AWS

productService : 9090

couponService : 9091

Manual Deployment to AWS using EC2 and S3

S3 -> Simple Storage Service, similar to google drive

1. Create S3 Buckets to store objects
2. Provide public access to jar files, change security rules and port
3. Deploy apps to EC2 (elastic compute cloud)
4. Create an EC2 instance
5. Install MySQl, Java -> start the services
6. Deploy jar on AWS using EC2 using S3 and Test
7. Launch spring boot application on EC2 instance
8. Stress Command : we can stress / load testing
9. Create your own AMI (Amazon Machine Image) from scratch not from the available list
10. To launch multiple instances of the same application use a Custom AMI and Image of your application EC2 instance

AWS Elastic Load Balancer

3 ways to create load balancer:

1. Application (work with virtual private cloud)(route traffic)

2. Classic (route traffic)

3. Network (work with virtual private cloud)

Create a Load Balancer in AWS

1. multiple instances for an application running on different port
2. it provides a health check URL for our microservices
3. Hit the URL and validate in the database
4. Load Balancer works in Round Robin Fashion

AWS Auto Scaling

1. Create Launch Configuration
2. Create Auto Scaling Group(can scale up and scale down)
3. Stress command to increase the load on CPU

AWS Monitoring Using CloudWatch and SNS(Simple Notification Service)

Create Threshold and send email alert using SNS

SNS has 2 things topics and subscriptions

Deployment to AWS EBS(Elastic Bean Stalk) using RDS(Relational Database Service)

AWS RDS: can create instance of mysql, amazon aurora

AWS DynamoDb: NOSQL database service for unstructures databases or non RDBMS like MongoDb, CouchBase, Redis, Cassandra

AWS IAM Service (Identity and Access Management)

1. Create User and provide access(Read,Write,View,Start,Stop) to AWS resources (S3 (simple storage service) , RDS (relational database service) , AMI(Amazon Machine Image), EC2(elastic compute cloud)
2. IAM used for Managing access to AWS Resources (Groups, Roles, Users)
3. Each Developer, Tester, DevOps person will have a IAM account we do not use Root User
4. Priority developer -> tester -> devops
5. Enable MFA(Multi Factor Authentication (code on mobile), IP restriction)

AWS CLI Service (Command Line Interface)

1. Create User
2. Install AWS CLI
3. Configure And Use

AWS CLI Commands: