

Backend Engineer Test Task

Write a Python program that accepts the following arguments:

Arguments

1. A name of a Docker image
2. A bash command (to run inside the Docker image)
3. A name of an AWS CloudWatch group
4. A name of an AWS CloudWatch stream
5. AWS credentials
6. A name of an AWS region

Example:

```
python main.py --docker-image python --bash-command '$'pip install pip -U && pip
install tqdm && python -c \"import time\ncounter = 0\nwhile
True:\n\tprint(counter)\n\tcounter = counter + 1\n\ttime.sleep(0.1)\"'
--aws-cloudwatch-group test-task-group-1 --aws-cloudwatch-stream test-task-stream-1
--aws-access-key-id ... --aws-secret-access-key ... --aws-region ...
```

Functionality

- The program should create a Docker container using the given Docker image name, and the given bash command
- The program should handle the output logs of the container and send them to the given AWS CloudWatch group/stream using the given AWS credentials. If the corresponding AWS CloudWatch group or stream does not exist, it should create it using the given AWS credentials.

Other requirements

- The program should behave properly regardless of how much or what kind of logs the container outputs.
- The program should gracefully handle errors and interruptions.

For testing purposes, you can use the following AWS credentials:

Access key ID: **AKIASCKH5AAZIDBZ3PNJ**

Secret access key: **RrFGc7md6x9nom1o729b9ppe/A3QUJun2ym/1HoD**