**Posting Microservices**

**Project Overview**

The scope of this project is to be able to implement two Microservices: Posting, Voting.

Post services will handle:

Create a new post

Delete an existing post

Retrieve an existing post

List the n most recent posts to a particular community

List the n most recent posts to any community

**Instructions to Install needed packages:**

$ pip3 install --user requests

$ sudo apt install python3-flask

$ pip3 install Flask-API

$ pip3 install python-dotenv

$ sudo apt install --yes gunicorn3

$ sudo apt install ruby-foreman

$ sudo sed -i -re \

's/([a-z]{2}\.)?archive.ubuntu.com|security.ubuntu.com/old-releases.ubuntu.com/g' \

/etc/apt/sources.list

$ sudo apt update

$ sudo apt install --yes awscli

$ sudo apt install --yes python3-boto3

$ pip3 install --user flask-dynamo

Check python 3

$ which flask

Follow your direction, open the flask file

For example, my direction is

/home/student/.local/bin/flask

Open this flask file

The first line should end with “python3”. If it’s end with “python”, make it “python3” and save the file

Incorrect: #!/usr/bin/python

Correct: #!/usr/bin/python3

**Get project files:**

Create a folder where the project is stored (**Folder 0**)

Open terminal at that folder

$ git clone <https://github.com/quyen137/CPSC449-Project-2-Complete-Version>

**Set up**

After we clone the project from github, in the **Folder 0** now, there’s a subfolder (**Folder 1** which contain api.py, rss.py, Procfile, .env, ... )

Inside Folder 1, there is a subfolder named dynamodb\_local\_latest (**Folder 2)**

From now on, we need 2 terminals.

Open a terminal at **Folder 1**, (**terminal 1**), is used to run a code.

Open another terminal at **Folder 2**, (**terminal 2**), is used to run server

**Select terminal 2:**

$ java -Djava.library.path=./DynamoDBLocal\_lib -jar DynamoDBLocal.jar -sharedDb

**Select terminal 1:**

$ aws configure

AWS Access Key ID [None]: **fakeMyKeyId**

AWS Secret Access Key [None]: **fakeSecretAccessKey**

Default region name [None]: **us-west-2**

Default output format [None]: **table**

$ aws dynamodb list-tables --endpoint-url http://localhost:8000

A table is displayed in terminal 1 now

**Run Program**

**Select terminal 2:**

Press Ctrl + c to terminate the running one

$ cd .. (open the same directory of terminal 1)

$ foreman start

**Select terminal 1:**

$ flask init

Wait a little bit until seeing “Initial Post Database is DONE” message

**Start browser**

**Open these URL in browser:**

<http://localhost:5000>

Follow example in home page to display all posts, delete a post, create a post, display most recent post, and display most recent post by community

* Display all posts:

<http://localhost:5000/posts/all>

* Delete post by PostID = 100:

<http://localhost:5000/posts/delete/100>

* Display post by PostID = 10:

<http://localhost:5000/posts/10>

* Display default 2 recent posts with create post

<http://localhost:5000/posts>

Please copy this Json then change value if needed

{"Username": "User 100", "PostTitle": "Post Title 100", "Content": "Content 100", "Community": "home", "URLResource": "www.URLResource100.com"}

* Display 15 recent post with create post

<http://localhost:5000/posts?n=15>

Please copy Json above for creating a new post then change the values if needed

* Display 5 most recent post in school community

<http://localhost:5000/posts/school/5>