1. The VPC should have a name following this convention <ProjectName>-Network and a CIDR block of 10.0.0.0/16.

Graphical user interface, text, application, email

Description automatically generated

1. Create an internet gateway named <ProjectName>-IGW and attach it to the VPC.

Graphical user interface, text, application, email

Description automatically generated

Create two public subnets in the VPC:

* *<ProjectName>-PublicSubnet-A* in the first AZ with a CIDR block of *10.0.11.0/24*.

Graphical user interface, application

Description automatically generated

<ProjectName>-PublicSubnet-B in the second AZ with a CIDR block of 10.0.21.0/24.

A picture containing graphical user interface

Description automatically generated

Make them public and choose Auto-Assign Public IP.

Graphical user interface, text, application, email

Description automatically generated

Create a new route table named <ProjectName>-PublicRouteTable. Add a 10.0.0.0/16 – Local route and a route to the <ProjectName> IGW to it.

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, application

Description automatically generated

Associate the subnets with the new route table.

Graphical user interface, text, application, email

Description automatically generated

Create private subnet in the VPC:

* *<ProjectName>-PrivateSubnet-A* in the first AZ with a CIDR block of *10.0.12.0/24*.
* Create new route table named *<ProjectName>-PrivateRouteTable-A*. Add a *10.0.0.0/16* – *Local* route to it.
* Associate private subnet with the new route table.

Graphical user interface, text, application, email

Description automatically generated

Create DB subnet in the VPC:

* *<ProjectName>-DbSubnet-A* in the first AZ with a CIDR block of *10.0.13.0/24*.

Graphical user interface, application

Description automatically generated

 Create a new route table named *<ProjectName>-DbRouteTable*. Add a *10.0.0.0/16* – *Local* route to it. Associate DB subnet with the new route table.

Graphical user interface, text, application, email

Description automatically generated Graphical user interface, text, application, email

Description automatically generated

Create NAT gateway for the private subnet in public subnet:

* *<ProjectName>-NatGateway-A* with an elastic IP for the subnet *<ProjectName>-PrivateSubnet-A*.

Graphical user interface, application

Description automatically generated

* Add the gateway *A* to the route table *<ProjectName>-PrivateRouteTable-A*.

Graphical user interface, text, application, email

Description automatically generated

Create security groups:

* To allow inbound SSH traffic only from your IP address. Apply security group to the bastion host.

Graphical user interface, text, application

Description automatically generated

* To allow inbound HTTP/S traffic from anywhere. Apply security group to the public instance.

Graphical user interface, application

Description automatically generated

* To allow all inbound traffic from other instances associated with this security group. The security group should specify itself as a source security group in its inbound rules. Apply security group to all the instances.

Graphical user interface, text, application

Description automatically generated

Create a bastion host in the public subnet in the second AZ.

Graphical user interface, text, application, email

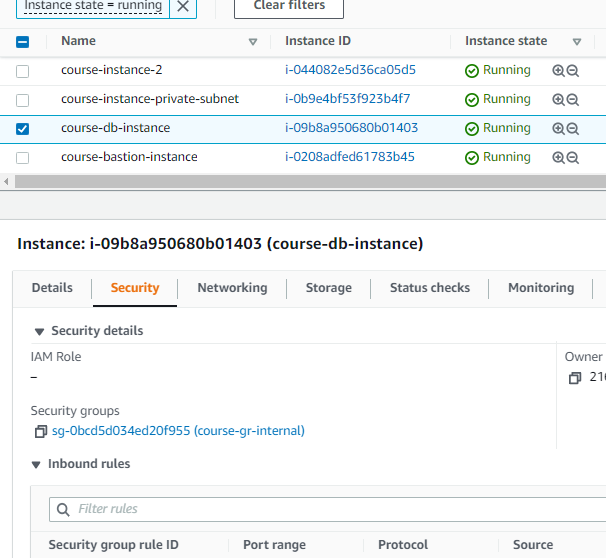
Description automatically generated

Create EC2 instance in the public subnet in the first AZ. Install the application developed in module 3 on the public instance.

Graphical user interface, text, application, email

Description automatically generated

Create one EC2 instance in the private subnet and one EC2 instance in the DB subnet. The instances do not have to have any special contents.

Graphical user interface, text, application, email

Description automatically generated

**Instances details(ip)**

Graphical user interface, application

Description automatically generated

1. the application on the public instance is available from anywhere

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, chat or text message

Description automatically generated

Text

Description automatically generated

Text

Description automatically generated

Graphical user interface, text, application

Description automatically generated