

## WEBSITE URL

```
ApplicationLoadBalancer:
  Type: AWS::ElasticLoadBalancingV2::LoadBalancer
  Properties:
    IpAddressType: ipv4
    Scheme: internet-facing
    SecurityGroups:
      - !GetAtt ALBSecurityGroup.GroupId
    Subnets: !Ref Subnets
    Type: application
```

```
WebServerSecurityGroup:
  Type: AWS::EC2::SecurityGroup
  Properties:
    GroupDescription: Enable HTTP for Flask server and SSH for getting into EC2
    VpcId: !Ref MyVPC
    SecurityGroupIngress:
      - IpProtocol: tcp
        FromPort: 22 # whatever comes from this port you can accept
        ToPort: 22
        CidrIp: 0.0.0.0/0
      - IpProtocol: tcp
        FromPort: 80 # whatever comes from this port you can accept
        ToPort: 80
        SourceSecurityGroupIds: !GetAtt ALBSecurityGroup.GroupId
```

```
Resources:
  ALBSecurityGroup:
    Type: AWS::EC2::SecurityGroup
    Properties:
      GroupDescription: Enable HTTP for ALB
      VpcId: !Ref MyVPC
      SecurityGroupIngress:
        - IpProtocol: tcp
          FromPort: 80 # whatever comes from the ALB
          ToPort: 80
          CidrIp: 0.0.0.0/0
```

```
Parameters:
  MyVPC:
    Description: VPC ID of your existing account
    Type: AWS::EC2::VPC::Id
  KeyPair:
    Description: Please enter your valid key pair
    Type: AWS::EC2::KeyPair::KeyName
  Subnets:
    Description: Choose your subnets
    Type: List<AWS::EC2::Subnet::Id>
```

```
ALBListener:
  Type: AWS::ElasticLoadBalancingV2::Listener
  Properties:
    DefaultActions: # Required
      - TargetGroupArn: !Ref WebServerTG
    Type: forward
    LoadBalancerArn: !Ref ApplicationLoadBalancer
    Port: 80
    Protocol: HTTP
```

```
WebServerTG:
  Type: AWS::ElasticLoadBalancingV2::TargetGroup
  Properties:
    Port: 80
    Protocol: HTTP
    TargetType: instance
    UnhealthyThresholdCount: 3
    HealthyThresholdCount: 2
    VpcId: !Ref MyVPC
```

```
MyDBSecurityGroup:
  Type: AWS::RDS::DBSecurityGroup
  Properties:
    GroupDescription: Front-end access to RDS
    DBSecurityGroupIngress: # Required
      - CIDRIP: 0.0.0.0/0
      - EC2SecurityGroupId: !GetAtt WebServerSecurityGroup.GroupId
```

```
WebServerASG:
  Type: AWS::AutoScaling::AutoScalingGroup
  Properties:
    AvailabilityZones:
      - !GetAZs ""
    DesiredCapacity: 3
    HealthCheckGracePeriod: 300
    HealthCheckType: ELB
    LaunchTemplate:
      LaunchTemplateId: !Ref WebServerLT
      Version: !GetAtt WebServerLT.LatestVersionNumber
    MaxSize: 3 # Required
    MinSize: 1 # Required
    TargetGroupARNs:
      - !Ref WebServerTG
```

```
WebServerLT:
  Type: AWS::EC2::LaunchTemplate
  Properties:
    LaunchTemplateData:
      ImageId: ami-8c293f3f676ec4f90
      InstanceType: t2.micro
      KeyName: !Ref KeyName
      SecurityGroups:
        - !GetAtt WebServerSecurityGroup.GroupId
    Tags:
      - Resource: instance
        Key: Name
        Value: !Sub Web Server of ${AWS::StackName} Stack
    UserData:
      Fn::Base64:
        !Sub |
          #!/bin/bash
          yum update -y
          yum install python3 -y
          pip3 install flask
          pip3 install flask_mysql
          echo "${MyDBURL}" > /home/ec2-user/dbserver.endpoint
          TOKEN=$(curl -s https://stoken@raw.githubusercontent.com/cumbak1823/private-my-projects/main/Project-004-Phonebook-Application/"
          curl -s --create-dirs -o "/home/ec2-user/templates/index.html" -L "$FOLDER"templates/index.html
          curl -s --create-dirs -o "/home/ec2-user/templates/add-update.html" -L "$FOLDER"templates/add-update.html
          curl -s --create-dirs -o "/home/ec2-user/templates/delete.html" -L "$FOLDER"templates/delete.html
          curl -s --create-dirs -o "/home/ec2-user/phonebook-app.py" -L "$FOLDER"phonebook-app.py
          python3 /home/ec2-user/phonebook-app.py
          - MyDBURL: !GetAtt MyDatabaseServer.Endpoint.Address
```

```
MyDatabaseServer:
  Type: AWS::RDS::DBInstance
  DeletionPolicy: Delete
  Properties:
    AllocatedStorage: 20
    AllowMajorVersionUpgrade: false
    AutoMinorVersionUpgrade: true
    BackupRetentionPeriod: 0
    DBInstanceIdentifier: KayaCann-DB-579
    DBName: clarusway_phonebook
    DBSecurityGroups:
      - !Ref MyDBSecurityGroup
    Engine: MySQL
    DBInstanceClass: db.t2.micro
    EngineVersion: 8.0.20
    MasterUsername: admin
    MasterUserPassword: Serdar_1
    Port: 3306
    PubliclyAccessible: true
```

STACK