readme.md 4/25/2023

Important Links

- GITHUB
- APPLICATION
- Please refer to YOUTUBE DEMO for in depth explanation

Deployement Instructions

Environment Variables

```
export STACK_NAME = kube-stack
export VPC_ID = vpc-xxx
export SUBNET_IDS = subnet-xxx, subnet-xxx
export REGION = ap-southeast-2
export ACCOUNT_ID = <your account id>
export WORKER_INSTANCE_TYPE = t3.small
```

Kubernetes Cluster

```
aws cloudformation deploy --template-file ./cloudformation.yaml --stack-
name $(STACK_NAME) --capabilities CAPABILITY_IAM --parameter-overrides
VpcId=$(VPC_ID) SubnetIds=$(SUBNET_IDS)
WorkerInstanceType=$(WORKER_INSTANCE_TYPE)
```

Docker Build

```
docker build -t kube -f dockerfile .
```

Docker Run

```
docker run -p 3000:3000 kube
```

Docker Push

```
aws ecr get-login-password --region $(REGION) | docker login --username AWS --password-stdin $(ACCOUNT_ID).dkr.ecr.$(REGION).amazonaws.com docker tag kube:latest $(ACCOUNT_ID).dkr.ecr.$(REGION).amazonaws.com/$(STACK_NAME)-ecr:latest docker push $(ACCOUNT_ID).dkr.ecr.$(REGION).amazonaws.com/$(STACK_NAME)-ecr:latest
```

readme.md 4/25/2023

Kubernetes Deployment

 ${\tt kubectl\ apply\ -f\ ./deployment.yaml}$

Kubernetes Service

kubectl apply -f ./service.yaml

Architecture Diagram

