Face Mask Detection and Alert System

How to start?

Action 0 - Creating the Stack on Cloud formation

1. Download and keep the MaskDetectionCF.yaml file from the git repository.

Action 1 - Creating the Stack on Cloud formation

1. Search CloudFormation on AWS Services.
2. Select "Create stack".
3. In "Prerequisite - Prepare template" choose "Template is ready"option.
4. In "Specify template" choose "Upload a template file" and upload the YAML file (MaskDetectionCF.yaml) and choose "Next".
5. In "Specify stack details" enter the name for the stack (eg: MaskDetection)
6. Select the KeyName from the dropdown and choose "Next"
7. Select "Next" on "Configure stack options" page
8. Check all the details on the Review page and choose "Create Stack".
9. Now the resources will start getting created.

Once all the resources are created we now need to connect to both the EC2 servers for installing all the necessary packages .

Action 2 - Installing the necessary packages on our servers.

1. SSH into both the EC2 servers on separate tabs.
2. Once connected, clone the following directory by running this command on both the EC2 servers.
    a. **git clone https://github.com/arjunravikumar/SetupMaskDetectionEC2**
3. Now change directory to the new cloned directory on both servers.
    a. **cd SetupMaskDetectionEC2**
4. Now setup the mask detection on one server and email notification process on the other server.
    a. Run the following commands **on one** of the servers:
        i. **chmod +x maskshell.sh**
        ii. **./maskshell.sh**
    b. Run the following commands on **the other** server:

i. **chmod +x emailshell.sh**
ii. **./emailshell.sh**

5. This will take around 3-5 mins to install the packages (While waiting for this we can start with Action 3)
6. After the installation **both** the servers will request for AWS CLI key
7. Copy the AWS CLI from the workbench page and paste it to both the terminal tabs when requested as shown below. (Make sure there are no nextline commands in the text when copying)

8. After pasting the keys press return (Enter) twice.
9. Now on the email server will request for the number of email ids as below.

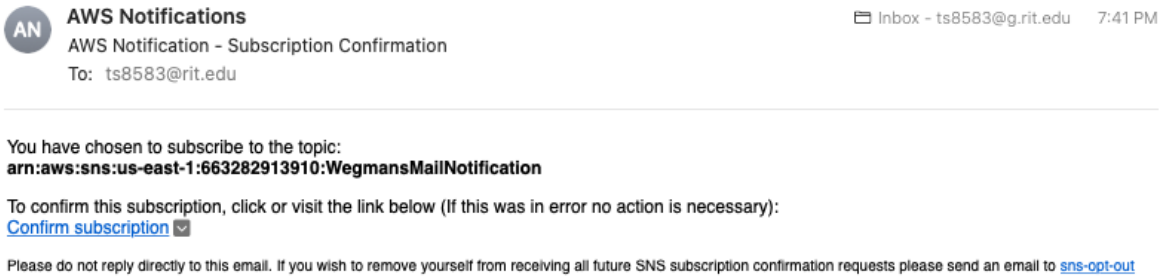
```
Please enter the your AWS CLI.
[default]
aws_access_key_id=
aws_secret_access_
aws_session_token=
LnbJgEyqLm3mt+/lOT
8cBLdiFzCrPsGJgQ6U
gajO9V4iDbVMKs9TAp
nLsEXC4K3uQzddt71X
qBzAqnH5IQApPtg99a
3hsWvEsQ754c4ikro9

How many email ID are to be added?
```

10. Now it will ask for the email ids. Enter the Email ids which are to be notified (Please include new users only, that is email id's which were subscribed previously do need to be added again)

```
How many new subscriber email IDs are to be added?
1
Enter email ID of subscriber 1 : ts8583@rit.edu
```

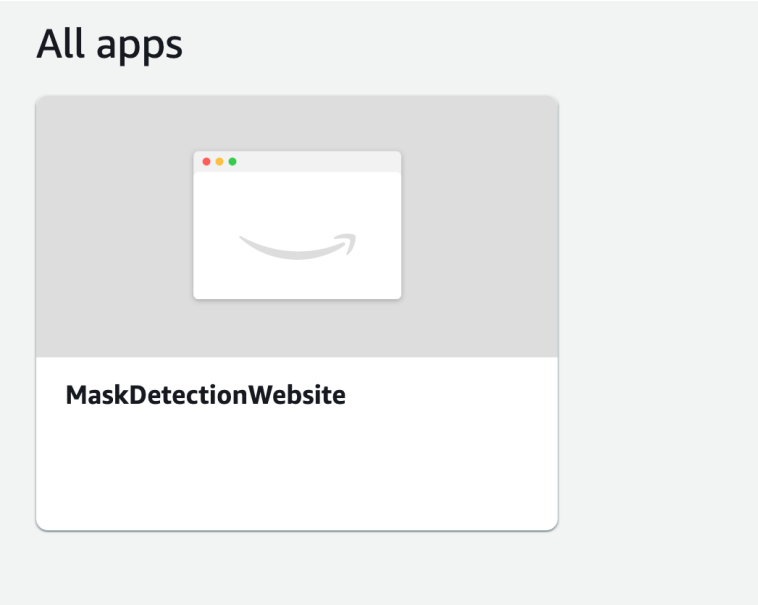
11. Now the entered emails should receive an email in order to confirm subscription as follows:



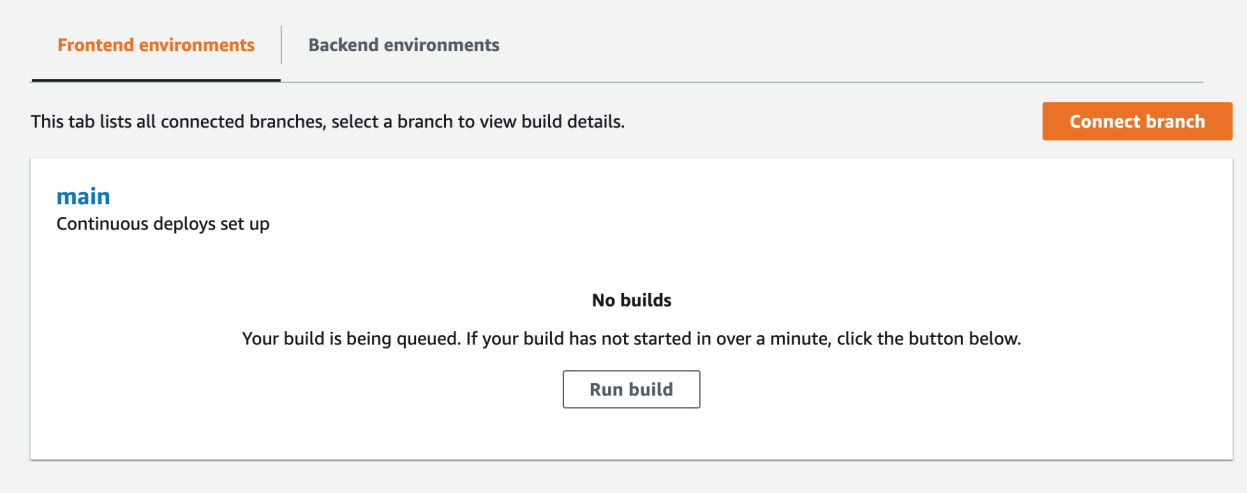
12. “Confirm subscription” to the service by clicking the link.

Action 3 - Start the Amplify Server (Needs to be done only once)

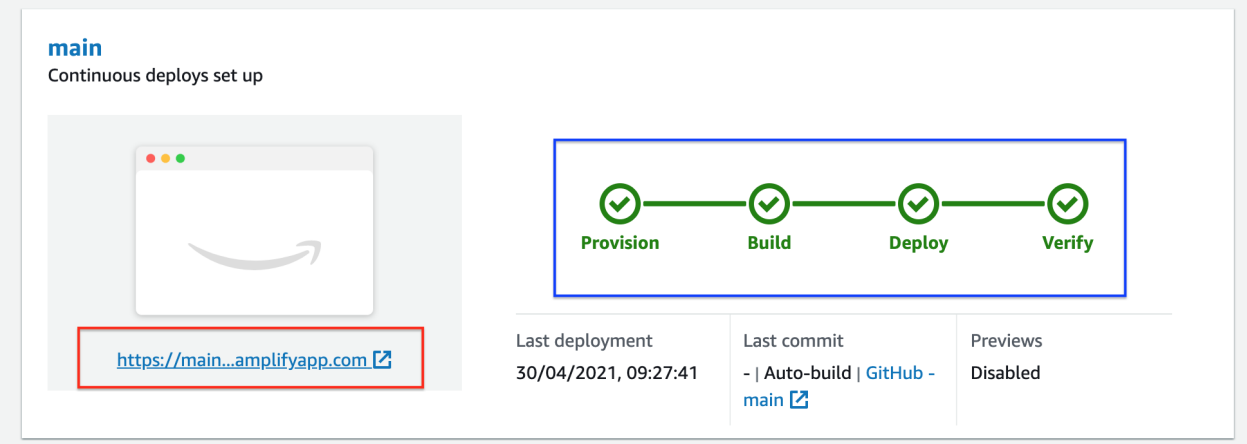
1. Search Amplify on AWS Services.
2. An app should be already created and be present on the dashboard.



3. Go inside the app and click “Run Build” in the front end section of the app.



4. Once the app has completed Deploy or Verify. The webpage for live annotation of people can be accessed by clicking on the link marked in Red.



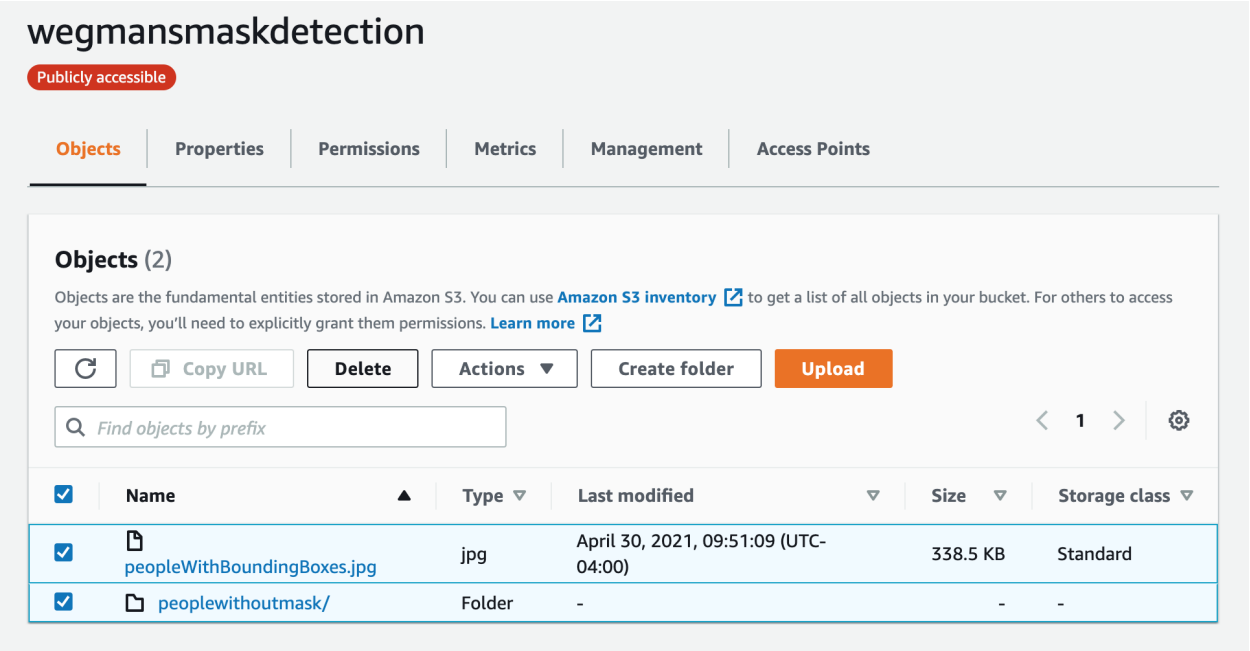
All the features should be running!
Please stop here if everything is working as expected and the project needs to be running.

Action 4 - Troubleshooting

1. If there was an issue with installation process in Action 2 (Setting up the MaskDetection and Email Notification Server using the scripts)
2. Start from Step 4 in Action 3.

Action 5 - Terminating the process

1. Stop both the EC2 process. (control + c in mac)
2. Access the S3 bucket which was created part of the project
3. Delete all the contents inside the bucket.



4. Delete the cloudformation stack.