Group members name: Akash Rokade, Sumedh Vartak and Rohit Mali

Deployments strategies

1 A/B testing Deployment strategy:

- a) Create an EC2 instance and deploy the apache server in the same instance.
- b) Click on the Route53 service and create a new hosted zone and make it public
- c) Create an Application load balancer with a previously created security group.

In order to create an application load balancer, we need to create the target group with following details:

Health check path: /index.html

Advanced health check:- 1. Healthy threshold: 10

2. Unhealthy threshold: 10

3. Timeout: 5

4. Interval: 10

And then after adding the instance and create the target group

d) Now go to Create Record section for hosted zone and select A type Record

Turn on Alias and select application load balancer as an endpoint

Select region and associated load balancer and create the record

- e) Create an AMI for our EC2 instance
- f) Click on Launch configuration

Choose instance type as t2.micro

Select recently created AMI in step e)

Select existing security group and key pair and create launch configuration

G) Click on auto scaling group

Use launch configuration

Attach existing load balancer, choose target capacity

Create auto-scaling group

Now let us create the version 2

- h) Follow the step number 2)
- i) Create Load balancer for version 2
- j) Add target group
- K) Create an AMI
- I) Create launch configuration
- m) Create Auto scaling group

Thus we created Application load balancer version 2

- n) click on the records of the hosted zone and change the routing policy to Geolocationbased, location to default and select application load balancer version 1
- o) Create one more record and select the routing policy as Geolocation-based, location to country(India) and select the application load balancer version 2.

2.Blue green strategy:

- a) Create an EC2 instance and deploy the application in the same instance.
- b) Create a load balancer and attach an ec2 instance to it.
- c) Create a Route53 record and use LB as an alias.
- d) Create an AMI of the instance.
- e) Create a Launch configuration.
- f) Create an auto scaling group from launch configuration (Name it Blue) and associate it the same LB.
- g) Repeat step a) for the second version of deployment and create an AMI of the instance.
- h) Click on the launch configuration for new deployment.
- i) Use launch configuration for creating a new AutoScaling group (Name it Green) and associate it with the same LB that is serving the old instances. Once the new instances become healthy and get registered, Update the old group (Blue) and set the desired number of instances to zero.
- j) Wait for the old instances to be terminated.
- h) Remove the old launch configuration and AutoScaling Group (Blue one).