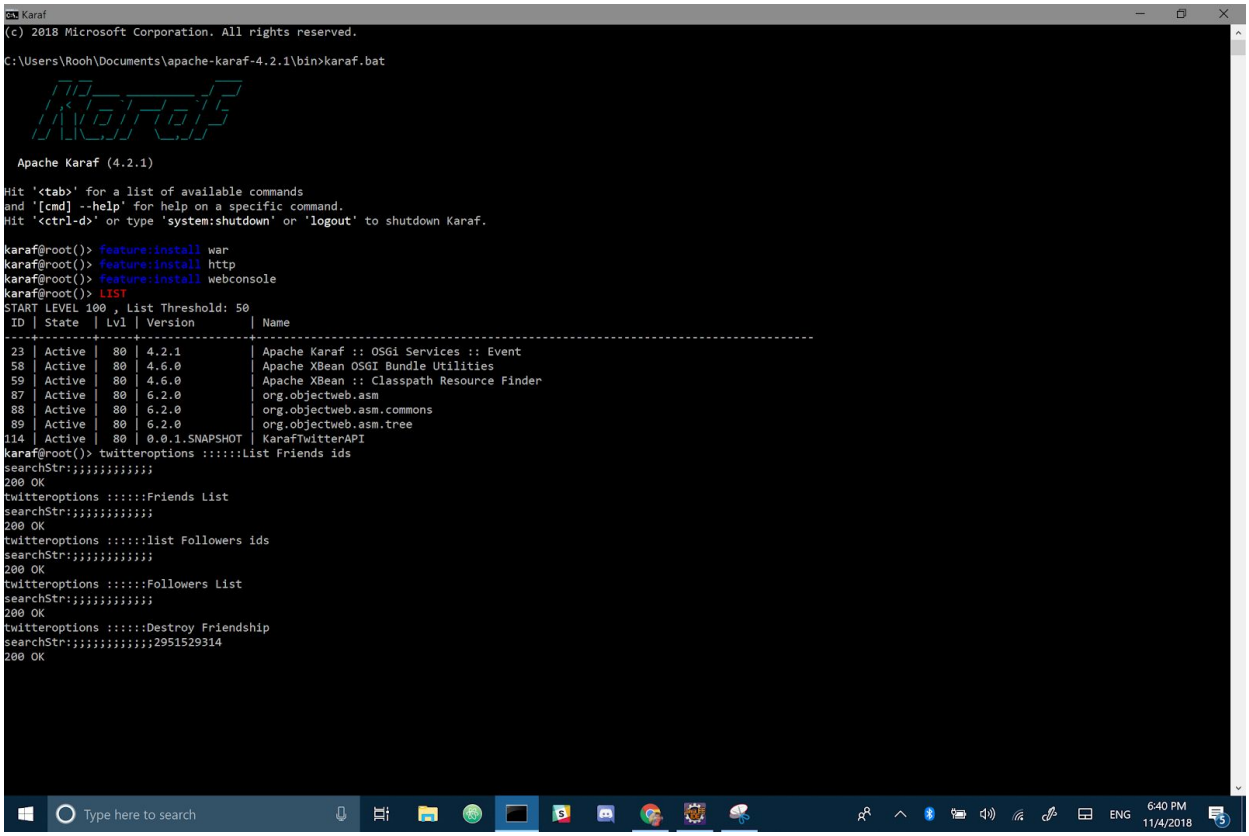
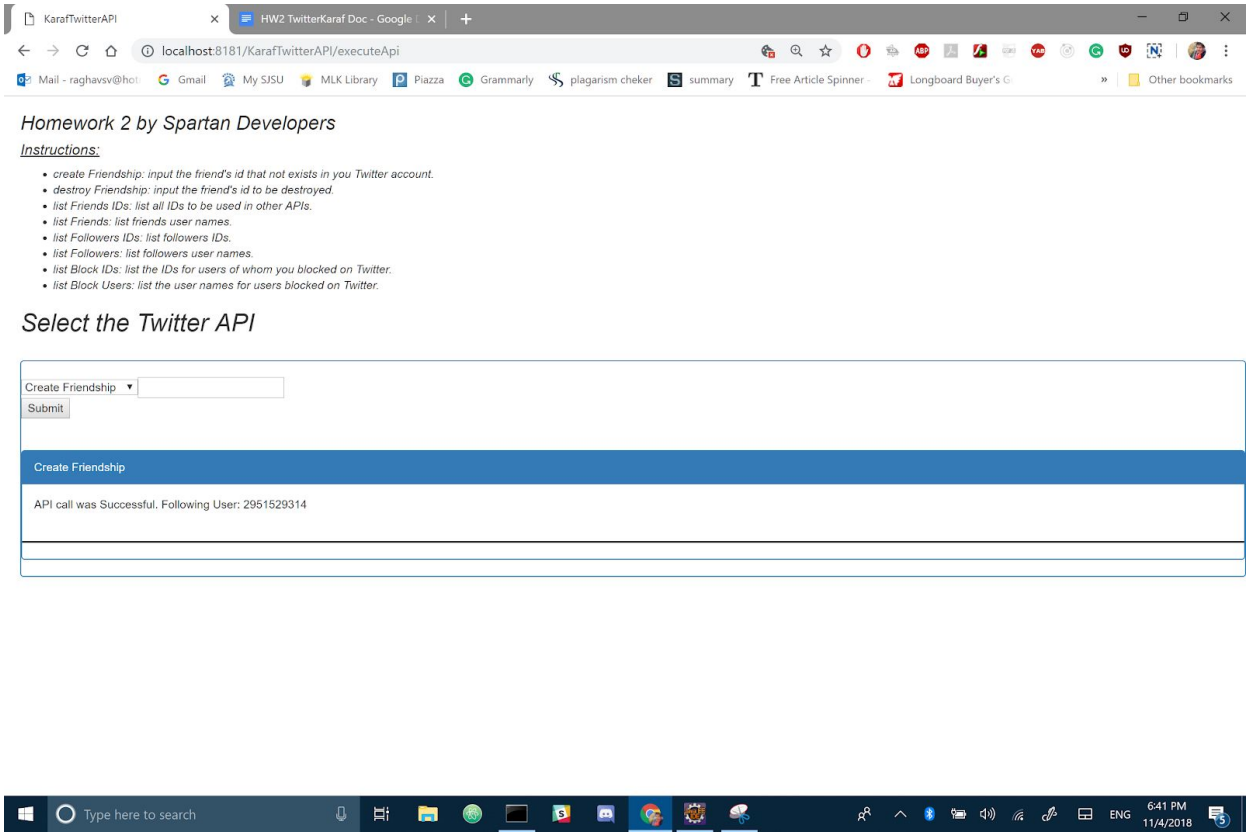
Select the Twitter API
Create Friendship
Submit
Destroy Friendship
API call was Successful. Destroyed User id: 2951529314
Type here to search
ENG
6:40 PM
11/4/2018



Running create a friendship for the id (2951529314):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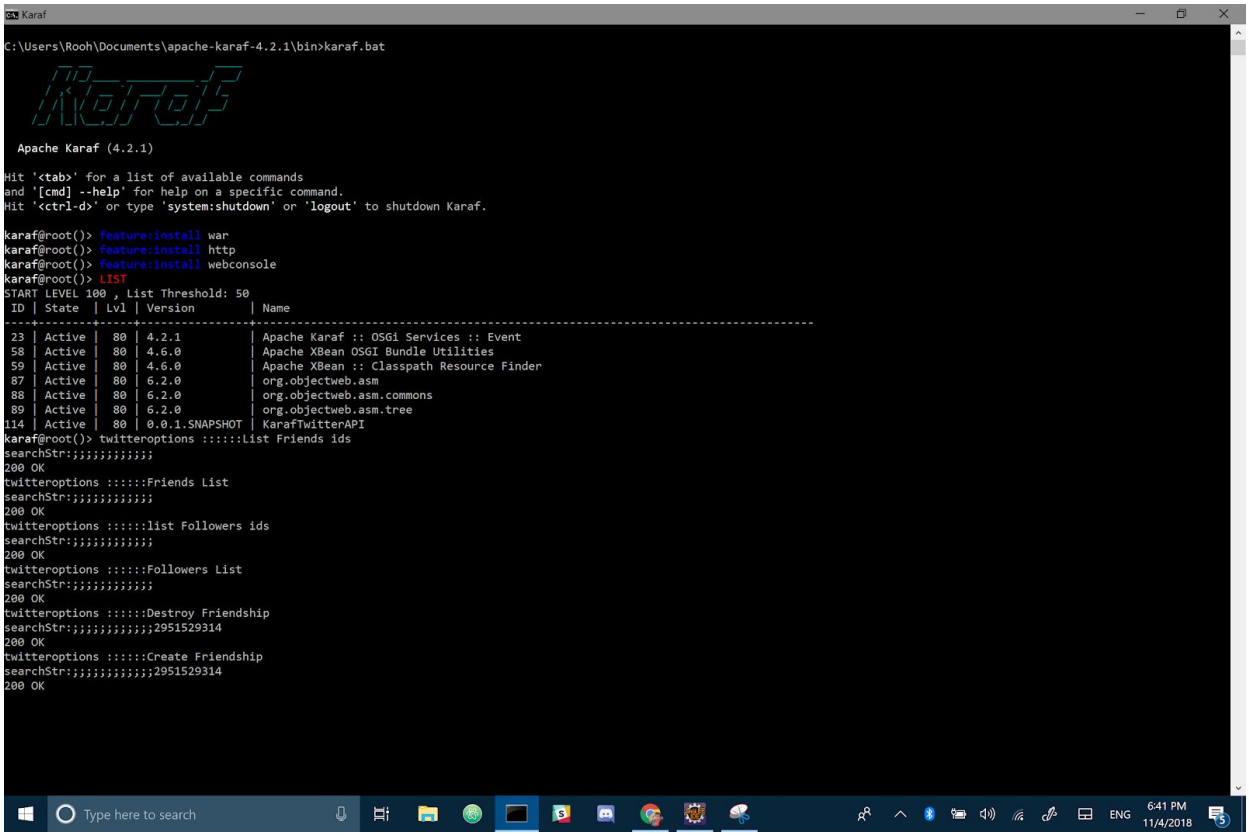
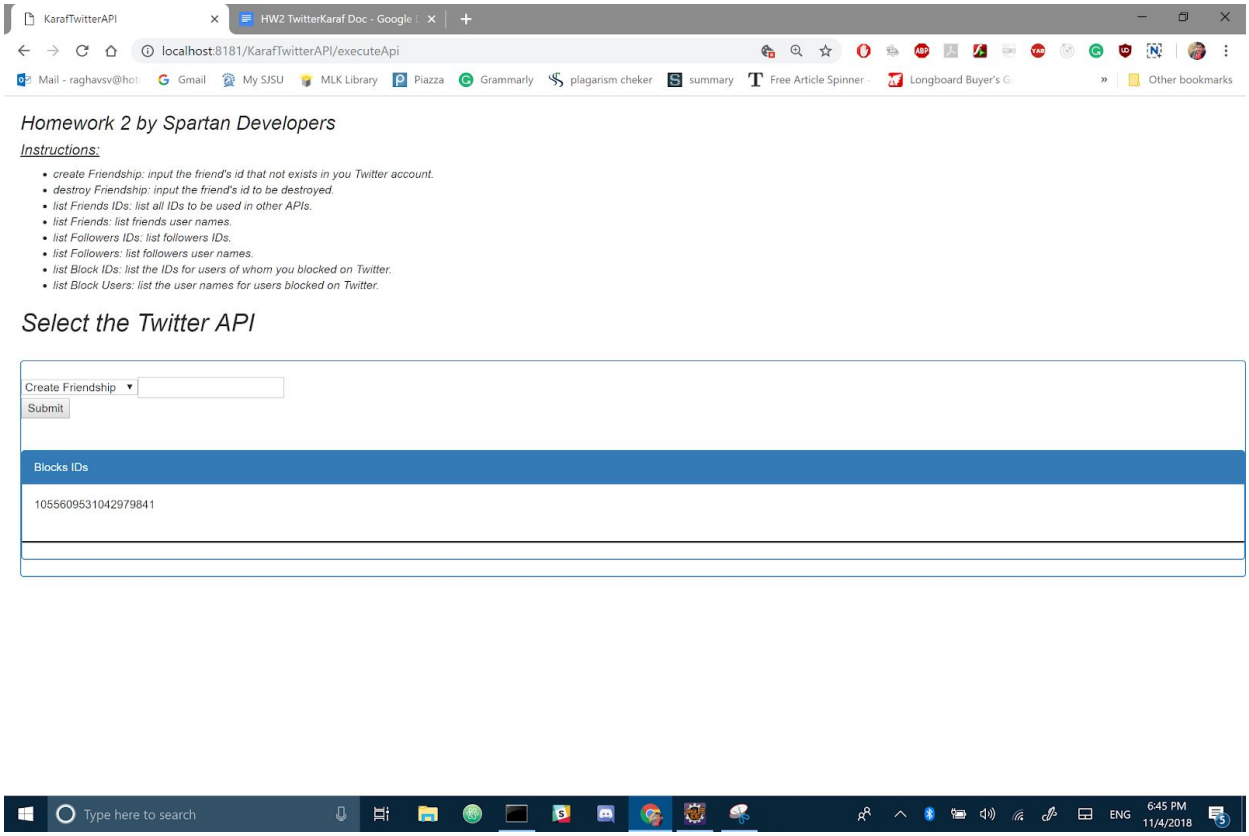
list Followers: list followers user names.
list Block IDs: list the IDs for users of whom you blocked on Twitter.
list Block Users: list the user names for users blocked on Twitter.
Select the Twitter API
Create Friendship
Submit
Create Friendship
API call was Successful. Following User: 2951529314
Type here to search
ENG
6:41 PM
11/4/2018



Running block ids: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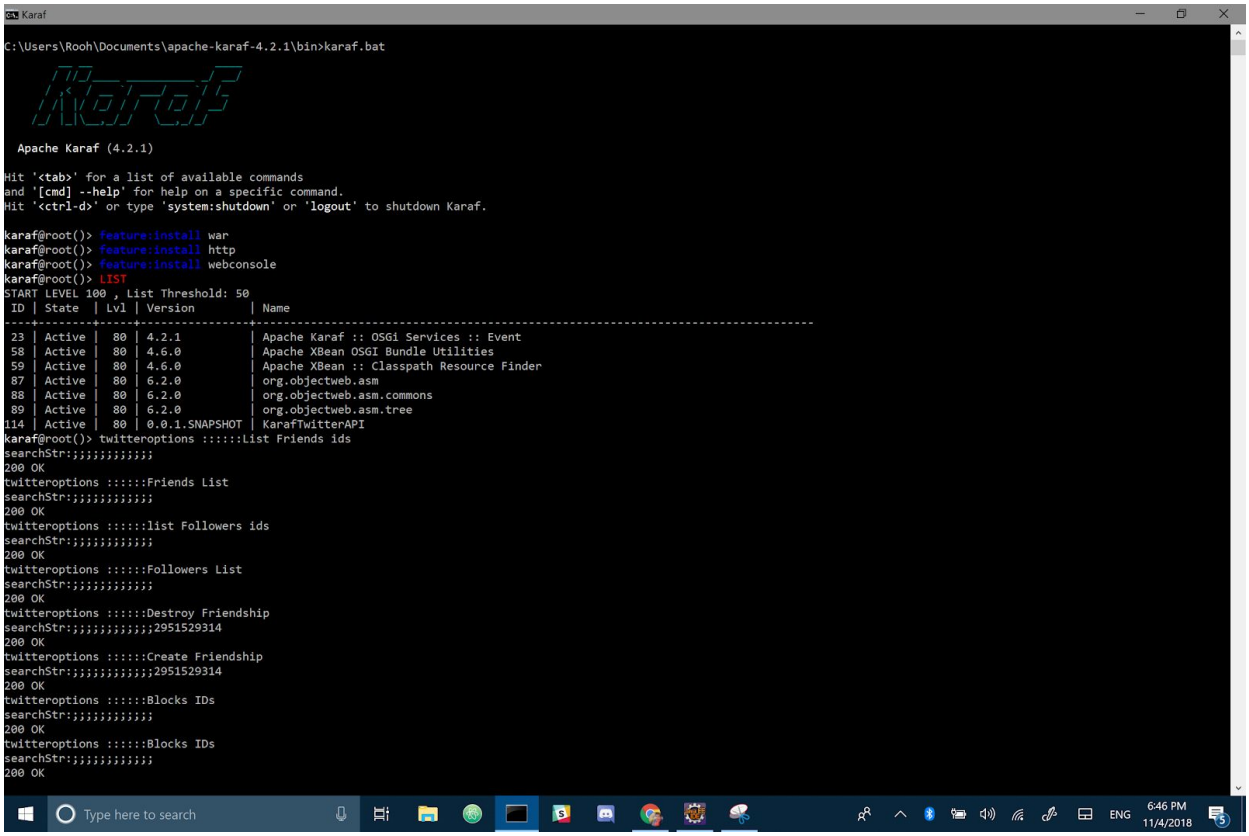
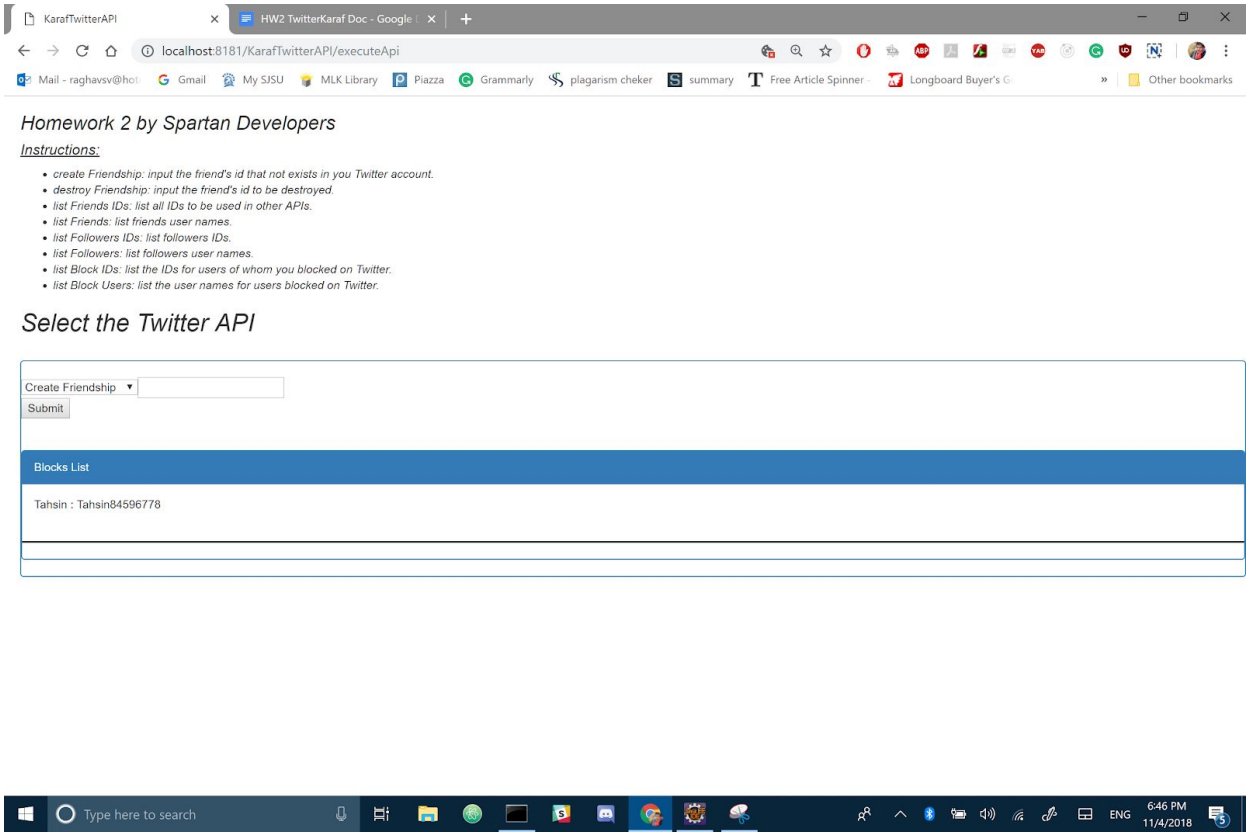
Submit
Blocks IDs
1055609531042979841
Type here to search
ENG
6:45 PM
11/4/2018



Running block usernames: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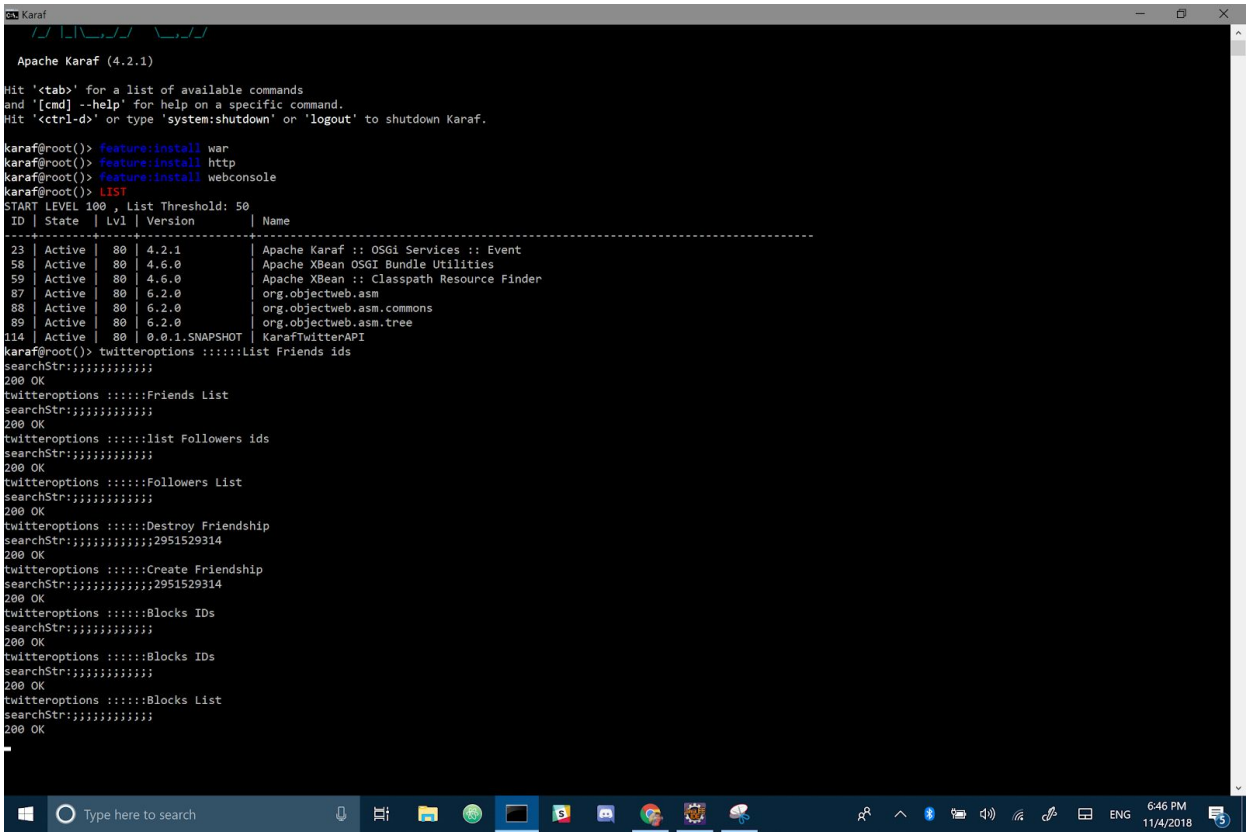
Type here to search
ENG
6:46 PM
11/4/2018


Karaf
Apache Karaf (4.2.1)
Hit '<tab>' for a list of available commands
and '[cmd] --help' for help on a specific command.
Hit '<ctrl-d>' or type 'system:shutdown' or 'logout' to shutdown Karaf.
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114 | Active | 80 | 0.0.1.SNAPSHOT | KarafTwitterAPI
karaf@root()> twitteroptions ::::::List Friends ids
searchStr:;;;;;;;;;;;;
200 OK
twitteroptions ::::::Friends List
searchStr:;;;;;;;;;;;;
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twitteroptions ::::::list Followers ids
searchStr:;;;;;;;;;;;;
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twitteroptions ::::::Destroy Friendship
searchStr:;;;;;;;;;;;;2951529314
200 OK
twitteroptions ::::::Create Friendship
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searchStr:;;;;;;;;;;;;
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