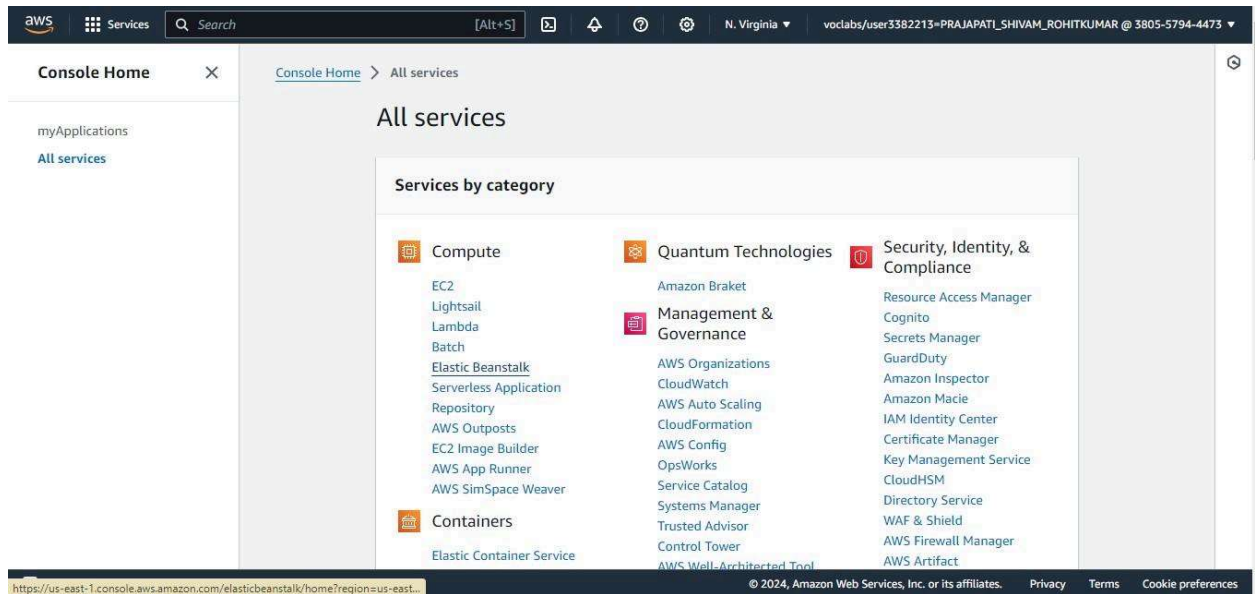
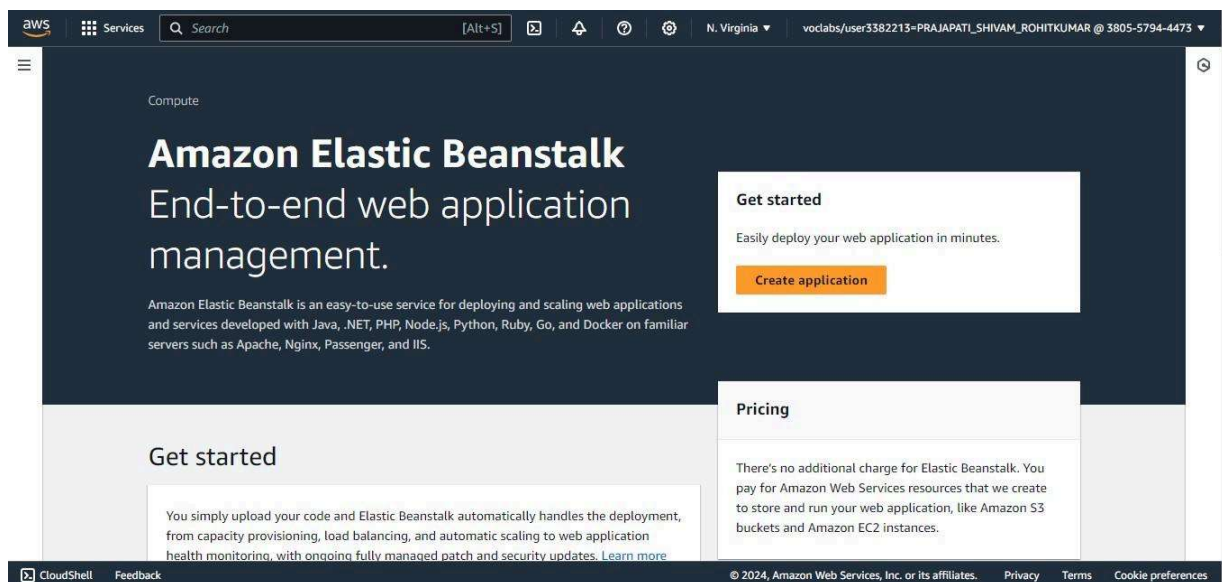


Experiment No :2

Step 1: Login to your AWS console. Search for Elastic Beanstalk in the searchbar near services.



Step 2: Go to Elastic Beanstalk and click on Create Application



Step 3: Enter the name of your application. Scroll down and in the platform, select platform as PHP. Keep the application code as Sample Application. Set the instance to single instance. Click on NEXT.

Step 1
Configure environment

Step 2
Configure service access

Step 3 - optional
Set up networking, database, and tags

Step 4 - optional
Configure instance traffic and scaling

Step 5 - optional
Configure updates, monitoring, and logging

Step 6
Review

Configure environment

Environment tier

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications.

☒ Web server environment
Run a website, web application, or web API that serves HTTP requests. [Learn more](#)

☐ Worker environment
Run a worker application that processes long-running workloads on demand or performs tasks on a schedule. [Learn more](#)

Application information

Application name
FirstWebApp
Maximum length of 100 characters.

► Application tags (optional)

(Scroll Down)

Environment information

Choose the name, subdomain and description for your environment. These cannot be changed later.

Environment name
FirstWebApp-env
Must be from 4 to 40 characters in length. The name can contain only letters, numbers, and hyphens. It can't start or end with a hyphen. This name must be unique within a region in your account.

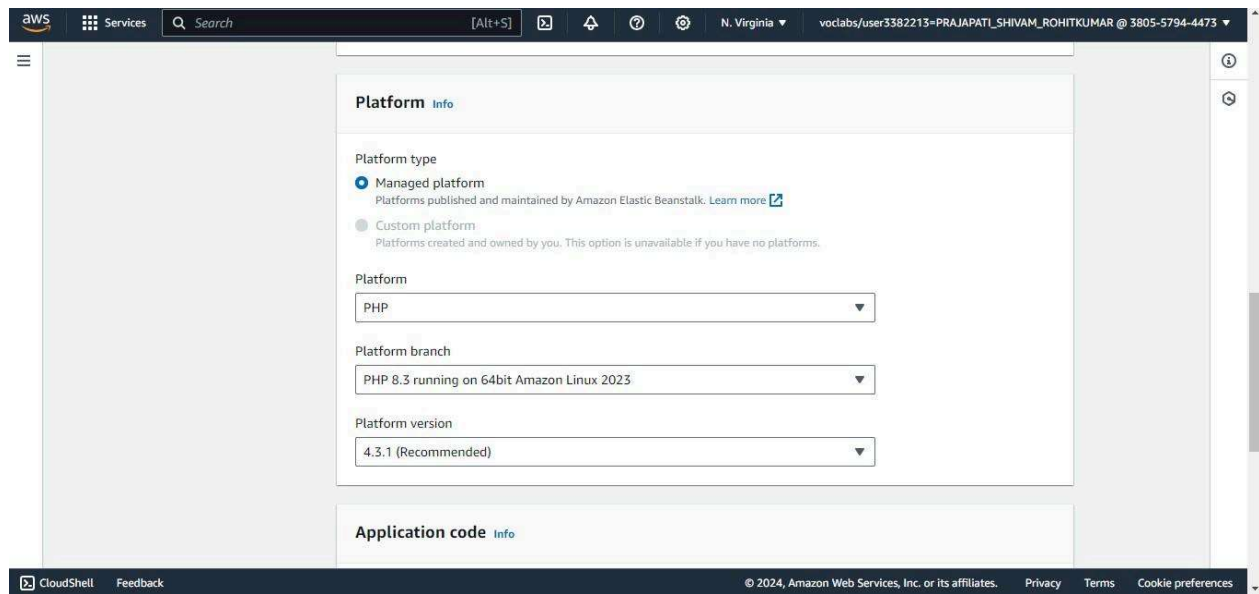
Domain
Leave blank for autogenerated value .us-east-1.elasticbeanstalk.com [Check availability](#)

Environment description

Platform

Platform type
☒ Managed platform

(Scroll Down)



The screenshot shows the 'Platform' configuration page in the AWS Elastic Beanstalk console. The page is titled 'Platform' with an 'Info' link. It contains two main sections: 'Platform type' and 'Platform'. The 'Platform type' section has two radio buttons: 'Managed platform' (selected) and 'Custom platform'. The 'Platform' section has three dropdown menus: 'Platform' (set to 'PHP'), 'Platform branch' (set to 'PHP 8.3 running on 64bit Amazon Linux 2023'), and 'Platform version' (set to '4.3.1 (Recommended)'). Below these is an 'Application code' section with an 'Info' link. The footer of the console shows 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc. or its affiliates.

Platform [Info](#)

Platform type

- ☒ Managed platform
Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)
- ☐ Custom platform
Platforms created and owned by you. This option is unavailable if you have no platforms.

Platform

PHP

Platform branch

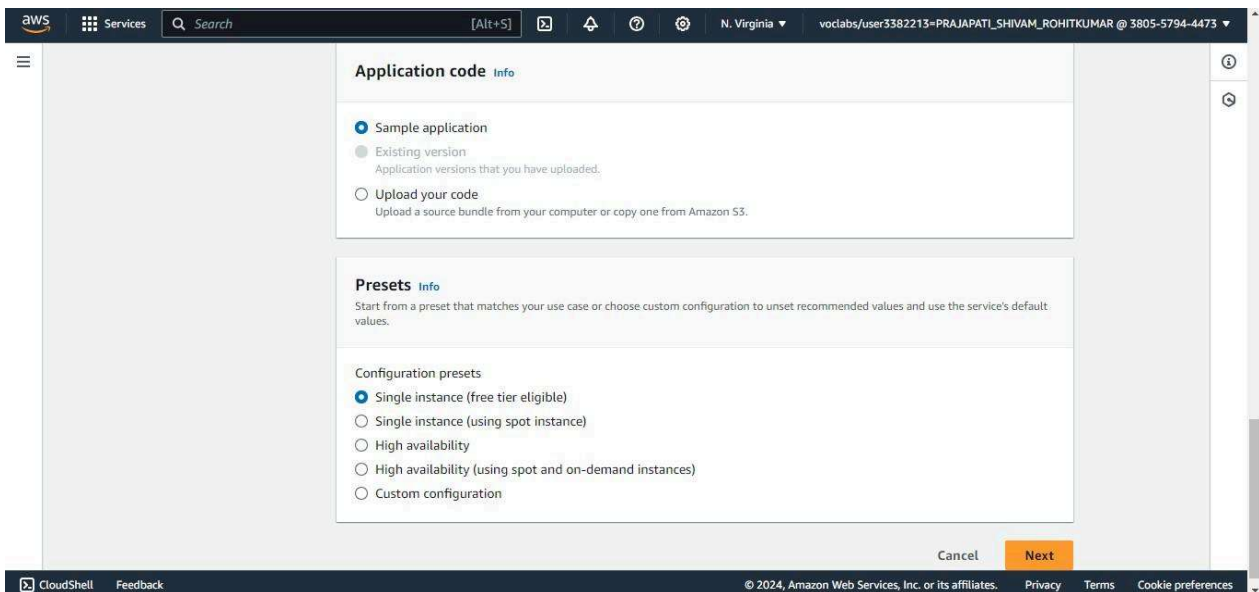
PHP 8.3 running on 64bit Amazon Linux 2023

Platform version

4.3.1 (Recommended)

Application code [Info](#)

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences



The screenshot shows the 'Application code' configuration page in the AWS Elastic Beanstalk console. The page is titled 'Application code' with an 'Info' link. It contains two main sections: 'Application code' and 'Presets'. The 'Application code' section has three radio buttons: 'Sample application' (selected), 'Existing version', and 'Upload your code'. The 'Presets' section has a heading 'Configuration presets' and five radio buttons: 'Single instance (free tier eligible)' (selected), 'Single instance (using spot instance)', 'High availability', 'High availability (using spot and on-demand instances)', and 'Custom configuration'. At the bottom right of the configuration area are 'Cancel' and 'Next' buttons. The footer of the console shows 'CloudShell', 'Feedback', and copyright information for Amazon Web Services, Inc. or its affiliates.

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 default values.

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

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

(Click on Next)

Step 4: Use an existing service role and choose whatever service role is present on your account

Configure service access Info

Service access
IAM roles, assumed by Elastic Beanstalk as a service role, and EC2 instance profiles allow Elastic Beanstalk to create and manage your environment. Both the IAM role and instance profile must be attached to IAM managed policies that contain the required permissions. [Learn more](#)

Service role
☐ Create and use new service role
☒ Use an existing service role

Existing service roles
Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.

LabRole

EC2 key pair
Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)

vockey

EC2 instance profile
Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.

LabInstanceProfile

Step 5: Click on Skip to Review

Configure service access

Service role
☐ Create and use new service role
☒ Use an existing service role

Existing service roles
Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.

LabRole

EC2 key pair
Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)

vockey

EC2 instance profile
Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.

LabInstanceProfile

[View permission details](#)

Cancel [Skip to review](#) [Previous](#) [Next](#)

Step 6: Review the settings that you have set up for your application and submit your application

The screenshot shows the AWS IAM console 'Review' page for Step 1: Configure environment. The left sidebar lists steps 1 through 6, with Step 6 'Review' selected. The main content area shows the 'Environment information' section with the following details:

Environment tier	Application name
Web server environment	FirstWebApp

Environment name	Application code
FirstWebApp-env	Sample application

Platform: am:aws:elasticbeanstalk-us-east-1:platform/PHP 8.3 running on 64bit Amazon Linux 2023/4.3.1

Below this, the 'Step 2: Configure service access' section is visible but empty.

(Scroll Down)

The screenshot shows the AWS IAM console 'Review' page for Step 2: Configure service access. The left sidebar lists steps 1 through 6, with Step 2 'Configure service access' selected. The main content area shows the 'Service access' section with the following details:

Display errors	Document root	Max execution time
Off	-	60

Memory limit	Zlib output compression	Proxy server
256M	Off	nginx

Logs retention	Rotate logs	Update level
7	Deactivated	minor

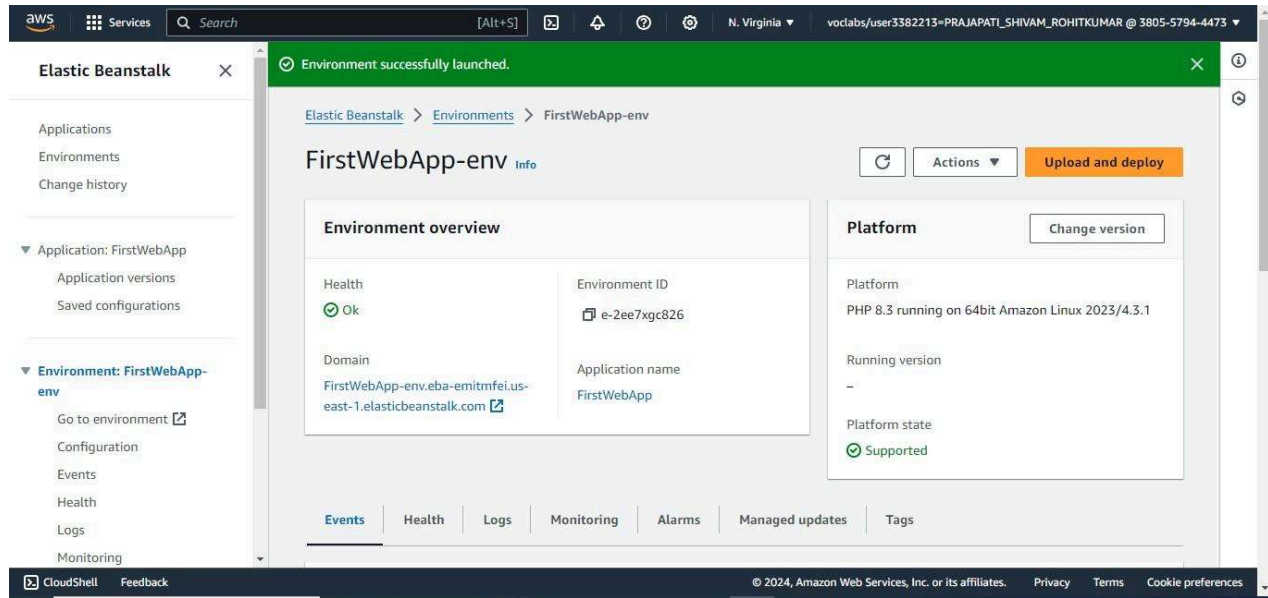
X-Ray enabled: Deactivated

Environment properties

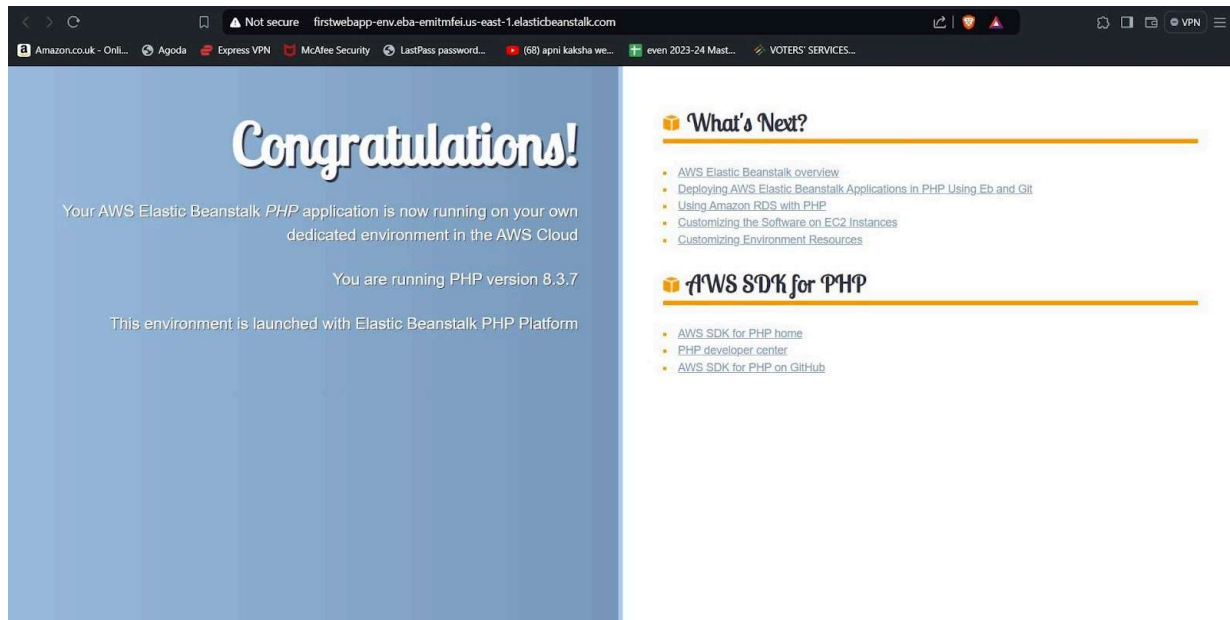
Key	Value
No environment properties	
There are no environment properties defined	

At the bottom, there are 'Cancel', 'Previous', and 'Submit' buttons.

(Click on the Submit)



(Click on the link under domain it will redirect to a new page)



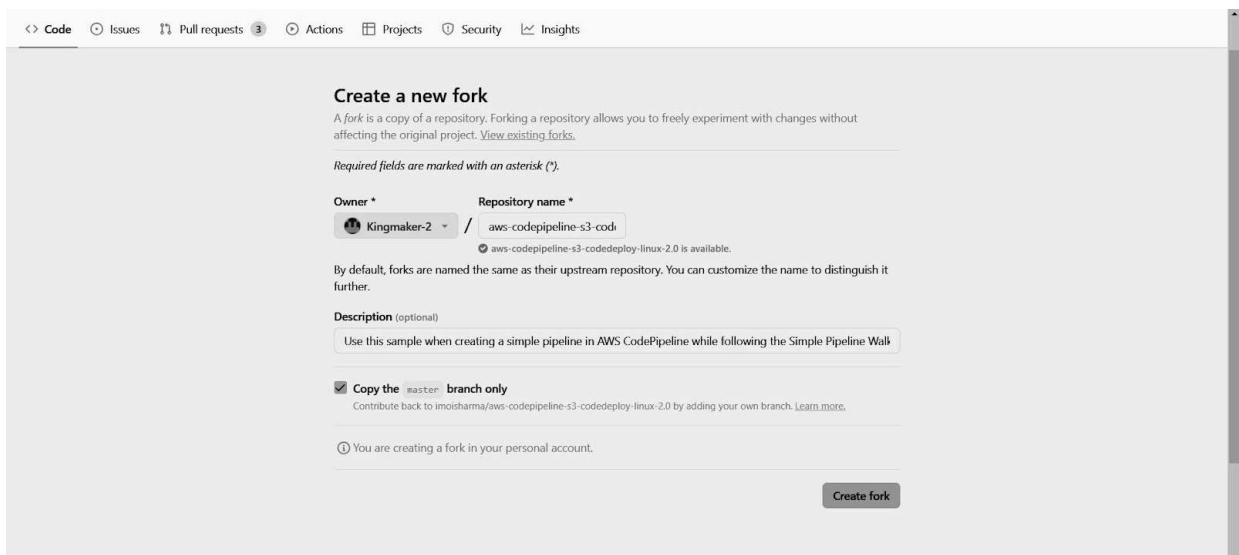
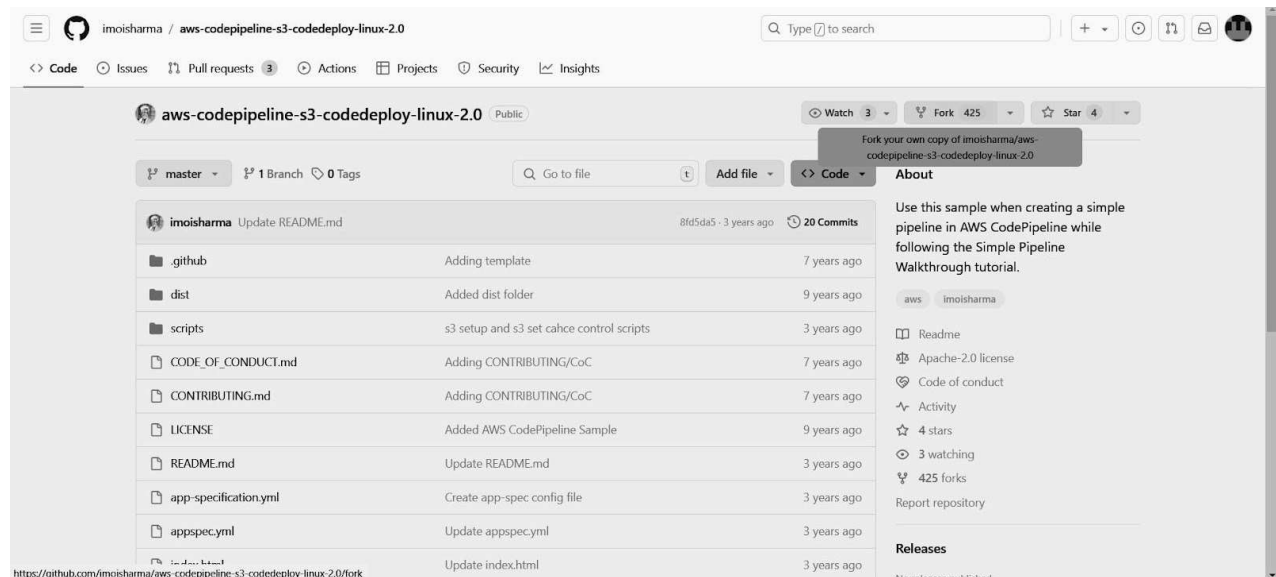
Name: Aditya Dubey

Div: D1
SC

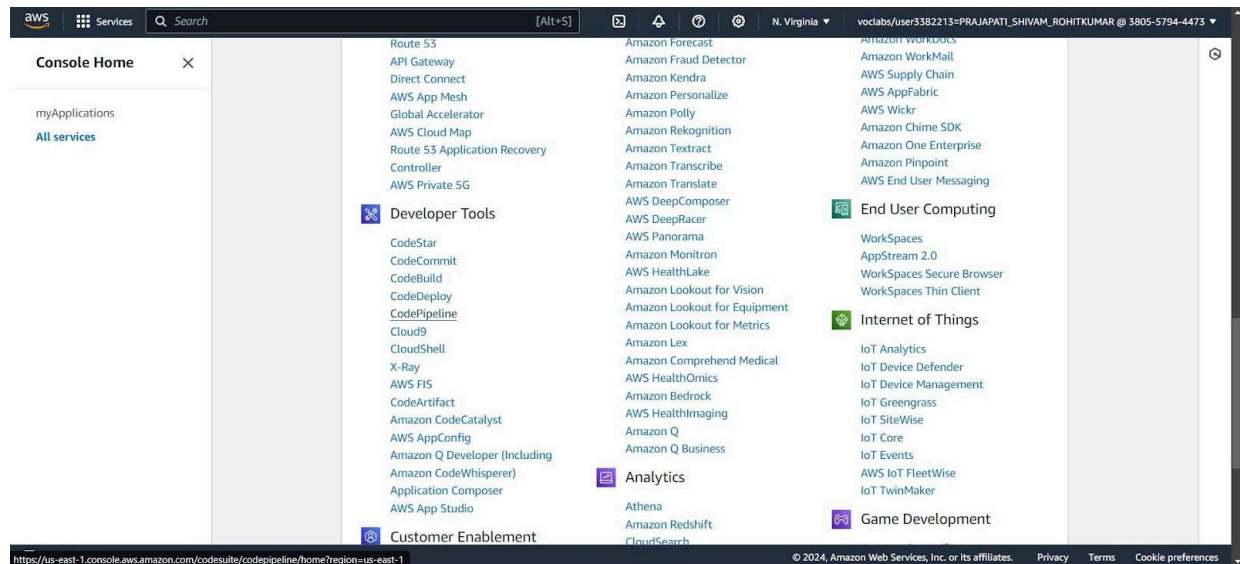
Roll
No: 10

Step 7 : Go to the github link below. This is a github with a sample code for deploying a file on AWS CodePipeline. Fork this repository into your personal github.

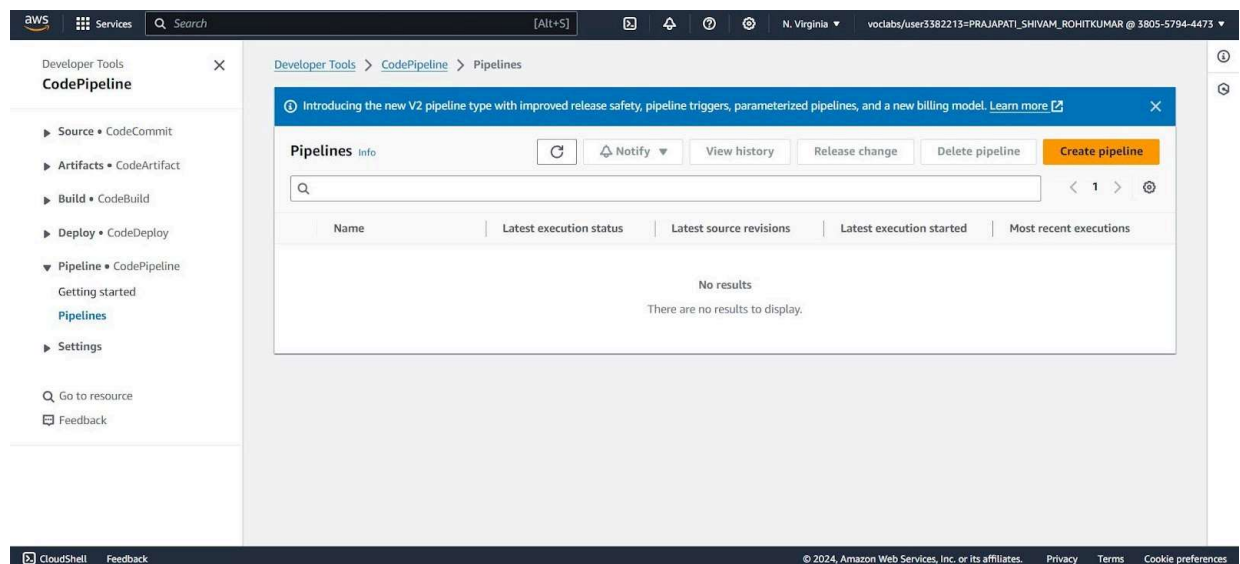
<https://github.com/aws-samples/aws-codepipeline-s3-codedeploy-linux>



Step 8: Search CodePipeline in the services tab and click on it.



Step 9: Click on Create Pipeline.



Step 10: Give a name to your Pipeline. A new service role would be created with the name of the pipeline.

The screenshot shows the 'Service role' step of the AWS CodePipeline 'New pipeline' wizard. The 'Execution mode' is set to 'Queued (Pipeline type V2 required)'. Under 'Service role', the 'New service role' option is selected. The 'Role name' field contains 'AWSCodePipelineServiceRole-us-east-1-MyPipeline'. The checkbox 'Allow AWS CodePipeline to create a service role so it can be used with this new pipeline' is checked. The 'Variables' section shows 'No variables defined at the pipeline level in this pipeline.'

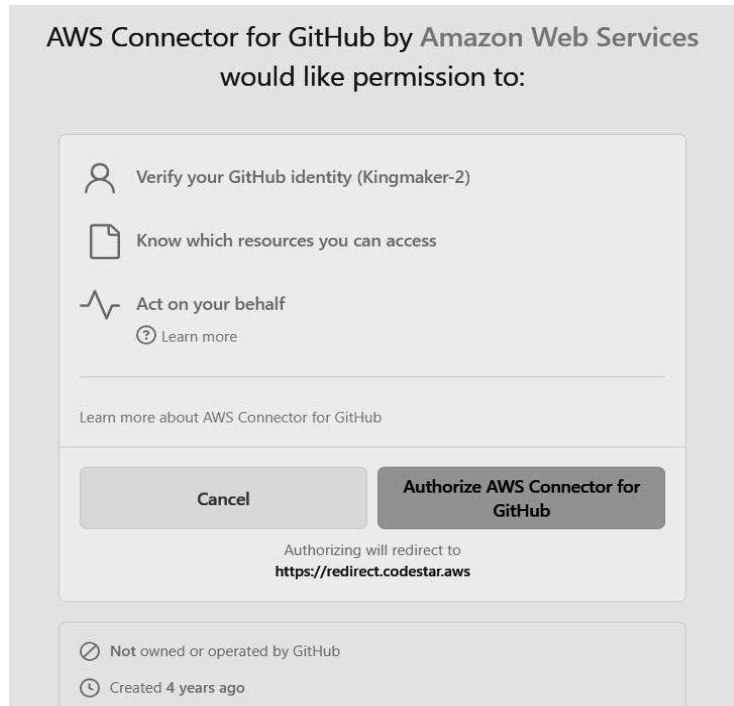
The screenshot shows the 'Variables' step of the AWS CodePipeline 'New pipeline' wizard. The 'Role name' field still contains 'AWSCodePipelineServiceRole-us-east-1-MyPipeline'. The checkbox 'Allow AWS CodePipeline to create a service role so it can be used with this new pipeline' is checked. The 'Variables' section shows 'No variables defined at the pipeline level in this pipeline.' with an 'Add variable' button. A note states: 'The first pipeline execution will fail if variables have no default values.' At the bottom, there is an 'Advanced settings' section and 'Cancel' and 'Next' buttons.

Step 11: Select a source provider (as GitHub Version (2)). Click on connect to Github (*This part have to be done in the personal account of aws as in academy account it wont allow you to create pipeline with github version 1 or 2*)

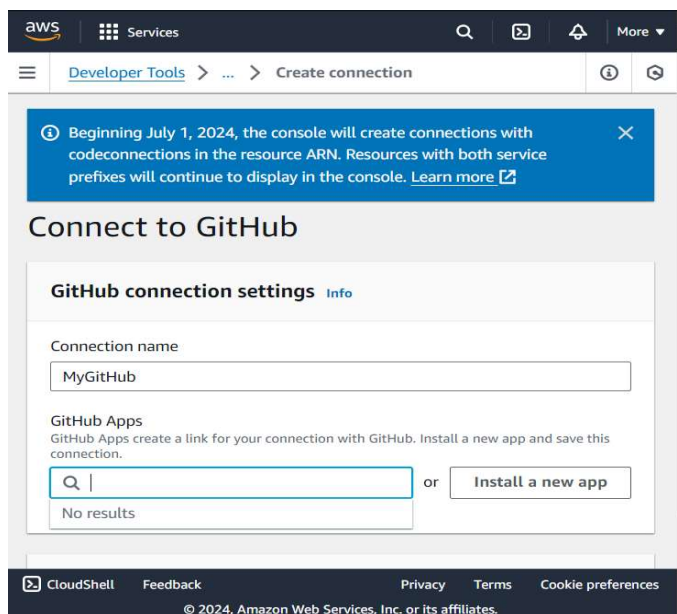
The screenshot shows the AWS CodePipeline console interface. The breadcrumb navigation at the top reads: **Developer Tools** > **CodePipeline** > **Pipelines** > **Create new pipeline**. The left-hand navigation pane lists the steps of the pipeline creation process: **Step 1: Choose pipeline settings**, **Step 2: Add source stage** (which is the active step), **Step 3: Add build stage**, **Step 4: Add deploy stage**, and **Step 5: Review**. The main content area is titled **Add source stage** (Step 2 of 5). It features a **Source** section where the **Source provider** is set to **GitHub (Version 2)**. A blue information box states: **New GitHub version 2 (app-based) action**. Below this, the **Connection** section prompts the user to choose an existing connection or create a new one, with a **Connect to GitHub** button. The **Repository name** and **Default branch** fields are also visible, each with a search icon and a placeholder text.

Step 12: Give a name to your GitHub app Connection and click on Connect. This will give you a prompt to either to select a GitHub app or to install a new app. If it is your first time, click on Install a new app.

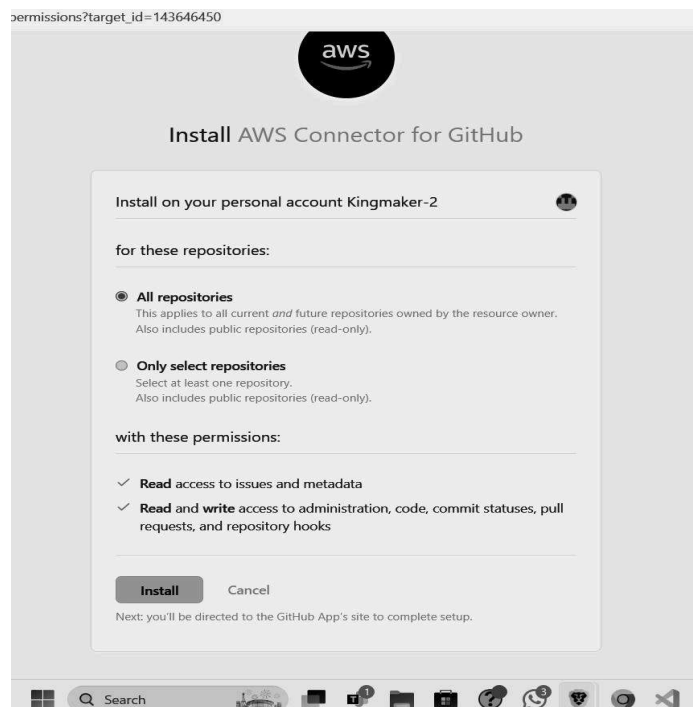
The screenshot shows the AWS CodePipeline console interface for the **Create a connection** step. The breadcrumb navigation at the top reads: **Developer Tools** > ... > **Create connection**. The left-hand navigation pane shows the steps: **Developer Tools**, ..., **Create connection** (active), and **More**. The main content area is titled **Create a connection**. It features a **Create GitHub App connection** section. The **Connection name** field is filled with **MyGitHub**. Below this, there is a **Tags - optional** section. At the bottom right of the main content area, there is a prominent orange **Connect to GitHub** button. The footer of the console shows links for **CloudShell**, **Feedback**, **Privacy**, **Terms**, and **Cookie preferences**, along with the copyright notice: © 2024, Amazon Web Services, Inc. or its affiliates.



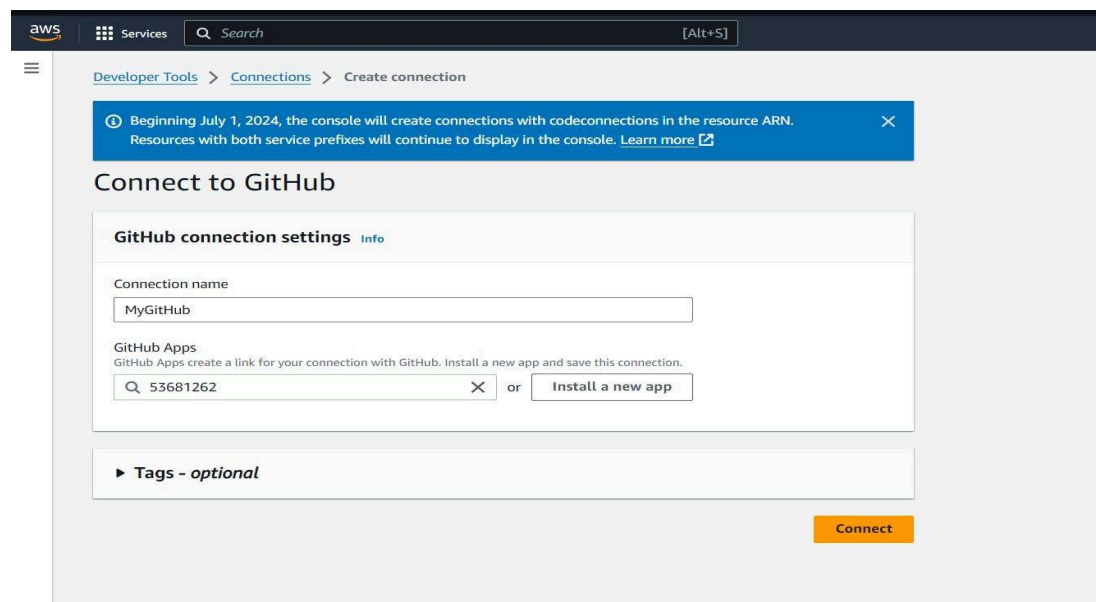
(Click on Authorize)



Step 13: This will direct you to install AWS connector on your GitHub .Install it to your account and give it its permissions



Step 14: After the app is set up, it gives the number in the text field. Click on Connect. After clicking on connect, the link is shown in the connection field and AWS shows that GitHub connection is ready to use.



The screenshot shows the AWS CodePipeline console interface. The breadcrumb navigation is 'Developer Tools > CodePipeline > Pipelines > Create new pipeline'. The left sidebar shows a progress list: Step 1 (Choose pipeline settings), Step 2 (Add source stage - selected), Step 3 (Add build stage), Step 4 (Add deploy stage), and Step 5 (Review). The main content area is titled 'Add source stage' with an 'Info' link. Below the title, it says 'Step 2 of 5'. The 'Source' section has a 'Source provider' dropdown set to 'GitHub (Version 2)'. A blue information box explains the 'New GitHub version 2 (app-based) action'. The 'Connection' section shows a search for 'arn:aws:codeconnections:us-east-1:011528263337:connection/b7859e8a-5ft' and a 'Connect to GitHub' button. A green 'Ready to connect' message indicates the connection is ready.

Step 15: Select the repository that you had forked to your GitHub. After that select the branch on which the files are present (default is Master).

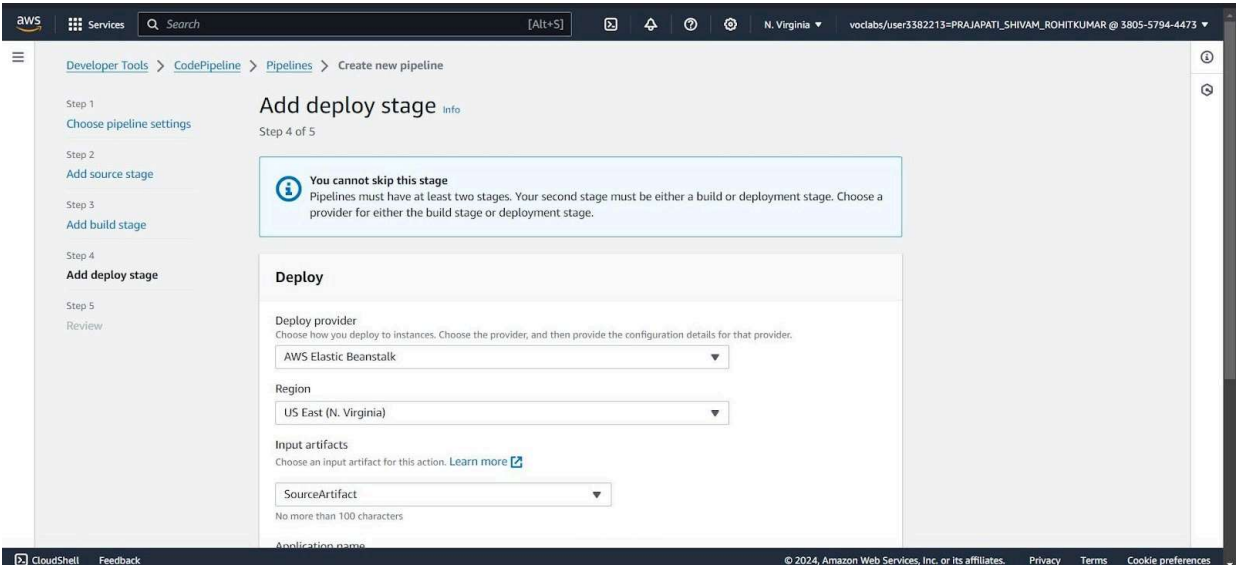
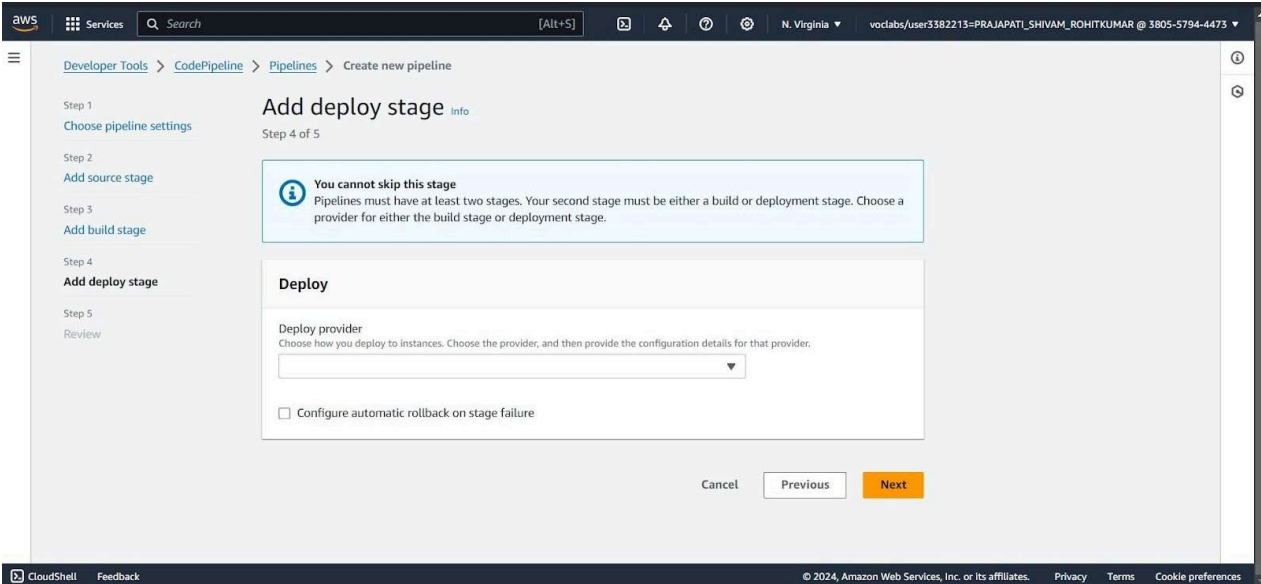
The screenshot shows the 'Repository name' section of the 'Add source stage' step. The 'Repository name' field contains 'Kingmaker-2/aws-codepipeline-s3-codedeploy-linux-2.0'. Below it, a note says 'You can type or paste the group path to any project that the provided credentials can access. Use the format 'group/subgroup/project''. The 'Default branch' field contains 'master'. The 'Output artifact format' section has two options: 'CodePipeline default' (selected) and 'Full clone'. The 'Trigger' section has three options: 'No filter' (selected), 'Specify filter', and 'Do not detect changes'.

Step 16: Set the Trigger type as no filter. This would allow it to the website to update as soon as some change is made in the github.

The screenshot shows the AWS CodePipeline console interface. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and a user profile dropdown. The main content area is titled 'Output artifact format' and 'Trigger'. Under 'Output artifact format', there are two radio button options: 'CodePipeline default' (selected) and 'Full clone'. The 'Trigger' section has a 'Trigger type' dropdown set to 'No filter'. Below it, there are three radio button options: 'No filter' (selected), 'Specify filter', and 'Do not detect changes'. A blue information box at the bottom states: 'You can add additional sources and triggers by editing the pipeline after it is created.' At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons.

Step 17: Skip the build stage and go to Deploy. Select the deploy provider as AWS Elastic Beanstalk and Input Artifact as SourceArtifact. The application name would be the name of your Elastic Beanstalk. Then click on next.

The screenshot shows the AWS CodePipeline console interface. The left sidebar shows a list of steps: 'Step 1: Choose pipeline settings', 'Step 2: Add source stage', 'Step 3: Add build stage' (selected), 'Step 4: Add deploy stage', and 'Step 5: Review'. The main content area is titled 'Add build stage' and 'Step 3 of 5'. It shows a 'Build - optional' section with a 'Build provider' dropdown menu. Below the dropdown, there's a text input field. At the bottom right, there are 'Cancel', 'Previous', 'Skip build stage', and 'Next' buttons.



The screenshot shows the 'Review' step configuration in the AWS CodePipeline console. The 'Provider' is set to 'AWS Elastic Beanstalk'. The 'Region' is 'US East (N. Virginia)'. Under 'Input artifacts', 'SourceArtifact' is selected. The 'Application name' is 'FirstWebApp' and the 'Environment name' is 'FirstWebApp-env'. The checkbox 'Configure automatic rollback on stage failure' is checked. At the bottom, there are 'Cancel', 'Previous', and 'Next' buttons.

aws Services Search [Alt+S] N. Virginia voclabs/user3382213=PRAJAPATI_SHIVAM_ROHITKUMAR @ 3805-5794-4473

Review

Choose how you deploy to instances. Choose the provider, and then provide the configuration details for that provider.

AWS Elastic Beanstalk

Region

US East (N. Virginia)

Input artifacts

Choose an input artifact for this action. [Learn more](#)

SourceArtifact

No more than 100 characters

Application name

Choose an application that you have already created in the AWS Elastic Beanstalk console. Or create an application in the AWS Elastic Beanstalk console and then return to this task.

FirstWebApp

Environment name

Choose an environment that you have already created in the AWS Elastic Beanstalk console. Or create an environment in the AWS Elastic Beanstalk console and then return to this task.

FirstWebApp-env

☒ Configure automatic rollback on stage failure

Cancel Previous Next

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

Step 18: Check all the information and click on create Pipeline

The screenshot shows the 'Step 3: Add build stage' and 'Step 4: Add deploy stage' configuration in the AWS CodePipeline console. In Step 3, the 'Build action provider' is 'No build'. In Step 4, the 'Deploy action provider' is 'AWS Elastic Beanstalk', with 'ApplicationName' 'FirstWebApp', 'EnvironmentName' 'FirstWebApp-env', and 'Configure automatic rollback on stage failure' 'Enabled'. At the bottom, there are 'Cancel', 'Previous', and 'Create pipeline' buttons.

aws Services Search [Alt+S] N. Virginia voclabs/user3382213=PRAJAPATI_SHIVAM_ROHITKUMAR @ 3805-5794-4473

Step 3: Add build stage

Build action provider

Build stage

No build

Step 4: Add deploy stage

Deploy action provider

Deploy action provider

AWS Elastic Beanstalk

ApplicationName

FirstWebApp

EnvironmentName

FirstWebApp-env

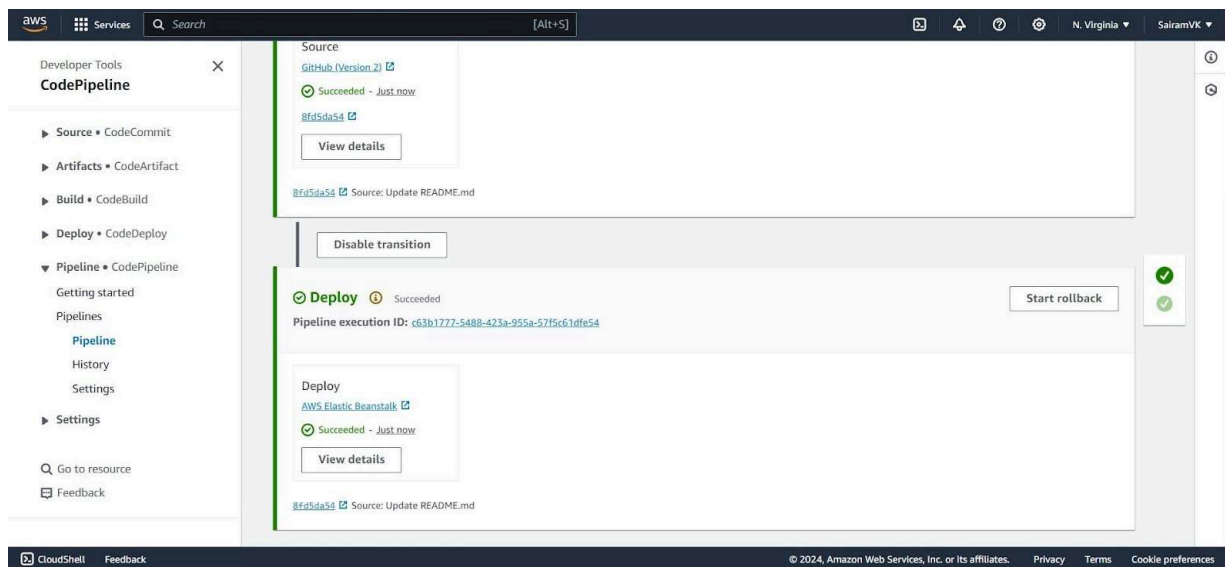
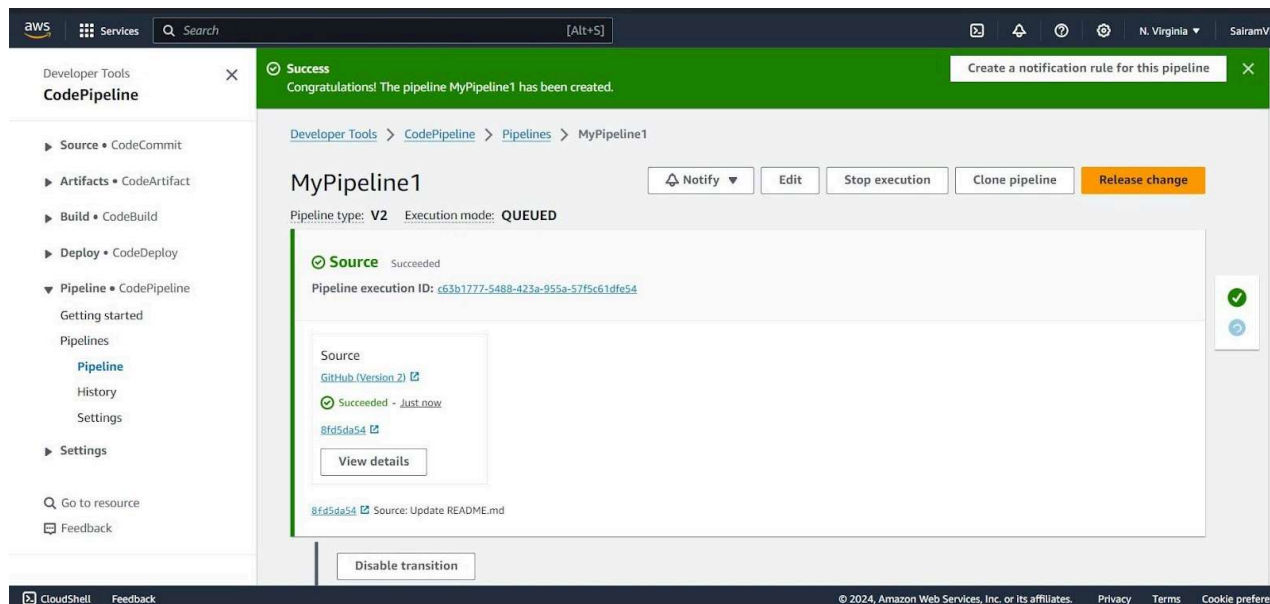
Configure automatic rollback on stage failure

Enabled

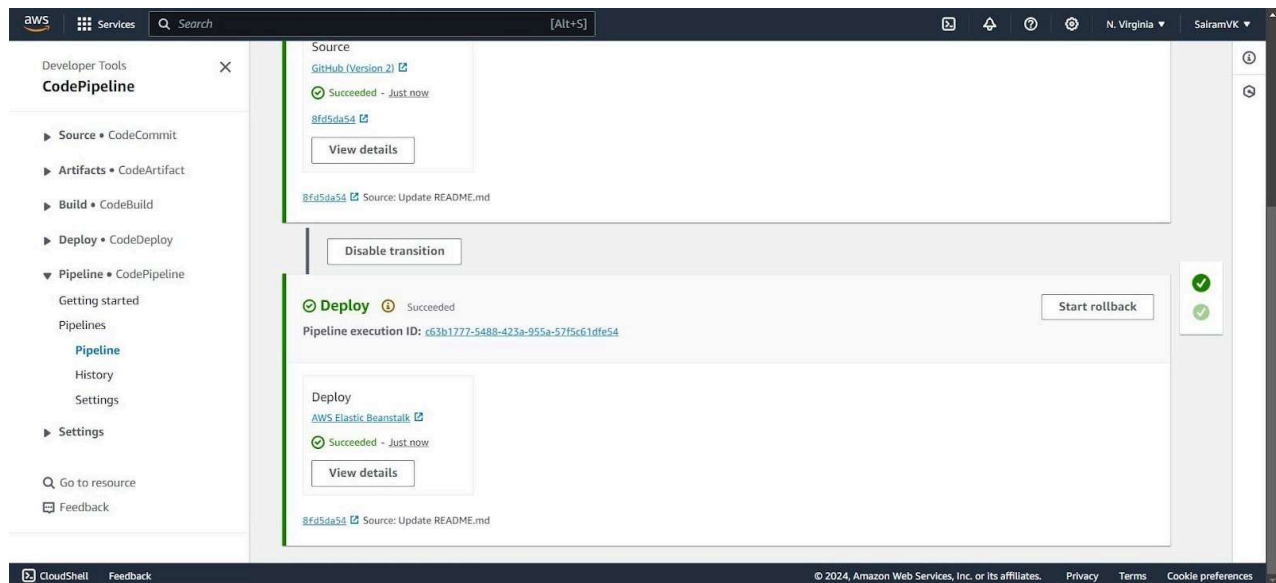
Cancel Previous Create pipeline

CloudShell Feedback © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

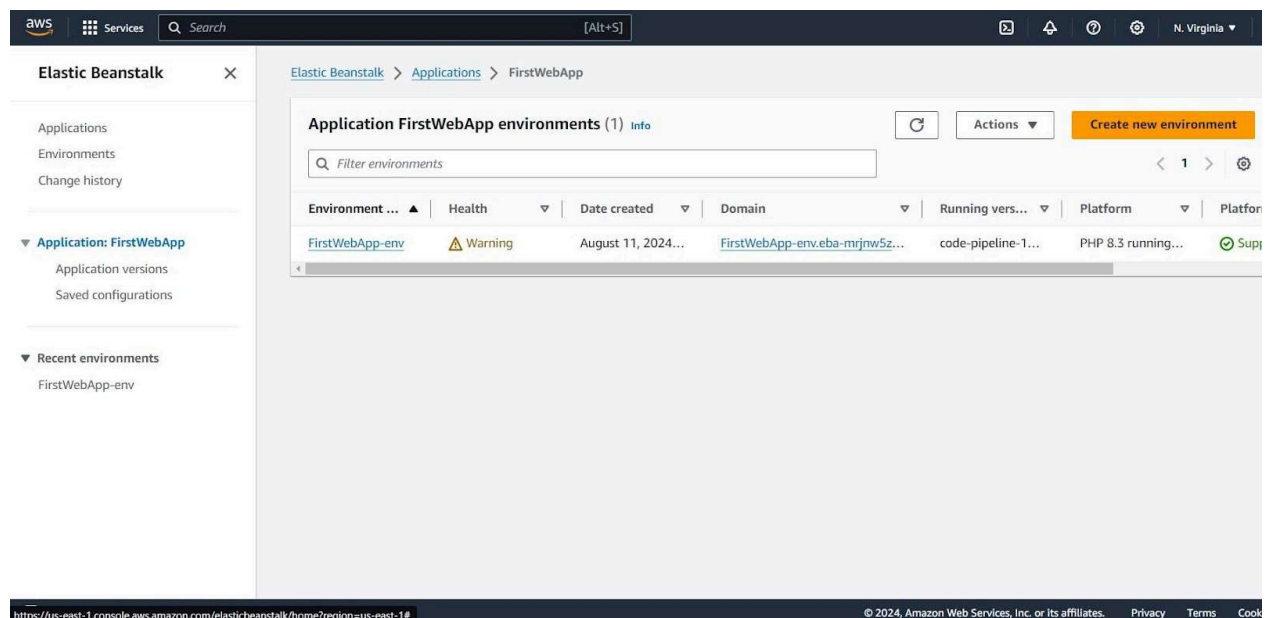
Step 19: If the pipeline is successfully deployed, this screen comes up where the source is set up and then it is transitioned to deploy



Step 20: Once the deployment is complete, click on the AWS Elastic Beanstalk under Deploy.



Step 21: This will redirect you to the application screen of Elastic Beanstalk. Click on the link shown under Domain



Step 22: This will successfully show the sample website hosted.



Step 23: Now, we make some changes to the index.html file in the github. For eg: If you make some changes to the tag .Once the changes are committed ,when the website is refreshed ,the changes will be seen.

