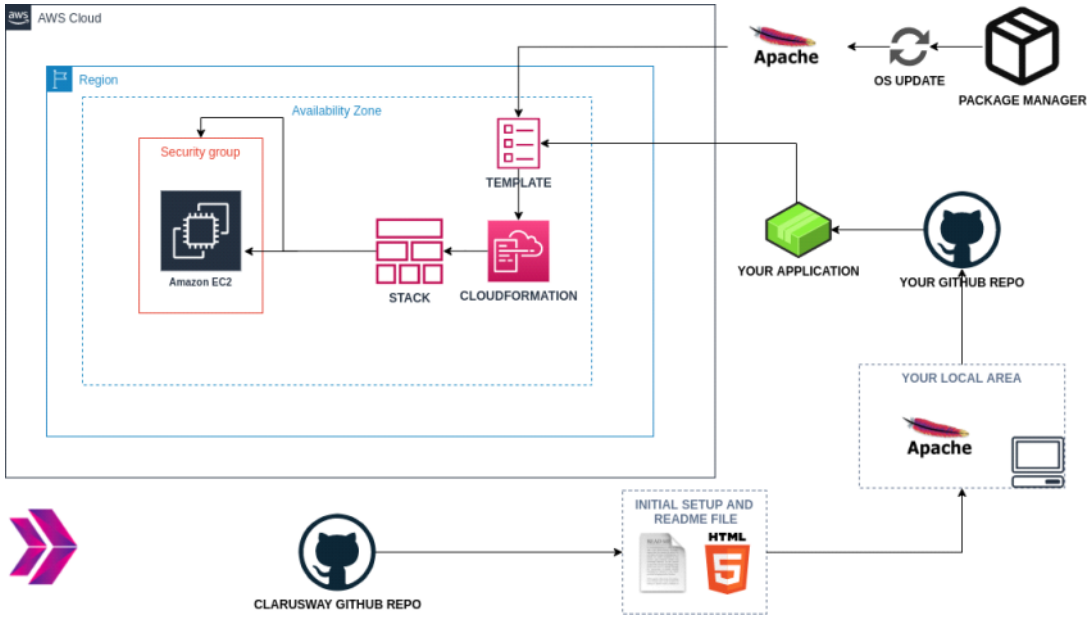
Project-101-kittens-carousel-static-website-ec2

Monday, 5 July 2021 17.17



- Amacimiz bize verilen jpg ve
- Clarusway reposundaki proje klasorune kendi localimize atiyoruz
- Vs codda locale attigimiz projeyi acalim
- Proje dosyasi icerinde kittens-carousel-static-website.yaml dosyasi olusturalim
- https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/template-anatomy.html ==> template hakkinda bilgi
- Vs coda 'cfn' yazip enter a basiyoruz ve yaml dosyasinin componentlerini bize verir.

```
cloudformation.json
AWSTemplateFormatVersion: 2010-09-09
Description: |
  This CloudFormation Template was written
  Kittens Carousel Static Website will be
  custom security group which allows http
  Kittens Carousel Static Website is downl
Parameters:

Metadata:

Mappings:

Conditions:

Resources:

Transform:

Outputs:
```

Description kismina '
This CloudFormation Template was written for running Kittens Carousel Static Website on EC2. Kittens Carousel Static Website will be deployed on Amazon Linux 2 (ami-026dea5602e368e96) EC2 Instance with custom security group which allows http connections on port 80 and ssh port 22 from anywhere. Kittens Carousel Static Website is downloaded from my Public Github repository, then deployed on Apache Web Server.' yaziyoruz

-
```
Description: |
```

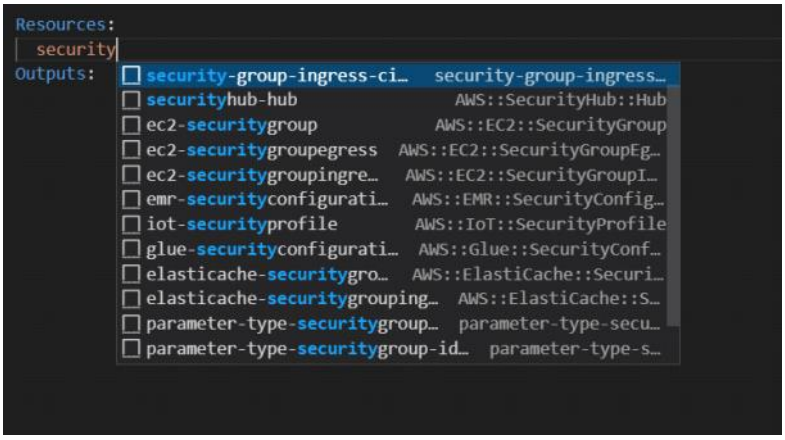
-
```
Description: >
```

- Yukaridaki gibi | veya > isaretleri olabilir

- Parameters, metadata, mappings conditions, transform kisimlarini bu gunku calismada kullanmayacagimiz icin silecegiz.

- Resources, AWS uzerinde calistirdigimiz makinalar ve islemler butunu ve mutlaka eklenmesi gerekmektedir.

- Oncelikle security grup olusturacagiz. Security yazip 3. secenegiz aciyoruz.



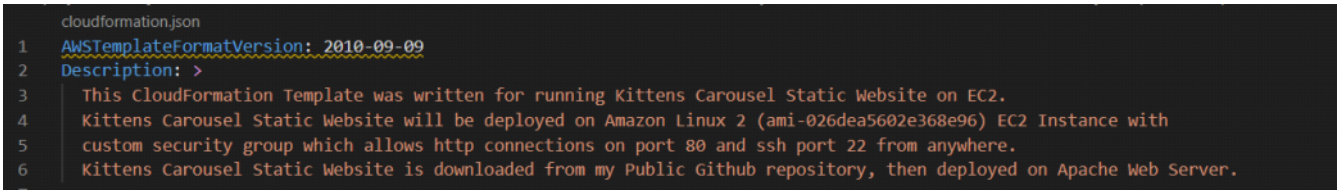
- LogicalID yazan kisma istedigimiz ismi atayabiliriz. Biz simdilik WebServerSecurityGroup yaziyoruz

- Type ==> ayni kaliyor

- GroupDescription kismina yazilacak ==> Enable HTTP for Apache Server and SSH secure connection

- Groupname i siliyoruz
- Securitygroupingress kismi kaliyor egress kismini siliyoruz.
- Securitygroupingress kismina 'securityg' yazinca gorseldeki kismi acacagiz

- Sayfa goruntusu gorseldeki gibi olacak



cloudformation.json

```
AWSTemplateFormatVersion: 2010-09-09
Description: >
  This CloudFormation Template was written for running Kittens Carousel Static Website on EC2.
  Kittens Carousel Static Website will be deployed on Amazon Linux 2 (ami-026dea5602e368e96) EC2 Instance with
  custom security group which allows http connections on port 80 and ssh port 22 from anywhere.
  Kittens Carousel Static Website is downloaded from my Public Github repository, then deployed on Apache Web Server.

Resources:
  WebServerSecurityGroup:
    Type: AWS::EC2::SecurityGroup
    Properties:
      GroupDescription:  Enable HTTP for Apache Server and SSH secure connection # Required
      SecurityGroupIngress:
        - IpProtocol: tcp
          FromPort:
          ToPort:
          CidrIp:
      Tags:
        Tags
      VpcId: "String"
Outputs:
```

- Securitygroupingress kismini gorseldeki gibi 80 ve 22 olacak sekilde duzenliyoruz

```
      GroupDescription:  Enable HTTP for Apache Se
      SecurityGroupIngress:
        - IpProtocol: tcp
          FromPort: 80
          ToPort: 80
          CidrIp: 0.0.0.0/0
      Tags:
```

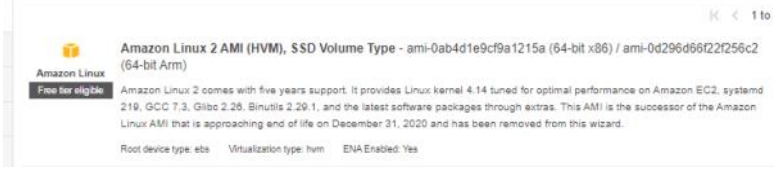
```
  SecurityGroupIngress:
    - IpProtocol: tcp
      FromPort: 80
      ToPort: 80
      CidrIp: 0.0.0.0/0
    - IpProtocol: tcp
      FromPort: 22
      ToPort: 22
      CidrIp: 0.0.0.0/0
```

- Tag kismini siliyoruz
- Ec2 instance olusturacagiz dokuman ==> https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/aws-properties-ec2-instance.html

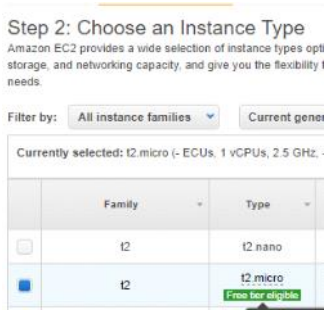
- Instance yazip sekildekini seciyoruz. Bize uzun bir dizi cikaracak.

-
```
      CidrIp: 0.0.0.0/0
instance
        ec2-instance
```

- Gorseldeki ami ile baslayan ilk numarayi imageId kismina yapistiriyoruz.



- Instancetype ==< t2.micro yaziyoruz



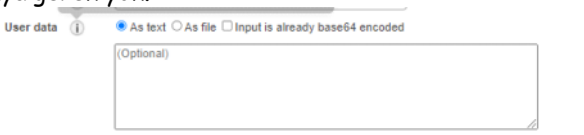
- Resource altina yazdigimiz 'WebServerSecurityGroup' metni SecurityGroupsIds kismina basina !Ref yazarak ekliyoruz.

```
SecurityGroupIds:
  !Ref WebServerSecurityGroup
SecurityGroups:
```

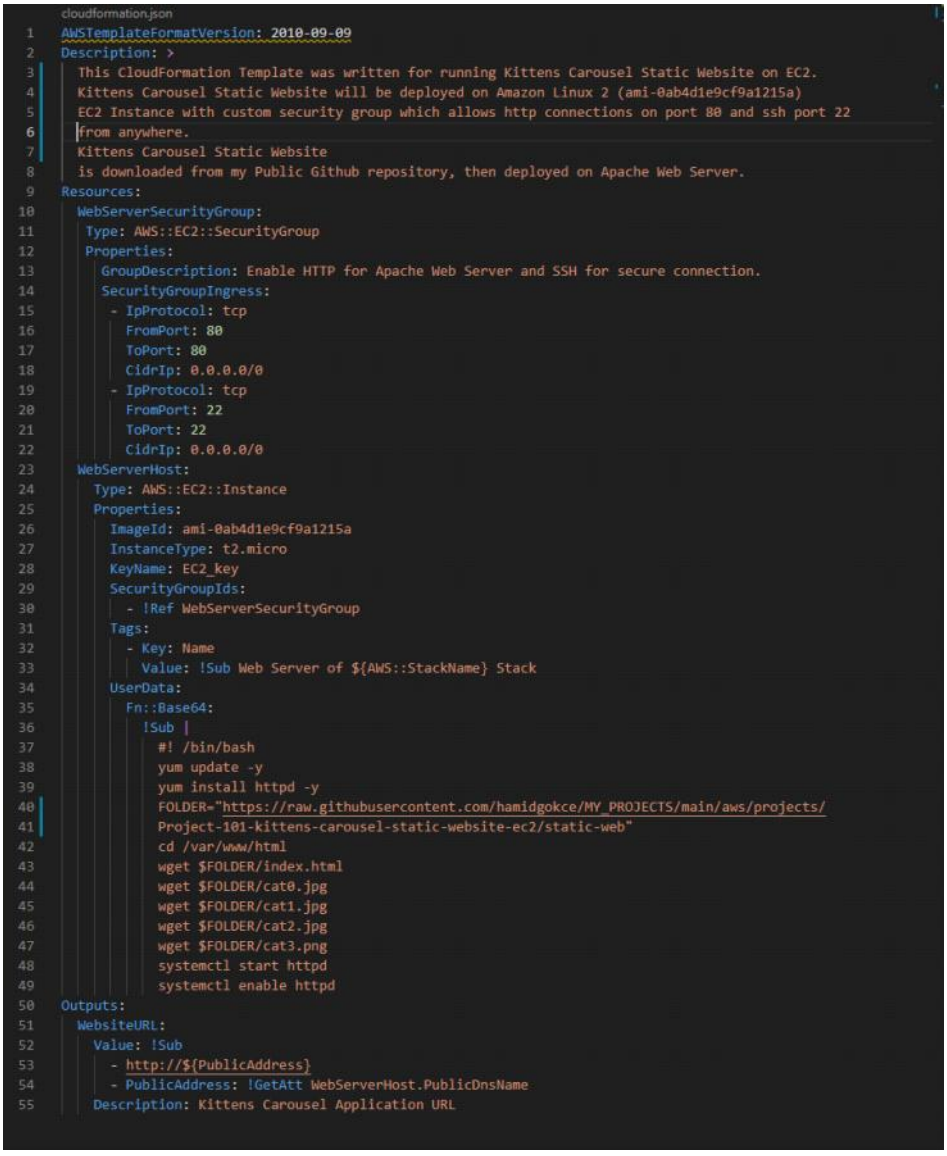
- EC2 acarken ilk gorsele yazmis oldugumuz degeri yaml dosyasi icerinde olusturmus olacagiz. $ isaretiyle olusturacagimiz stack ismini atama

```
Tags:
  - Key : Name
    Value : Web Server of Stackname ${AWS::Stackname} Stack
```

- Konsoldo 3. bolumde(Configure instance) kismindaki userdata bolumunu yazacagiz. Root'ta calisacagi icin sudo komutlarini kullanmaya gerek yok.



- Yaml dosyamizin gorseli ve yazi hali :



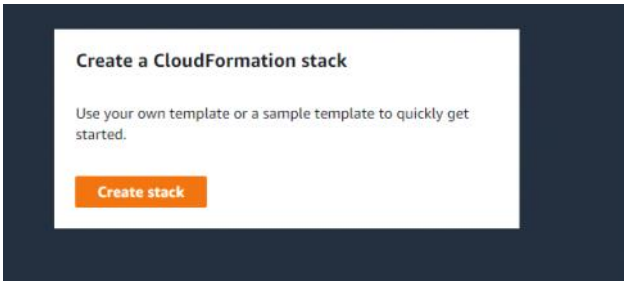

```
AWSTemplateFormatVersion: 2010-09-09
Description: >
  This CloudFormation Template was written for running Kittens Carousel Static
 Website on EC2.
  Kittens Carousel Static Website will be deployed on Amazon Linux 2 (ami-0ab4
d1e9cf9a1215a)
  EC2 Instance with custom security group which allows http connections on por
t 80 and ssh port 22
  from anywhere.
  Kittens Carousel Static Website
  is downloaded from my Public Github repository, then deployed on Apache Web
Server.
Resources:
  WebServerSecurityGroup:
   Type: AWS::EC2::SecurityGroup
   Properties:
     GroupDescription: Enable HTTP for Apache Web Server and SSH for secure co
nnection.
     SecurityGroupIngress:
      - IpProtocol: tcp
        FromPort: 80
        ToPort: 80
        CidrIp: 0.0.0.0/0
      - IpProtocol: tcp
        FromPort: 22
        ToPort: 22
        CidrIp: 0.0.0.0/0
  WebServerHost:
    Type: AWS::EC2::Instance
    Properties:
      ImageId: ami-0ab4d1e9cf9a1215a
      InstanceType: t2.micro
      KeyName: EC2_key
      SecurityGroupIds:
        - !Ref WebServerSecurityGroup
      Tags:
        - Key: Name
          Value: !Sub Web Server of ${AWS::StackName} Stack
      UserData:
```

```
        Fn::Base64:
          !Sub |
            #! /bin/bash
            yum update -y
            yum install httpd -y
            FOLDER="https://raw.githubusercontent.com/hamidgokce/MY_PROJECTS/m
ain/aws/projects/
            Project-101-kittens-carousel-static-website-ec2/static-web"
            cd /var/www/html
            wget $FOLDER/index.html
            wget $FOLDER/cat0.jpg
            wget $FOLDER/cat1.jpg
            wget $FOLDER/cat2.jpg
            wget $FOLDER/cat3.png
            systemctl start httpd
            systemctl enable httpd
Outputs:
  WebsiteURL:
    Value: !Sub
      - http://${PublicAddress}
      - PublicAddress: !GetAtt WebServerHost.PublicDnsName
    Description: Kittens Carousel Application URL
```

- Yapmis oldugumuz degisikliklerimizi github repomuza push ediyoruz.
  - Git status
  - Git add .
  - Git commit -m 'kittens carousel'
  - Git push

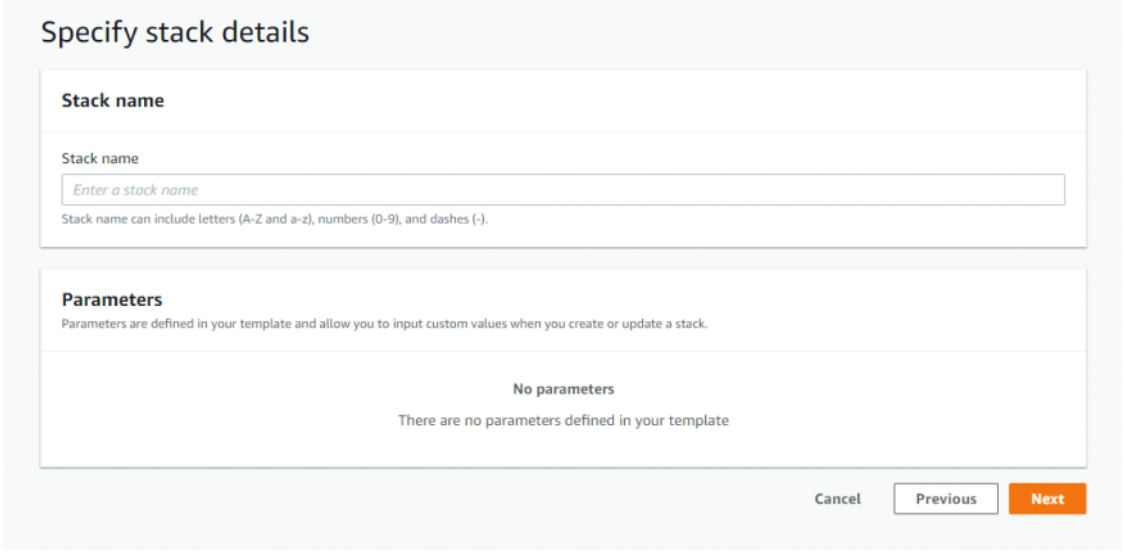
- AWS cloudformation sayfasini acalim 'https://console.aws.amazon.com/cloudformation/home?region=us-east-1#/'

- Create Stack



- **Upload a template file** kismini secip VS codda hazirlamis oldugumuz yaml dosyasini yukleyelim ve NEXT

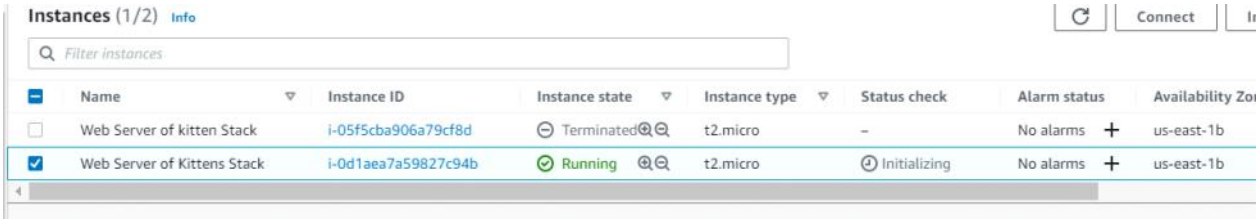
- Acilan sayfadan olusturacagimiz stack e bir isim verelim ve NEXT

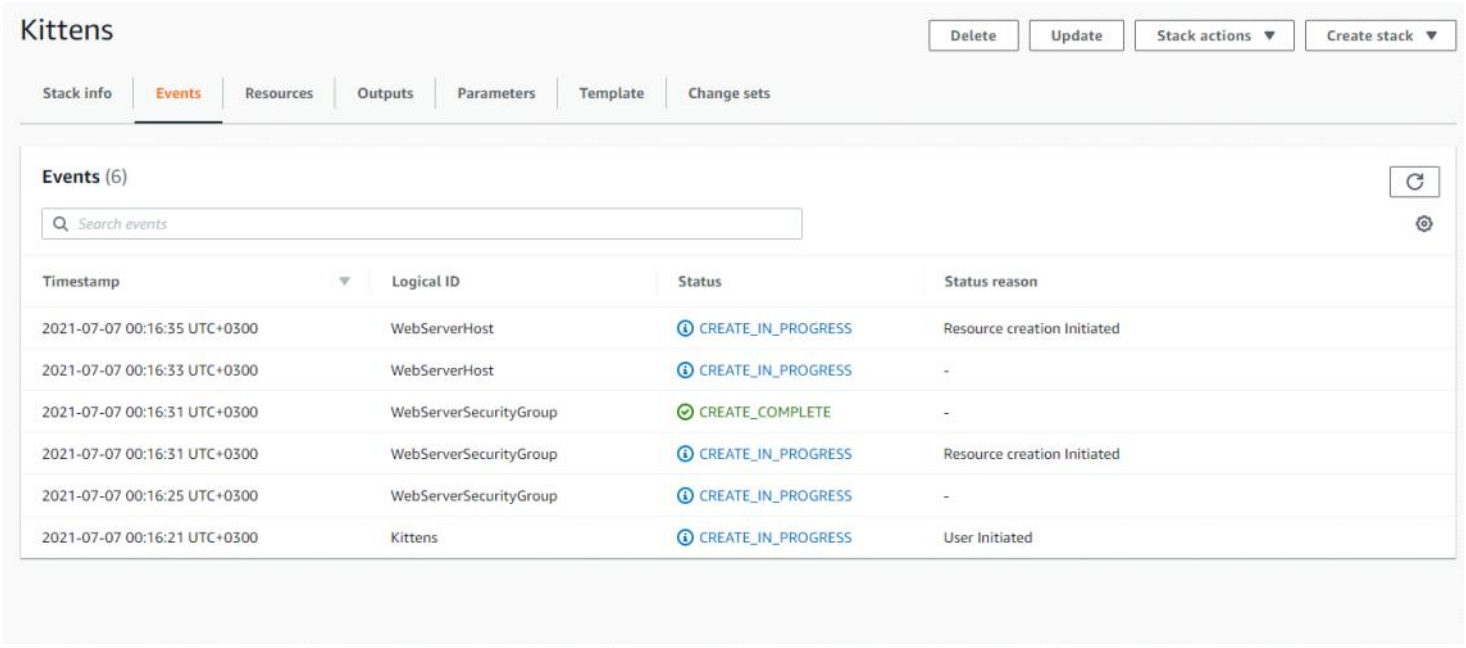


- Sonraki bolumleri default olarak birakip stack imizi create

ediyoruz.

- Stack hatasiz bir sekilde olustu ve yeni bir EC2 instance baslatildi.





- Outputs kisminda cikan linki tikladigimizda olusturdugumuz HTML dosyamizi browserda gorecegiz.