POC for TLDR using DOCKER and AWS

Following are steps for back-end dev using AWS and Docker.

We developed the app and use SAM to upload it to cloud.

This application uses a basic model which has been finetuned. We use postman to send request to API gateway.

We first install AWS CLI and AWS SAM cli-

sam-nightly init

open the folder in Visual studio code

And create hello-world template

Use memorysize of 3008

We make changes to requirements.txt, Dockerfile, app.py and placed the model in the hello-world folder. Change get to post

cd tldr_demo

we run sam-nightly build

```
(testenv) C:\Users\home\Downloads\Final Semester Project\tldr_demo>sam-nightly build
Building codeuri: C:\Users\home\Downloads\Final Semester Project\tldr_demo runtime: None metadata: {'Dockerfile':
'Dockerfile', 'DockerContext': 'C:\Users\home\Downloads\Final Semester Project\tldr_demo\hello_world', 'DockerTag':
'python3.10-v1'} architecture: x86_64 functions: HelloWorldFunction
Building image for HelloWorldFunction function
Setting DockerBuildArgs: {} for HelloWorldFunction function
Step 1/5 : FROM public.ecr.aws/lambda/python:3.10
3.10: Pulling from lambda/python
3d03dde9ded6: Pull complete
dbe66dd9d9d5: Pull complete
dbe66dd9d9d5: Pull complete
63cb9d715d76: Pull complete
63cb9d715d76: Pull complete
63e822183613: Pull complete
Status: Downloaded newer image for public.ecr.aws/lambda/python:3.10 ---> 528a9fd27680
Step 2/5 : COPY app.py requirements.txt ./
---> 1a5c6726d281
Step 3/5 : COPY model /opt/ml/model
---> d0aa2bddf2a7
Step 4/5 : RUN python3.10 -m pip install -r requirements.txt -t .
```

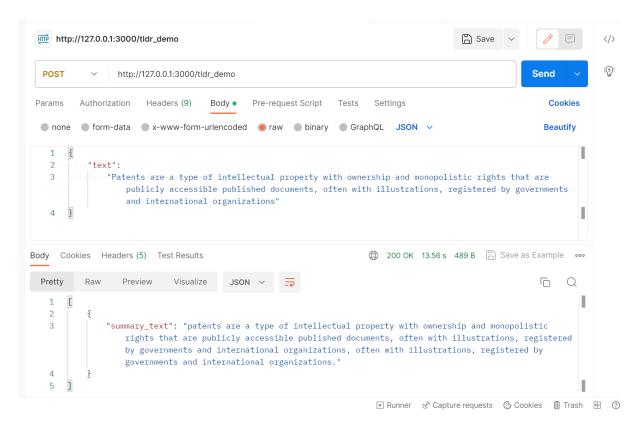
sam-nightly local start-api

```
Containers Initialization is done.

Mounting HelloWorldFunction at <a href="http://127.0.0.1:3000/tldr_demo">http://127.0.0.1:3000/tldr_demo</a> [GET]

You can now browse to the above endpoints to invoke your functions. You do not need to restart/reload SAM CLI while working on your functions, changes will be reflected instantly/automatically. If you used sam build before running local commands, you will need to re-run sam build for the changes to be picked up. You only need to restart SAM CLI if you update your AWS SAM template
2023-06-18 19:06:55 WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.

* Running on http://127.0.0.1:3000
2023-06-18 19:06:55 Press CTRL+C to quit
```



We have made a request from POSTMAN and received a response from LLM.

Challenge:

- 1. We need to make sure stack name does not have underscores.
- 2. We need to give full s3 access to iam user.

Load into AWS:

sam-nightly deploy -guided

once AWS services are launched.

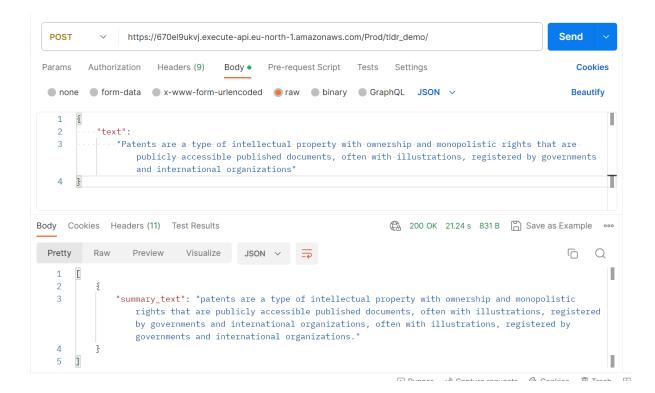
Go to postman and send request.

It will fail a few times since lambda is starting.

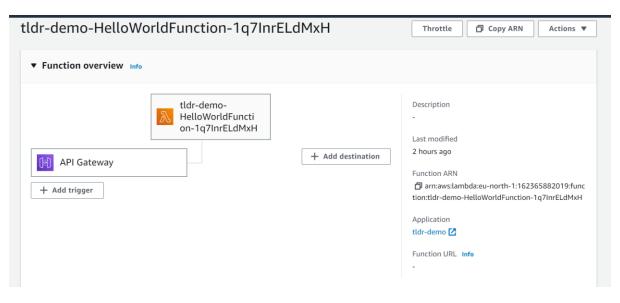
We put the api end point on postman and send request.

We can delete the stack using

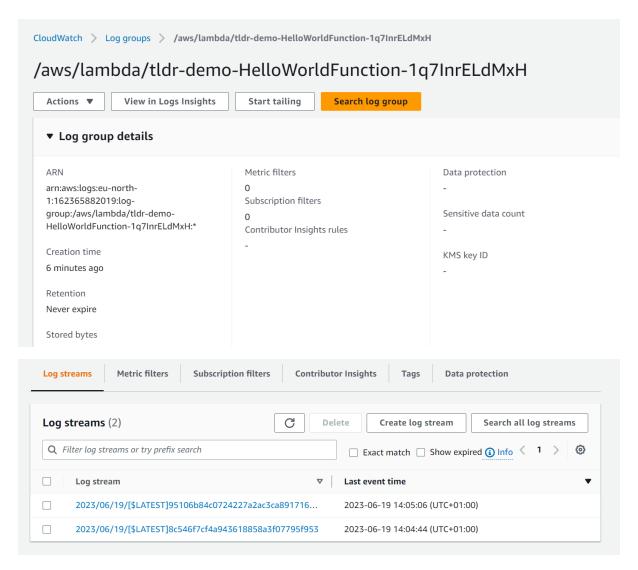
sam-nightly delete --stack-name tldr-demo



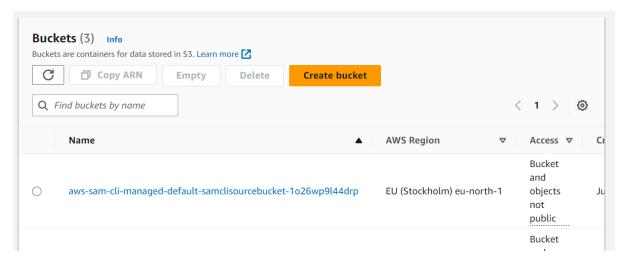
Lambda:



Cloudwatch:



S3:



Api gateway:

