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Hosting website on ec2 by using cloudformation

1. Create yaml file mentioning security group and instance

```yaml
AWSTemplateFormatVersion: "2010-09-09"

Description: "CloudFormation Template for EC2 Instance and Security Group in Multiple Availability Zones."


Parameters:
  InstanceType:
    Description: "EC2 Instance Type"
    Type: String
Default: t2.micro
    AllowedValues:
- t2.micro
- t2.small
- t2.medium
    ConstraintDescription: "Must be a valid EC2 instance type."


  KeyName:
    Description: "Name of an existing EC2 KeyPair to enable SSH access"
    Type: AWS::EC2::KeyPair::KeyName
    Default: Riya_12


Resources:
  WebServerSecurityGroup:
Type: AWS::EC2::SecurityGroup
    Properties:
      GroupDescription: "Allow HTTP and SSH traffic"
      VpcId: vpc-042065cdae99efe51  # Replace with your existing VPC ID
      SecurityGroupIngress:
- IpProtocol: tcp
```

```yaml
          FromPort: 22

          ToPort: 22

          CidrIp: 0.0.0.0/0

    - IpProtocol: tcp

          FromPort: 80

          ToPort: 80

          CidrIp: 0.0.0.0/0


  EC2Instance:

    Type: AWS::EC2::Instance

    Properties:

      InstanceType: !Ref InstanceType

      KeyName: !Ref KeyName

      SecurityGroupIds:

  - !Ref WebServerSecurityGroup

      SubnetId: subnet-0d31376605650c367  # Replace with your existing Subnet ID

      ImageId: ami-0aebec83a182ea7ea  # Ensure this AMI ID is correct for your region

      # No need to specify AvailabilityZone if you are using SubnetId

      UserData:

        Fn::Base64: |

#!/bin/bash          yum

update -y          yum install -

y httpd          systemctl start

httpd          systemctl enable

httpd

          echo "Hello World from $(hostname -f)" > /var/www/html/index.html


Outputs:

  EC2InstanceId:

    Description: "The Instance ID"

    Value: !Ref EC2Instance
```
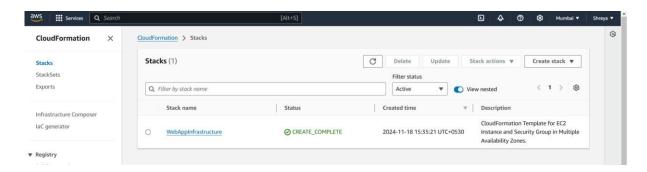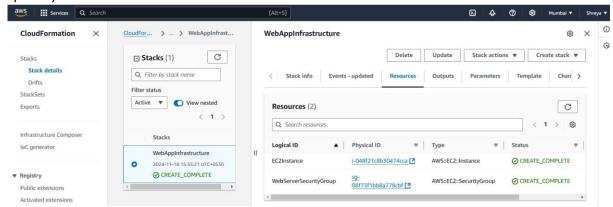
WebServerSecurityGroupId:

 Description: "The Security Group ID"

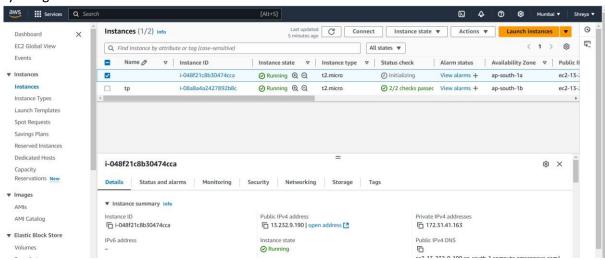 Value: !Ref WebServerSecurityGroup

2. Create Stack on CloudFormation

Upload yaml file

By using cloudformation instance create

Select EC2 -> Connect -> cd /var/log -> la –itrh ->less cfn-init.log and Check

Website run oh public id

Hello World from ip-172-31-41-163.ap-south-1.compute.internal