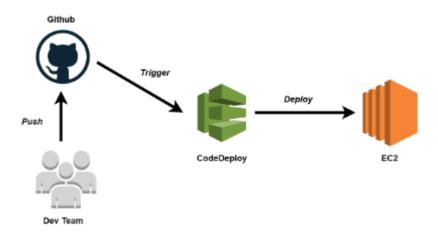
## Steps to Deploy Web Application Using AWS Infrastructure

The below architecture were developers team code is saved in github and by using codedeloy ec2 instances and github is integrated to autodeloy the application.

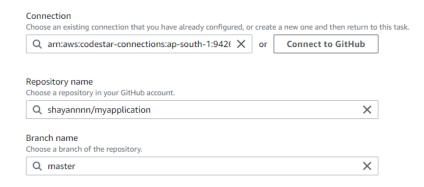


- First created 2 IAM roles
  - 1. Instance- AmazonEC2RoleforAWSCodeDeploy(attached to instance)
  - 2. Code deploy service -AWSCodeDeployRole(attached to code deploy)
- Launched the instances with Amazon Linux 2 AMI image and instances type is t2.micro, select the amazonEC2RoleforAWSCodeDeploy IAM role in IAM role tab.
- In the user data the below script added to install codedeloy agent at boot time.

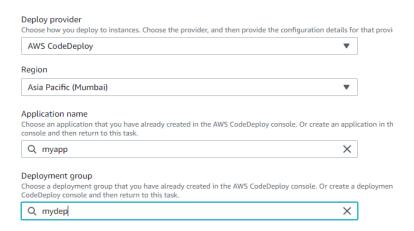
#!/bin/bash
sudo yum -y update
sudo yum -y install ruby
sudo yum -y install wget
cd /home/ec2-user
wget https://aws-codedeploy-ap-south-1.s3.ap-south-1.amazonaws.com/latest/install
sudo chmod +x ./install
sudo ./install auto
sudo yum install -y python-pip
sudo pip install awscli

➤ In security group opened http port 80 in the inbound rule to allow the http traffic.

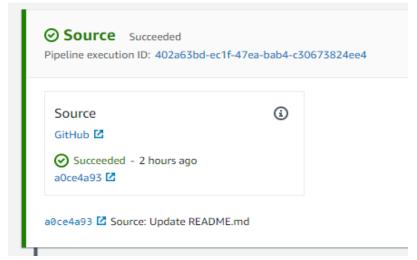
- Created application the codedeploy with the platform EC2 platform.
- Created deployment group and attached the service role(AWSCodeDeployRole) while creating, for high availability load balancer and autoscaling can be added, I selected single ec2 instance for deploy.
- Create a pipeline using codepipline
  - 1. In the source stage, connected to github by selecting source provider as github and provided git repository and master branch of the code.



2. In add deploy stage provide created application and deployment group.



> Checked for the pipeline execution and confirmed it is success



➤ In the instance copy the ip address or dns name of instance and open in the web browser.

