FACIAL RECOGNITION INTEGRATED WITH AWS INFRASTRUCTURE

CREATING PROJECT By: Mihir Parekh, Cristian Lopez, Vishal Patel, Doulos Htet

CLI Commands

Create the VPC variable

$VpcId="$(aws ec2 describe-vpcs --filter "Name=isDefault, Values=true" --query "Vpcs[0].VpcId" --output text)"

Set up the subnet for the VPC

$SubnetId="$(aws ec2 describe-subnets --filters "Name=vpc-id,Values=$VpcId" --query "Subnets[0].SubnetId" --output text)"

Creates stack from Cloudformation and launches EC2 Instance to create a VM based on our virtualmachine.yaml file (template).
Purpose is to make the environment get the files from our github repo

aws cloudformation create-stack --template-body file://virtualmachine.yaml --stack-name team4 --parameters ParameterKey=VPC,ParameterValue=$VpcId ParameterKey=Subnet,ParameterValue=$SubnetId

Gets the log file for installing dependency

sudo cat /var/log/cloud-init-output.log

Sets the AWS Access ID Key, AWS Secret Access Key, Region

aws configure set aws_access_key_id 'AKIAZA3ZDHAEG3N4YY62' && aws configure set aws_secret_access_key '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' && aws configure set region 'us-east-1' && aws configure set output 'text'

Grab Python files from our Github Repo [GitHub - douloswynnh/team4]

sudo git clone https://github.com/douloswynnh/team4

Grabs images from the internet and puts it directly into our dictionary

wget -r -A .jpeg .jpg <url_link>

Add the person's face and name to S3 Bucket along with name added as a metadata. This will then trigger a lambda function (facerecognition) to move items from S3 to DynamoDB table

python putUsers.py image1 name

Checks if the first image on the stack (data structure) matches any image from our database. Will print if the person is recognized or not using the Facial Recognition API.

python testFacialRec.py

CLEAN UP

This will delete stack along with EC2 instance

aws cloudformation delete-stack --stack-name team4

This deletes the DynamoDB Table

aws dynamodb delete-table --table-name facerecognition

This deletes the S3 Bucket

aws s3api delete-bucket --bucket serverless-team-4-s3uploadbucket-8qgj3onpd8i7--region us-east-1

Deletes the Lambda function

```
aws lambda delete-function \
    --function-name facerecognition
```