**CPSC449**

**Project 3**

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**Bony Roy: (Ops)**

#### To start with we need to do all the steps from project 2 for setting up Kong and Minio server.

**The command to start Kong is ulimit -n 4096 && sudo kong start**

#### Once Kong has started please run the Curl commands created from project 2 and saved in file “CurlCommands.txt”.

#### Now once they have started. Install Memcached and Scylla DB. Start them in Separate tab in command prompt.

#### Memcached & Scylla:

#### Run Scylla with- docker start Scylla

#### Run Memcached with:  memcstat --servers=localhost

#### Install libraries like:

#### Pymemcache (pip3 install --user pymemcache)

#### Running Cassandra with python: (sudo apt install --yes python3-cassandra)

#### flask\_cassandra(pip3 install --user flask\_cassandra)

#### Note: Cassandra is running on '172.17.0.2' and it is mentioned in all the python files(Tracks.py, desc.py, user.py, Playlist.py) ,in case there is an issue regarding that please run command “docker exec -it scylla nodetool status” to check the address and if you face error change those parameter in code according to the address your Cassandra/Scylla is running.

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#### Commands to run the python files(separate window):

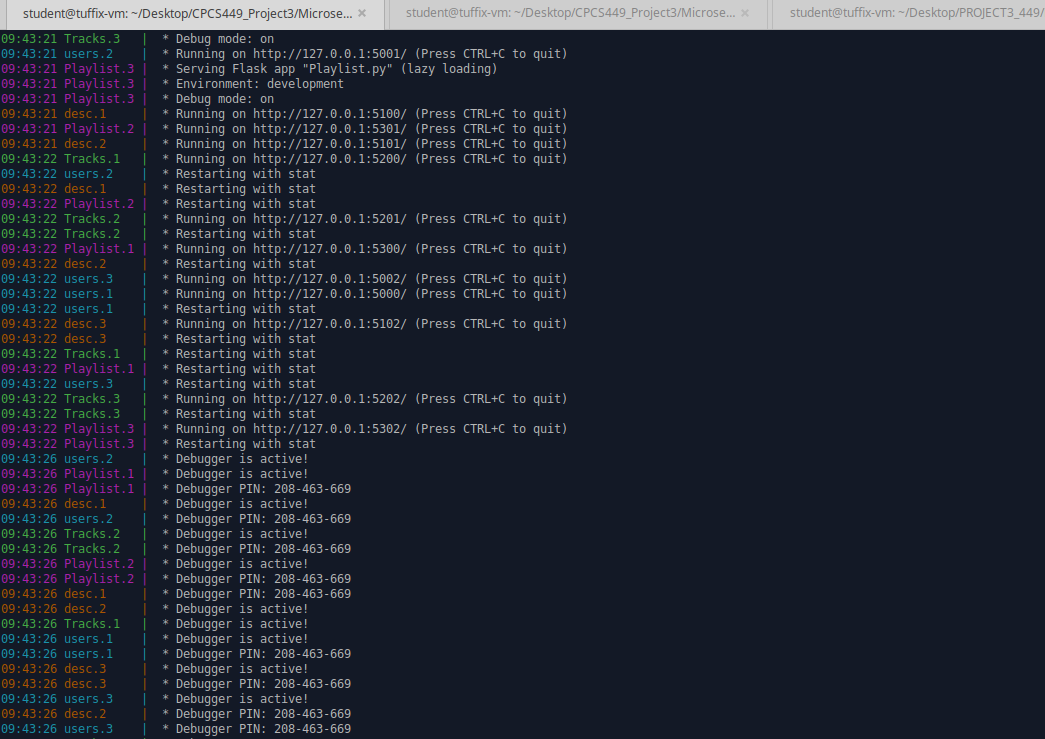
#### export FLASK\_APP=Tracks.py

#### flask init

#### export FLASK\_APP=user.py

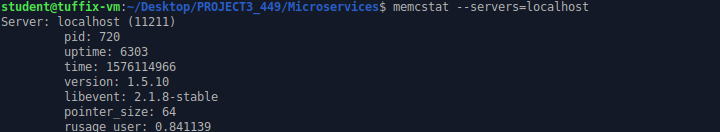
#### flask init

foreman start -m users=3,desc=3,Tracks=3,Playlist=3



Then clear Memcached server with command “**memcflush --servers=localhost”**

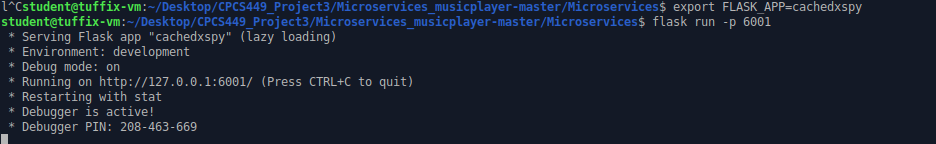
#### And run Memcached with:  memcstat --servers=localhost

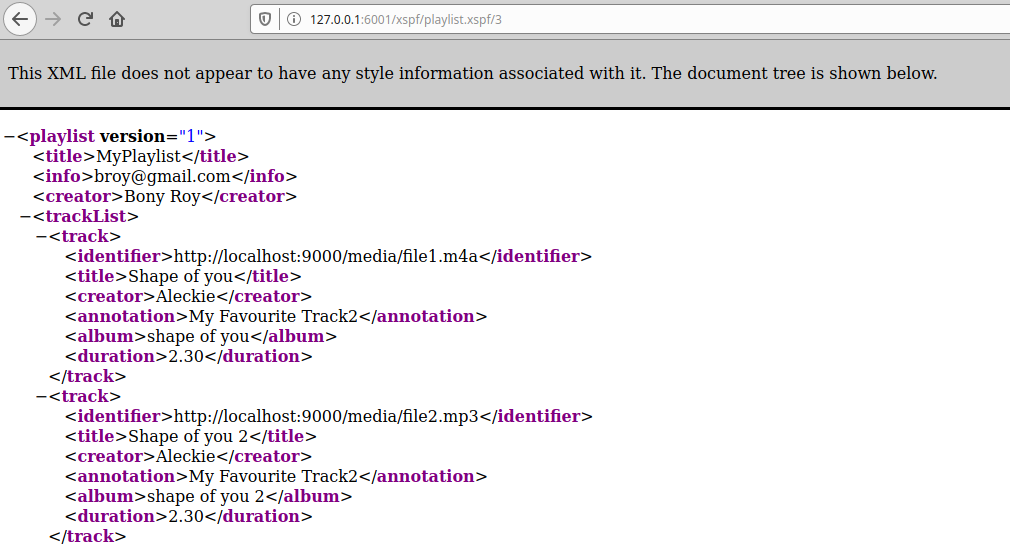


**Run below command in separate window to run xspf:**

Run the command “export FLASK\_APP=cachedxspy”

Then run the command “flask run -p 6001”





Before validating **cachedxspy** output and checking output is cached or not we will check Memcached output(get parameters), below is the screenshot of the same.

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#### Now do get on XSPF playlist id 3:

#### The network timing currently is 692 ms.

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#### Memcached: stat:

#### Get miss count increased to 119:

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#### Do get again on XSPF playlist id 3: (Cache Timing set to 100 ms in code. So, do in between that time)

#### The network timing currently is 8 ms. Much less than previous 692 ms.

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#### Memcache stat: GET hits count increased to 33.

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#### Testing other services:

#### User microservice:

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#### Playlist Microservice:

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#### Tracks microservice:

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#### Tracks description microservice:

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#### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*End of Ops\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*