What we have learned so far in Cloud?

Elastic Beanstalk

EC2

Understand what is

ECR

ECS

ECR stands for Elastic Container Registry

ECS stands for Elastic Container Service

Create a docker image of a project

1. mvn spring-boot:build-image
2. docker tag ust-mvc-2:0.0.1-SNAPSHOT jagindia/ust-mvc-2
3. docker push jagindia/ust-mvc-2

docker.io/jagindia/ust-mvc-2

1. You should have a docker image in hub.docker.com or ECR.

jagindia/jag-ust-demo

this will run in 5000 port and url is “hi”

1. Lets login to aws management console.
2. Search for Elastic Container Service
3. Click Task Definitions
4. Create new Task Definition
5. Type the task definition family name (ex: ust-mvc-2-task)
6. We can add 1 or more containers to a task. So under Container – 1
7. Enter the container details:
   1. Name: ust-mvc-2-container
   2. Image URI: docker.io/jagindia/ust-mvc-2

In case if ecr url is provided, it should start with ecr.io/

* 1. Container port: you can add one or more ports. We add 5000 port here
  2. Leave other values as default and Click Next
  3. Environment choose: AWS Fargate (serverless)

Linux CPU: 1 Memory 3GB

* 1. Task role: choose the only available role (ecsTaskExecutionRole) in both task role and task execution role
  2. Storage: amount must be between 21 and 200
  3. Click Next
  4. Review the details and click “create” button

1. Now, create cluster.

Enter the cluster name

Networking: choose the default VPC and subnets

Click “create” button

1. Once the cluster is created, open the cluster and go to “Tasks” tab (2nd tab) and run the task we created. Ensure that the execution role is selected.
2. Running state will be changing from
   1. Provisioned -> Pending -> Activated -> Running status.

Once it is in running status, click the task hyperlink and go to configuration page

Copy the public ip address.

1. Go to browser and type

http://<<public ipaddress>>:5000/employee

1. Delete cluster and go to tasks, click the task and in Actions: deregister

@RestController

@RequestMapping(“/contracEmployee”)

public class MyController

{

// @RequestMapping(method=”GET”, value=”/”)

@GetMapping(“/”)

public String home()

{

}

}

<https://blog.restcase.com/7-rules-for-rest-api-uri-design/>

RESTful webservice / rest api

Entity

* + - 1. Multiple entities relationships @OneToMany
      2. findByName (by non primary key)
      3. order by, group by
      4. security (mcq)
         1. OAuth2

What is CSRF

What is CORS

Implements SecurityConfigurer interface

Extends SecurityConfigurerAdapter class

configure(http)

http

.antMatcher({“/login”,”/signup”)

.permitAll()

.anyRequest()

.authenticate()

All annotations used in Entity class

@Id

@GeneratedValue

Composite primary key??????

` @Data

@EmbeddedId

class SalesId

{

Integer orderId;

Integer productId;

}

@Entity

@Table(name=”EMP”)

public class Employee

{

@Id

@Column(name=”salesId”)

private SalesId sid;

finder Methods in repository

findByAddress

findByPhone

findByEmail

@Query(“select e from Employee e where e.name=:name and e.address=:address”)

public List<Employee> findEmployeesByNameAndAddress(@Param(“name”)String name,@Param(“address”)String address);