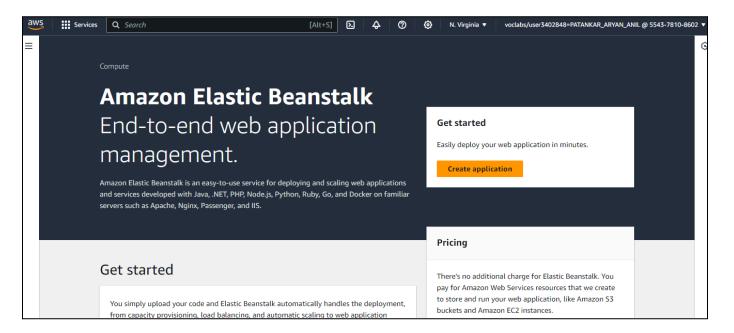
ADVANCE DEVOPS EXPERIMENT NO.2

Name: Aryan Anil Patankar

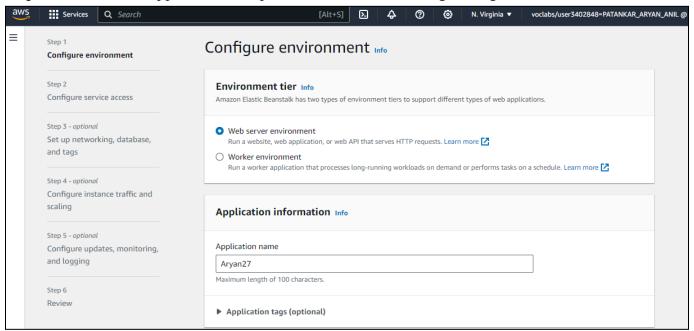
Class:D15A Roll No:34

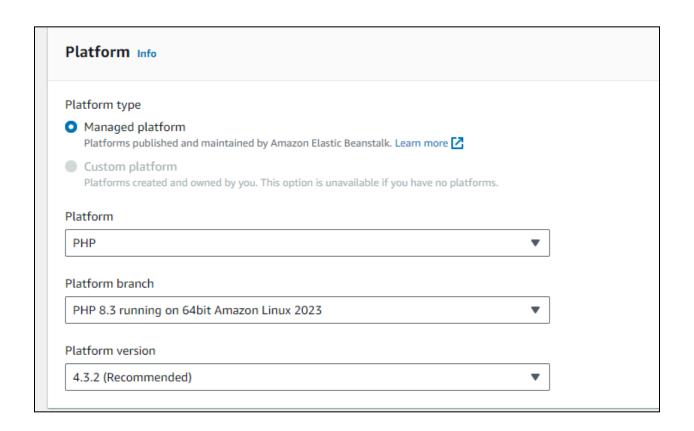
Aim: To Build Your Application using AWS CodeBuild and Deploy on S3 / SEBS using AWS CodePipeline, deploy Sample Application on EC2 instance using AWS CodeDeploy.

Step 1: Search for **Elastic Beanstalk** in the search bar next to services section and you would see the following page.



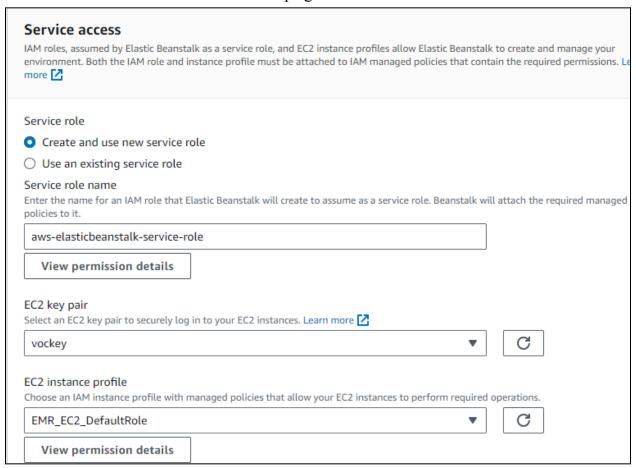
Step 2:Create a new application and proceed with the following settings

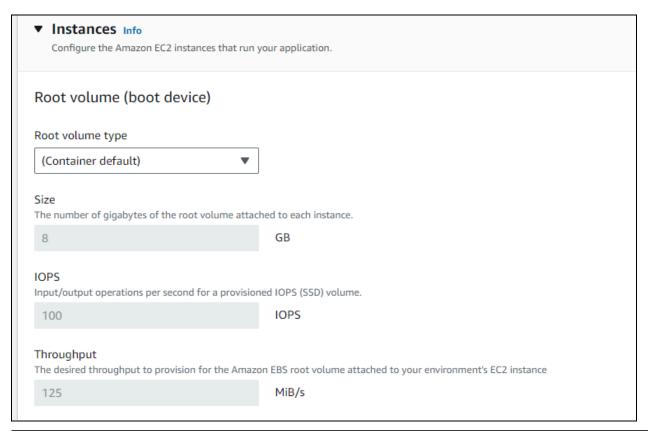


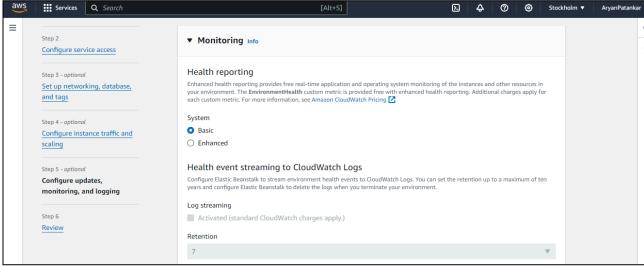


Application code Info		
Sample application		
Existing version Application versions that you have uploaded.		
Upload your code Upload a source bundle from your computer or copy one from Amazon S3.		
Presets Info Start from a preset that matches your use case or choose custom configuration to unset recommended values and use the service's ralues.	default	
Configuration presets		
Single instance (free tier eligible)		
○ Single instance (using spot instance)		
High availability		
High availability (using spot and on-demand instances)		
Custom configuration		
•		
Cancel	Next	

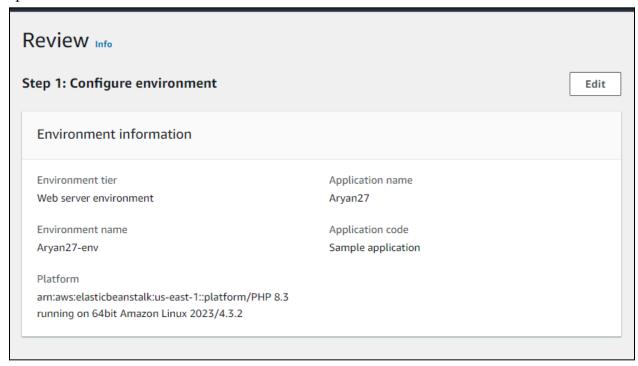
Step 3:Create a new service role as given below, if an existing service role with the same name does not exist. Proceed with the steps given below.







Step 4:Review each step along with the selected options and verify that the correct options have been chosen.



Step 2: Configure service access

Edit

Service access Info

Configure the service role and EC2 instance profile that Elastic Beanstalk uses to manage your environment. Choose an EC2 key pair to securely log in to your EC2 instances.

Service role

EC2 instance profile

arn:aws:iam::405894863107:role/ser

aws-elasticbeanstalk-ec2-role

vice-role/aws-elasticbeanstalk-

service-role

Step 3: Set up networking, database, and tags

Edit

Networking, database, and tags Info

Configure VPC settings, and subnets for your environment's EC2 instances and load balancer. Set up an Amazon RDS database that's integrated with your environment.

Network

VPC

Public IP address

Instance subnets

vpc-0bf7d7d872a737f13

false

subnet-035fe38d8d742329e,subnet-

0a7c9c6dedec1325d

Step 5: Configure updates, monitoring, and logging

Edit

Updates, monitoring, and logging Info

Define when and how Elastic Beanstalk deploys changes to your environment. Manage your application's monitoring and logging settings, instances, and other environment resources.

Monitoring

System enhanced

Cloudwatch custom metrics -

Cloudwatch custom metrics -

instance environment

_

-

Log streaming

Retention

Lifecycle

Deactivated

7

false

Updates

Managed updates

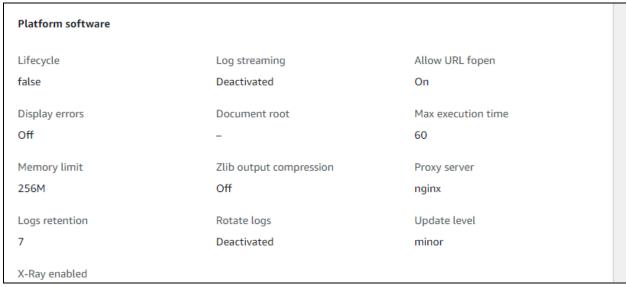
Deployment batch size

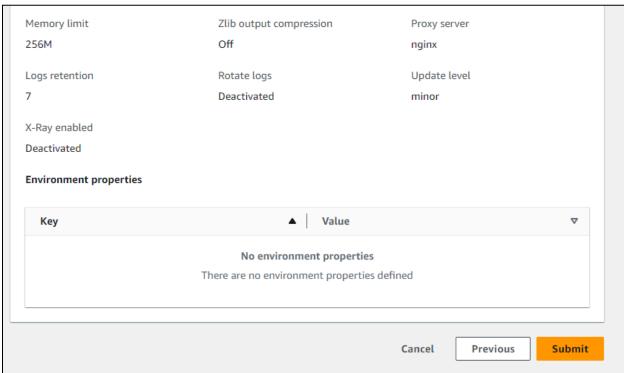
Deployment batch size type

Activated

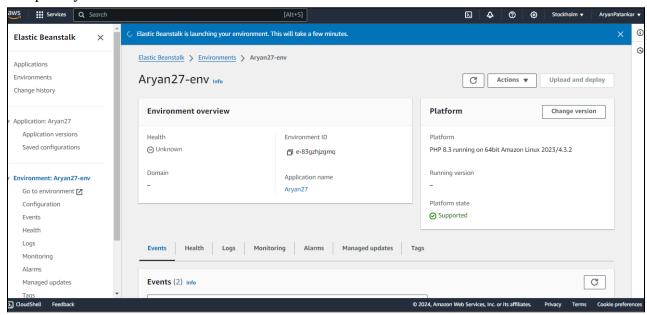
100

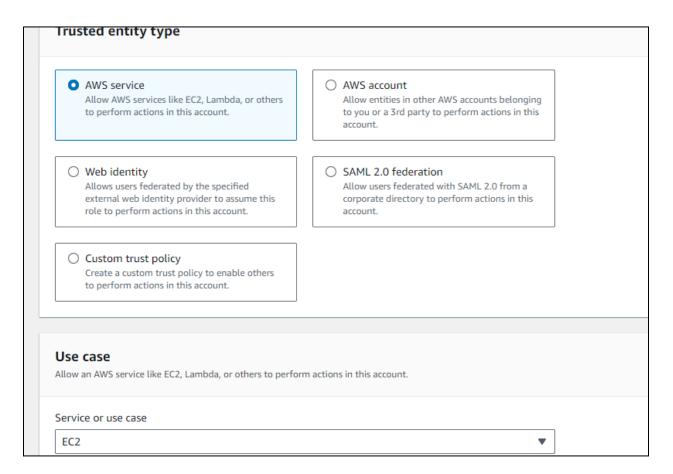
Percentage



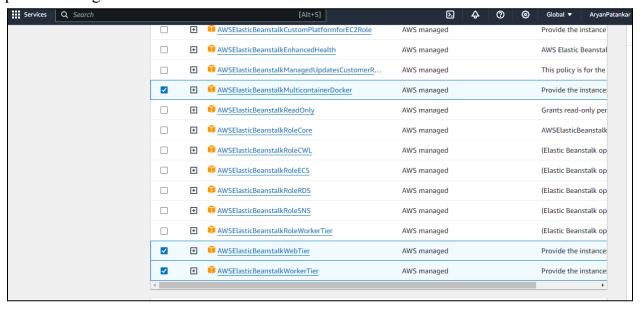


Step 5: After clicking on the submit button, you would notice that the Elastic Beanstalk environment is being created and it may take some time for the environment to load completely.

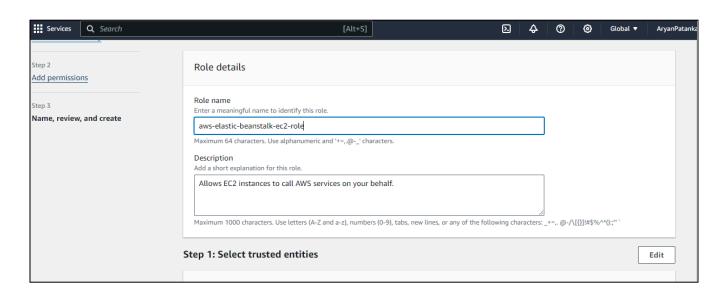


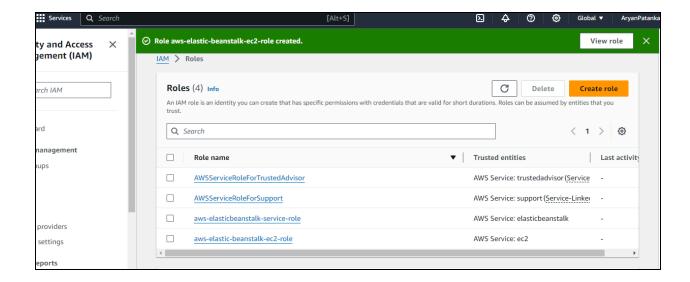


Step 6:Meanwhile, if a role is already not defined, then you need to create a new role for the elastic beanstalk and ensure there is a blue checkmark on the following three permissions given below.

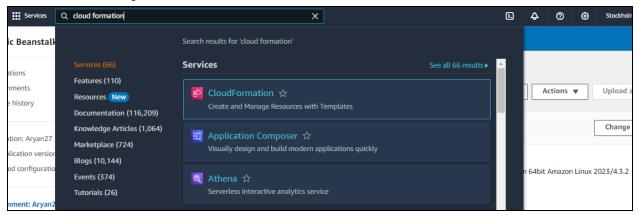


Step 7:Enter a role name and proceed. You would notice the role being successfully created after some time.

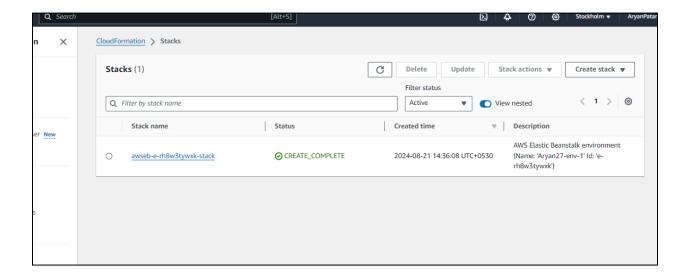


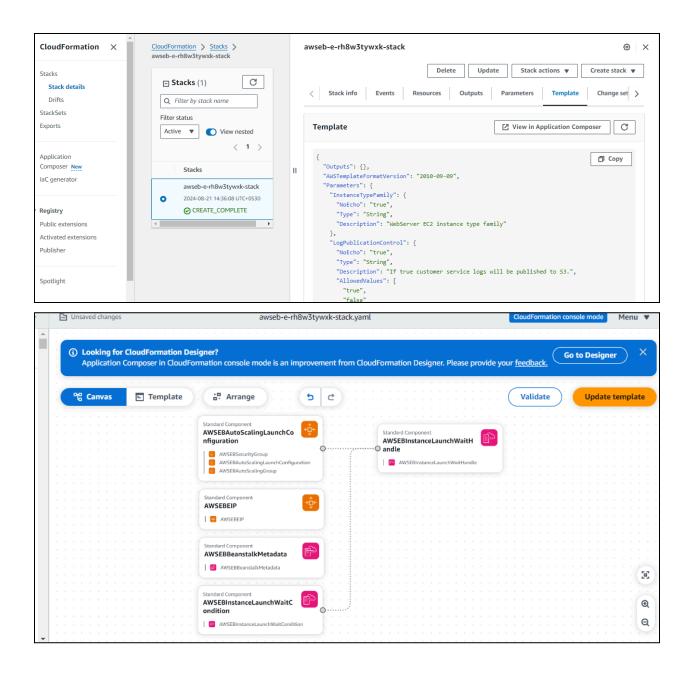


Step 8(optional): Search for CloudFormation as it helps you to manage AWS resources in a text file or a template.

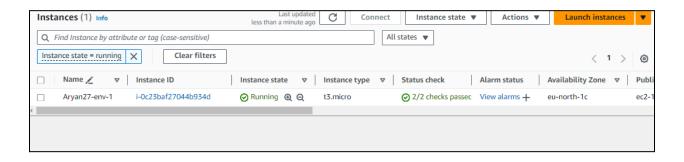


Here, the stacks option given below is a collection of AWS resources.

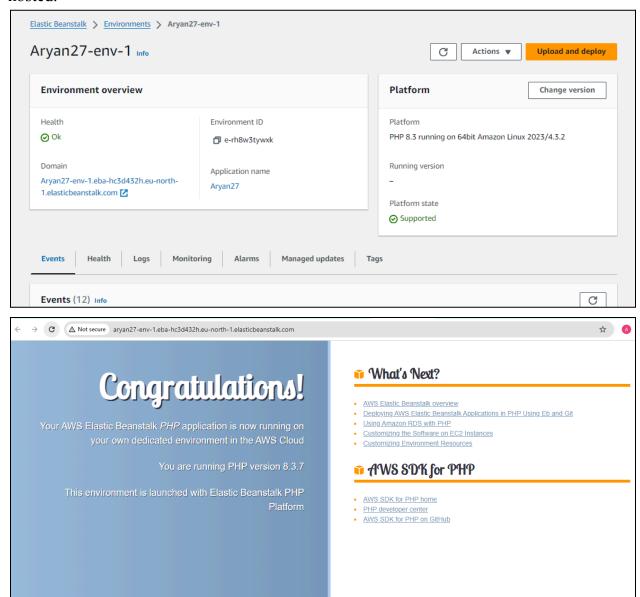




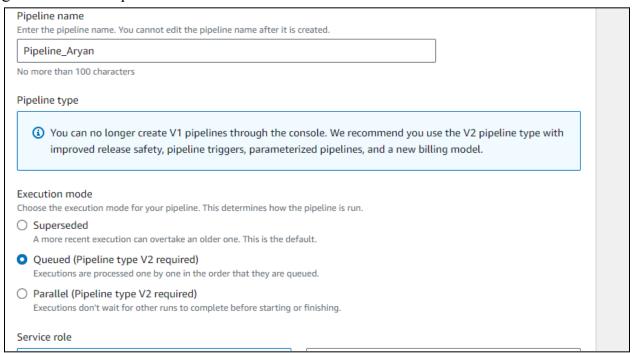
Step 9:Now,we search for EC2 in the services section and we notice that an instance of the Elastic Beanstalk app has already been created and it is running.



Step 10:Click on the domain link given below, after which we are redirected to a Congratulations page implying that our sample PHP application has been successfully hosted.



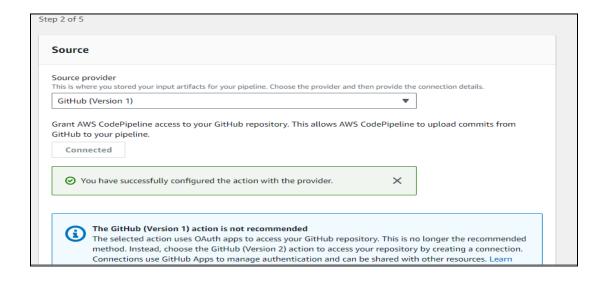
Step 11:Now,we will be deploying our website using CodePipeline,so follow all the steps given below and proceed.

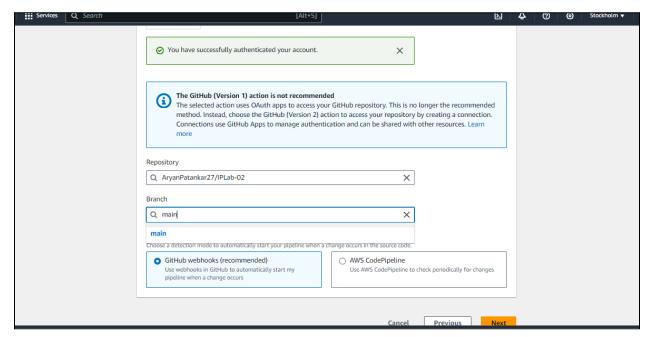


Step 12:In the source stage, choose GitHub v2 as the provider, then connect your GitHub account to

AWS by creating a connection. You'd need your GitHub credentials and then you'd need to

authorize and install AWS on the forked GitHub Repository.

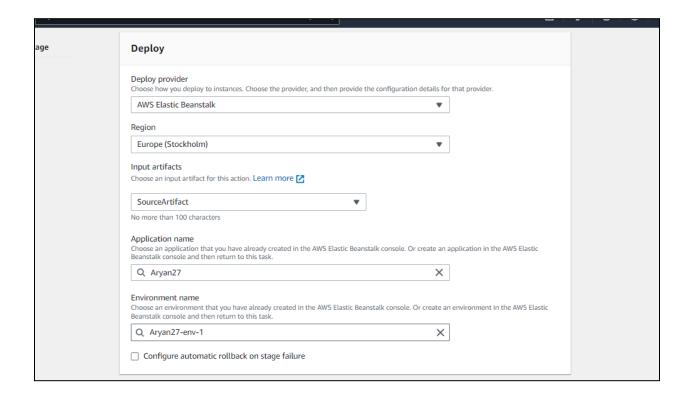




Then, simply choose this forked repository and the branch which you will be able to find in the search box. After that, click Continue and skip the build stage. Proceed to the Deployment stage.

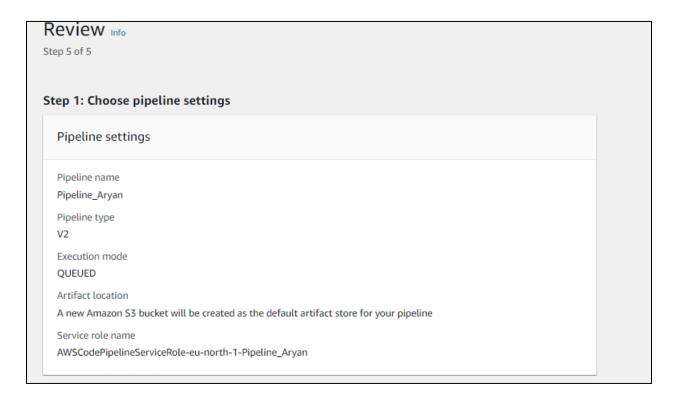
Step 13:Choose Beanstalk as the Deploy Provider, same region as the Bucket and Beanstalk, name and

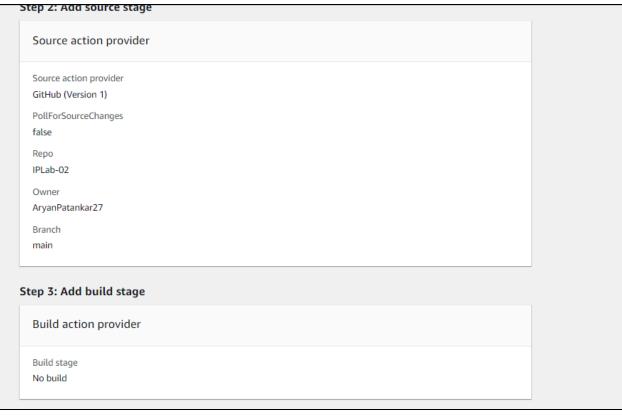
environment name. Click Next, Review and create the pipeline.

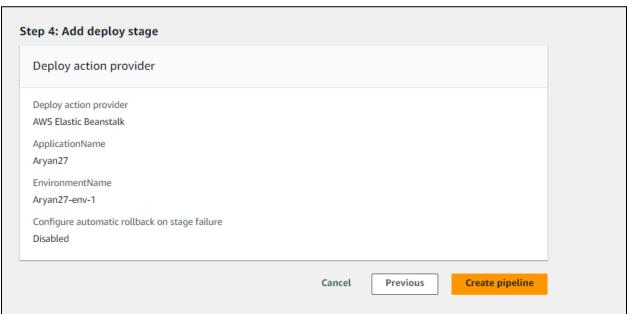


Deploy action provider		
Deploy action provider		
AWS Elastic Beanstalk		
pplicationName		
ryan27		
InvironmentName		
Aryan27-env		
Configure automatic rollback on stage failure		
isabled		

Step 14: Review all the selected steps once.

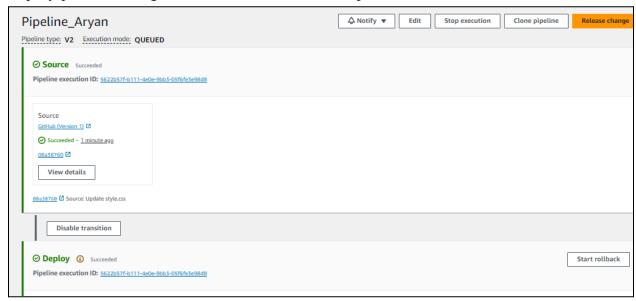




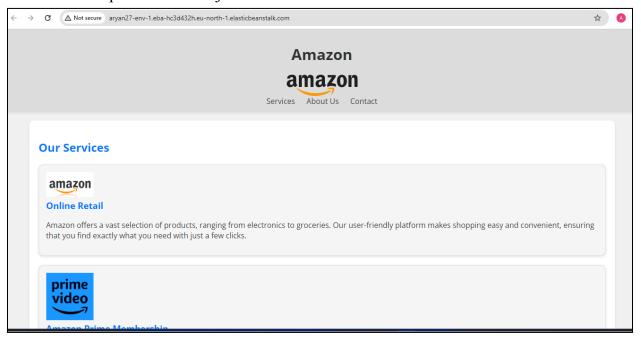


Step 15:In a few minutes, we will have our pipeline created. Once we have the success message on the

Deploy part, we can go ahead and check our URL provided in the EBS environment.



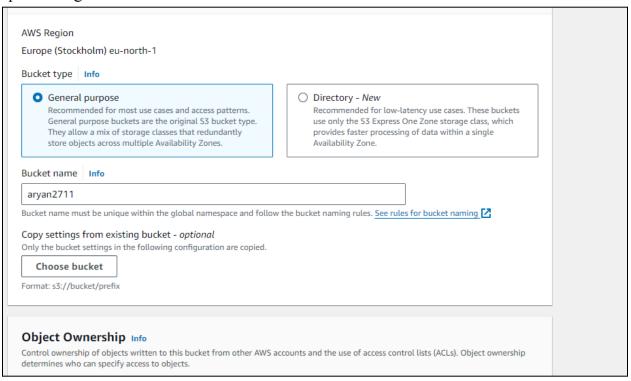
This is the sample website we just created.

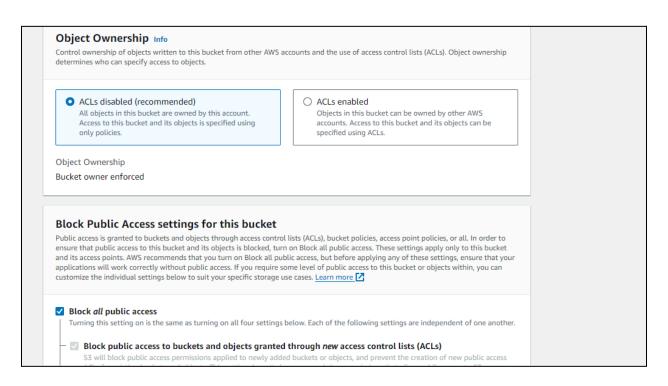


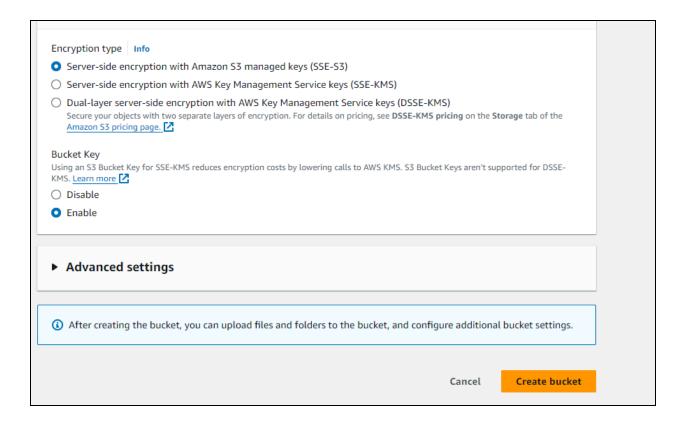
If you can see this, that means that you successfully created an automated software using CodePipeline.

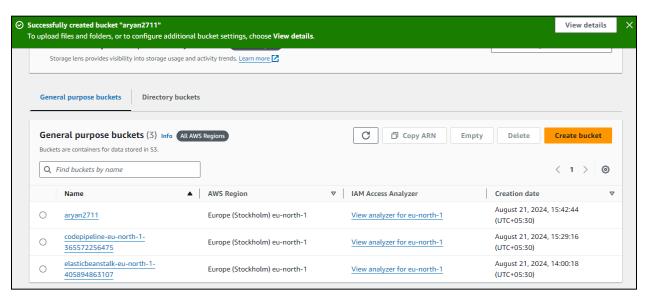
Using S3 Bucket

Step 16:Now, we will be deploying our website using the S3 bucket. So proceed with the options as given below.

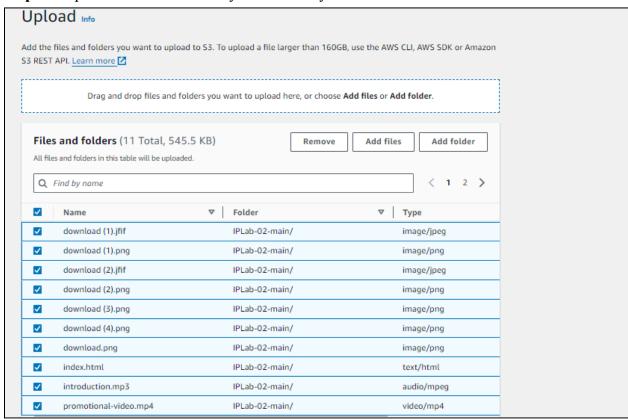


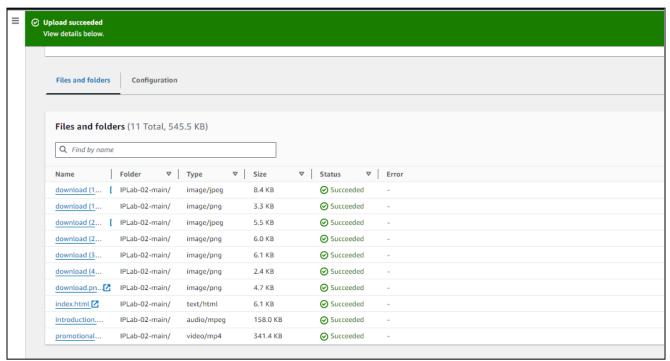






Step 17:Upload all the files that you want on your website that is to be hosted.





Step 18:Here,if the upload of files is successful you would get the following page,meaning your website has been successfully hosted using the S3 bucket.

