DEVOPS EASY LEARNING

EC2\DOCKERFILE

EC2 instances

Exercise 1: Instance Types

You are tasked with launching an EC2 instance for a web application. The application requires moderate CPU and memory resources, but it doesn't need specialized hardware. Which instance type should you choose, and why?

Exercise 2: Key Pair

You've just created a new EC2 instance, and now you need to securely connect to it using SSH. Explain the steps you would take to create a key pair and use it to log in to the instance. Mention any security best practices.

EC2 instances

Exercise 3: Security Groups

You are setting up security groups for your EC2 instances. You want to allow incoming SSH (port 22) access only from your office's IP address and incoming HTTP (port 80) access from anywhere. How would you configure the security group rules to meet these requirements?

Exercise 4: AMI (Amazon Machine Image)

You have configured a custom Amazon Machine Image (AMI) with all the necessary software and configurations for your application. Explain how you would launch new EC2 instances using this custom AMI, and what benefits it provides compared to starting with a standard AWS-provided AMI.

HANDS-ON AWS/DOCKER

On your first working day as a devOps engineer at EK_TECK SOFTWARE SOLUTION, you were assigned a project by your manager, and on the project, the tasks/requirements are as follows:

- The application code is written in **Python**
- Your base image is ubuntu
- Your working directory is /app
- Download and install python3 and python3-pip while writing your dockerfile
- Can you explain your previous step?
- You can have the developer code here;
- https://group5-braincells.s3.amazonaws.com/python-web-app.zip
- The directory(devOps) contains the Python code for the web application
- Your entrypoint will be python3 and your cmd (manage.py, runserver, 0.0.0.0:8000)
- Deploy your application and at the browser specified at the end **/demo**
- for example **http:amazonaws.com:8000/demo/**
- Push the image to dockerhub

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THUMBS UP TO TOM AND GERRY!!!

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