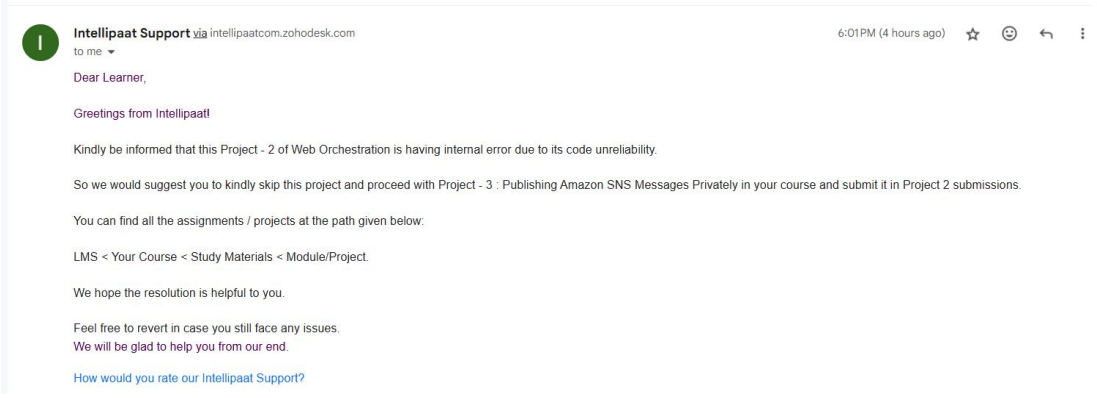
As per support I am doing project 3 instead of project 2



Intellipaat Support via intellipaatcom.zohodesk.com
to me
6:01PM (4 hours ago)

Dear Learner,

Greetings from Intellipaat!

Kindly be informed that this Project - 2 of Web Orchestration is having internal error due to its code unreliability.

So we would suggest you to kindly skip this project and proceed with Project - 3 : Publishing Amazon SNS Messages Privately in your course and submit it in Project 2 submissions.

You can find all the assignments / projects at the path given below:

LMS < Your Course < Study Materials < Module/Project.

We hope the resolution is helpful to you.

Feel free to revert in case you still face any issues.
We will be glad to help you from our end.

How would you rate our Intellipaat Support?

Industry: Healthcare

Problem Statement:

How to secure patient records online and send it privately to the intended party

Topics:

In this project, you will be working on a hospital project to send reports online and
develop a platform so the patients can access the reports via mobile and push
notifications. You will publish the report to an Amazon SNS keeping it secure and
private. Your message will be hosted on an EC2 instance within your Amazon
VPC. By publishing the messages privately, you can improve the message
delivery and receipt through Amazon SNS.

Highlights:

1. AWS CloudFormation to create a VPC
2. Connect VPC with AWS SNS
3. Publish message privately with SNS

Step 1: we will luanch vpc, ec2, sns via cloud formation

Here the yaml format which we used to launch the stack

```yaml
AWSTemplateFormatVersion: '2010-09-09'
Description: Create VPC, EC2 instance, and SNS topic for secure patient records.

Resources:
```

```yaml
VPC:
  Type: AWS::EC2::VPC
  Properties:
    CidrBlock: 10.0.0.0/16
    EnableDnsSupport: true
    EnableDnsHostnames: true
    Tags:
      - Key: Name
        Value: HospitalVPC
```

```yaml
Subnet:
  Type: 'AWS::EC2::Subnet'
  Properties:
    VpcId: !Ref VPC
    CidrBlock: 10.0.1.0/24
    AvailabilityZone:
      !Select
        - 0
        - !GetAZs
    Tags:
      - Key: Name
        Value: HospitalSubnet
```

```yaml
InternetGateway:
  Type: AWS::EC2::InternetGateway
  Properties:
    Tags:
      - Key: Name
        Value: HospitalInternetGateway
```

```yaml
VPCGatewayAttachment:
  Type: AWS::EC2::VPCGatewayAttachment
  Properties:
    VpcId: !Ref VPC
    InternetGatewayId: !Ref InternetGateway
```

```yaml
RouteTable:
  Type: AWS::EC2::RouteTable
  Properties:
    VpcId: !Ref VPC
    Tags:
      - Key: Name
        Value: HospitalRouteTable
```

```yaml
SubnetRouteTableAssociation:
  Type: AWS::EC2::SubnetRouteTableAssociation
  Properties:
    RouteTableId: !Ref RouteTable
    SubnetId: !Ref Subnet
```

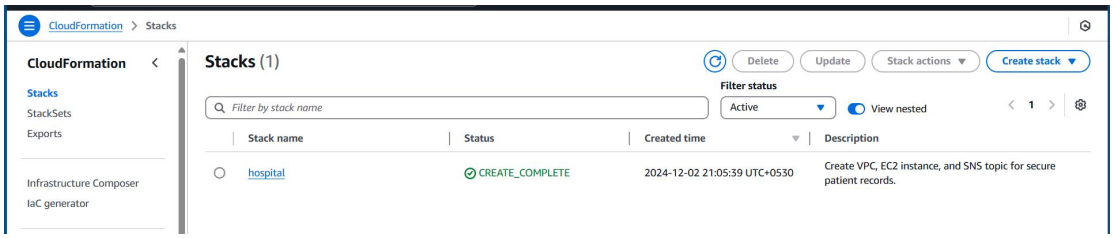
```yaml
InternetGatewayRoute:
  Type: AWS::EC2::Route
  Properties:
    RouteTableId: !Ref RouteTable
    GatewayId: !Ref InternetGateway
    DestinationCidrBlock: 0.0.0.0/0
```

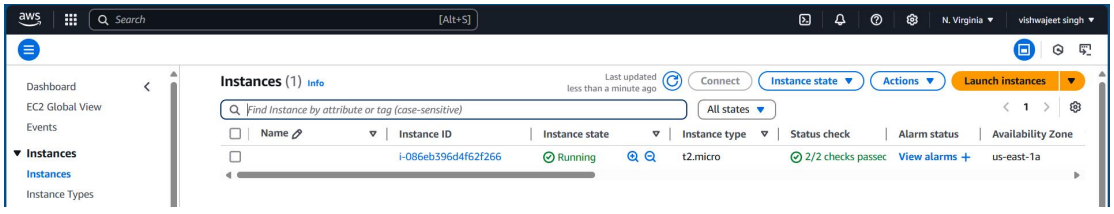
```yaml
SecurityGroup:
  Type: AWS::EC2::SecurityGroup
  Properties:
    GroupDescription: Enable SSH and HTTP access
```

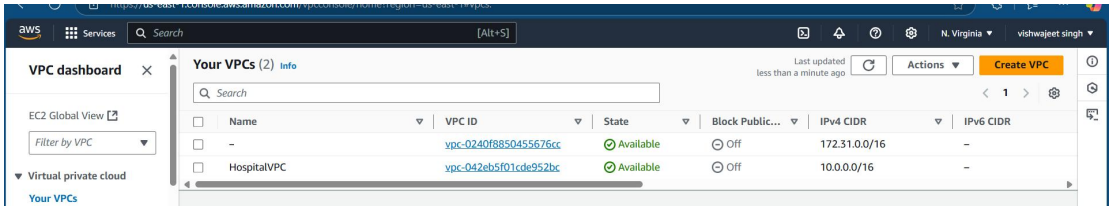
```
    VpcId: !Ref VPC
    SecurityGroupIngress:
      - IpProtocol: tcp
        FromPort: 22
        ToPort: 22
        CidrIp: 0.0.0.0/0
      - IpProtocol: tcp
        FromPort: 80
        ToPort: 80
        CidrIp: 0.0.0.0/0
```

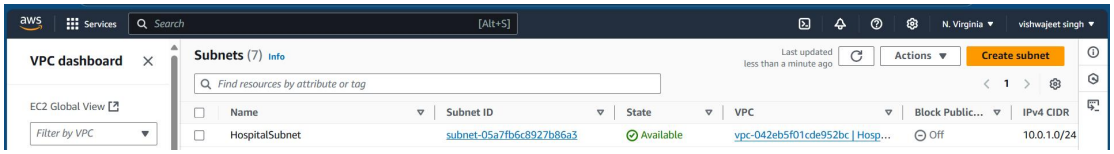
```
EC2Instance:
  Type: AWS::EC2::Instance
  Properties:
    InstanceType: t2.micro
    SecurityGroupIds:
      - !Ref SecurityGroup
    SubnetId: !Ref Subnet
    ImageId: ami-0453ec754f44f9a4a
    KeyName: vish_key
    UserData:
      Fn::Base64: |
        #!/bin/bash
        yum update -y
        yum install -y httpd
        systemctl start httpd
        systemctl enable httpd
        echo "Durga's Hospital Project" > /var/www/html/index.html
```

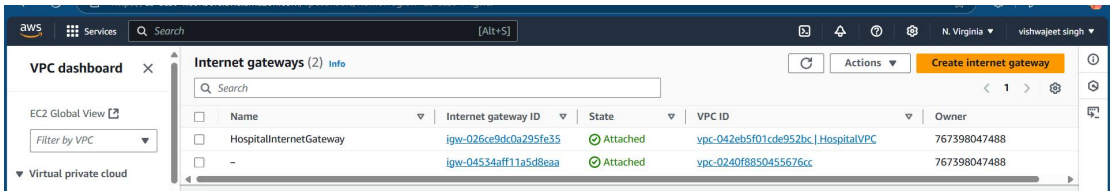
```
SNSTopic:
  Type: AWS::SNS::Topic
  Properties:
    TopicName: PatientReportsTopic
    Subscription:
      - Protocol: email
        Endpoint: patient@example.com
```

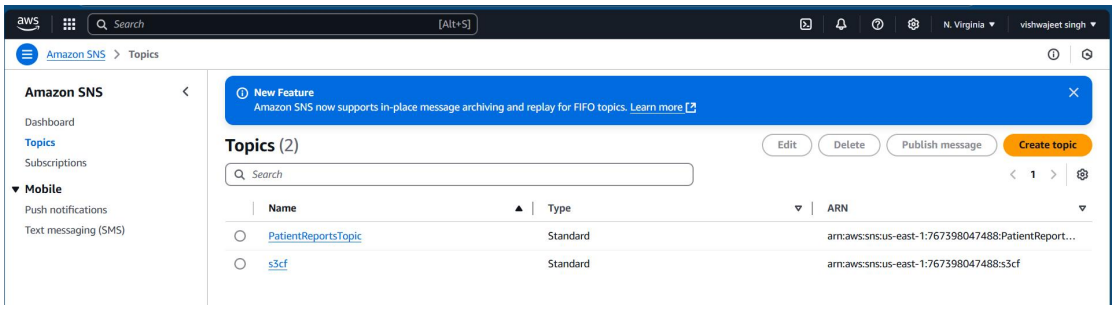




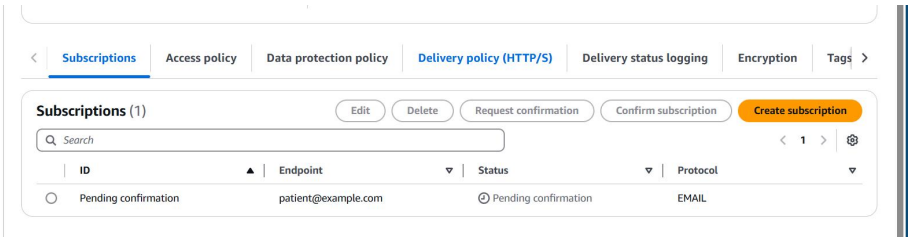


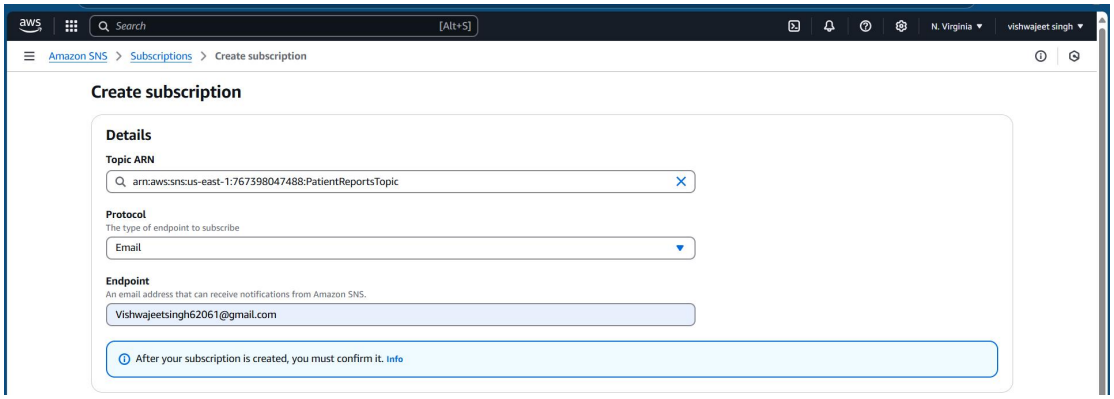




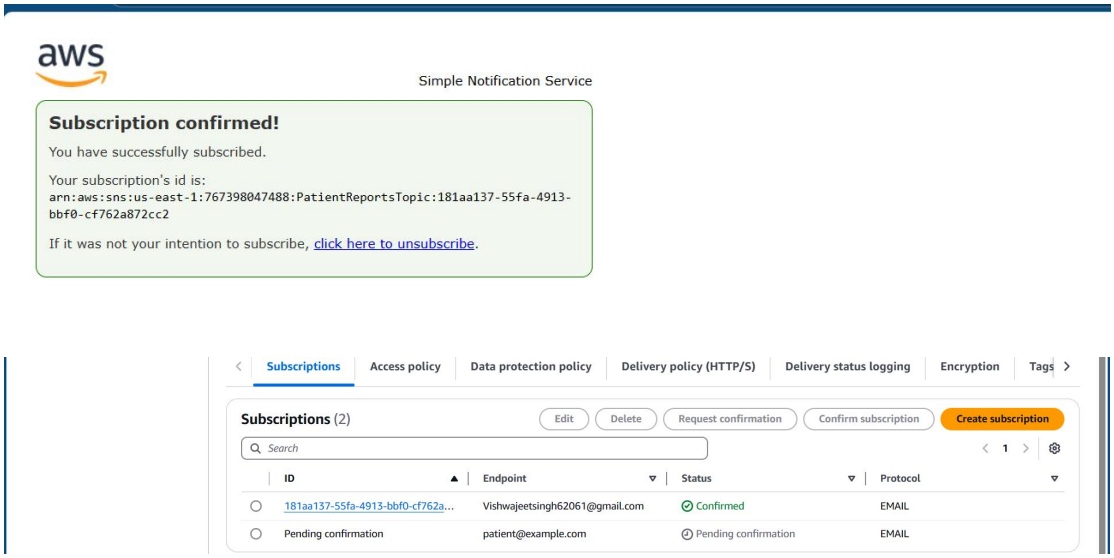


Step 2: go inside SNS and create the subscription

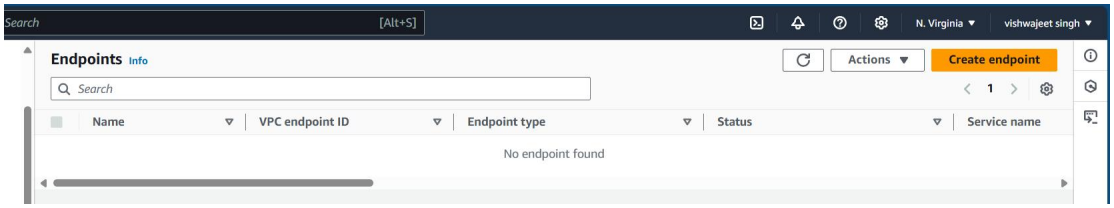


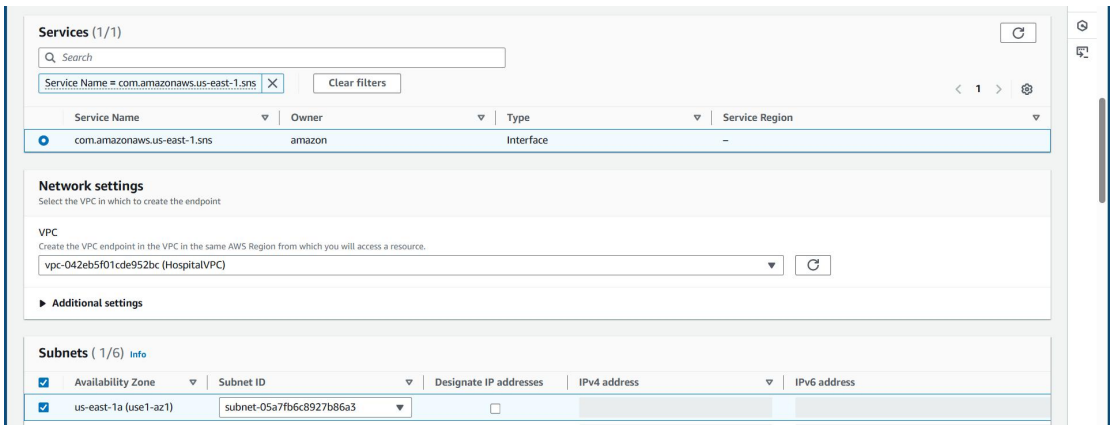


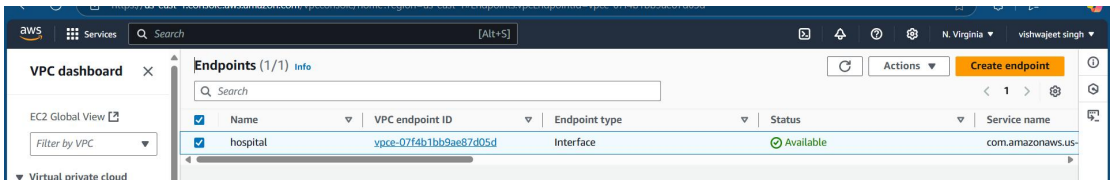
Go to email inbox and accept the subcription



Step 3: create vpc endpoint







Step 4 : connect with ec2 instance and run below command

aws sns publish --region us-east-1 --topic-arn arn:aws:sns:us-east-1:767398047488:PatientReportsTopic --message "we are executing project-3"

```
[ec2-user@ip-172-31-17-52 ~]$ aws sns publish --region us-east-1 --topic-arn arn:aws:sns:us-east-1:767398047488:PatientReportsTopic --message "we are executing project-3"
f15aba8a-63aa-5422-a874-e54d88c0023e
[ec2-user@ip-172-31-17-52 ~]$
```