CLOUD COMPUTING PROJECT

3 DEPLOYMENT OF WEB APPLICATION USING AWS

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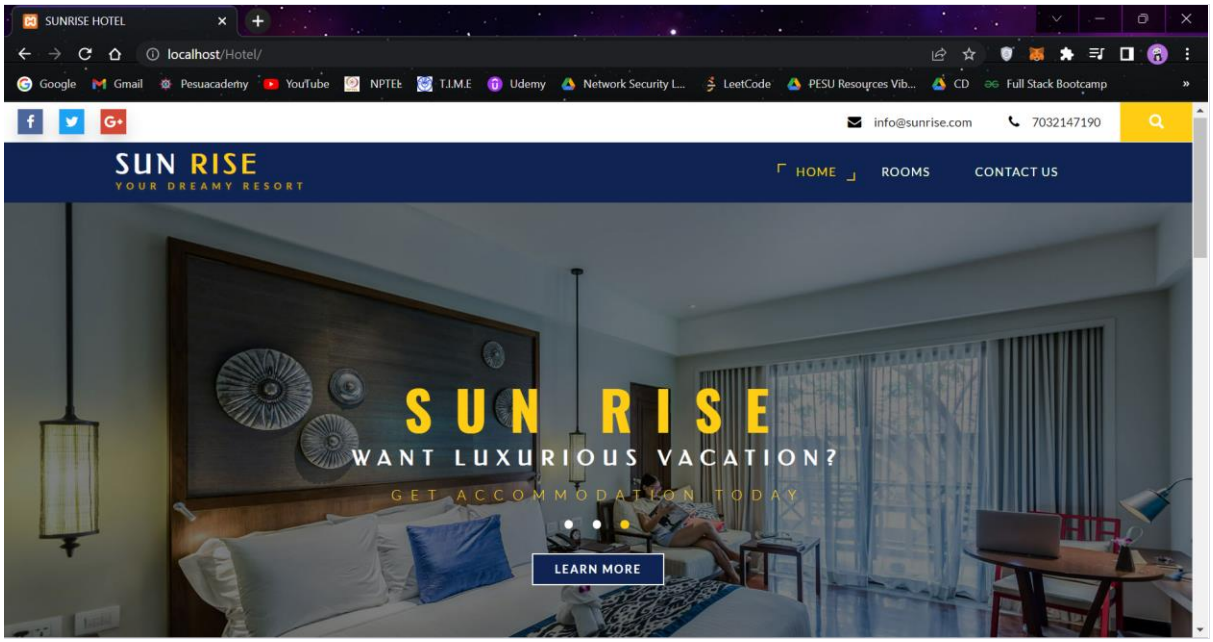
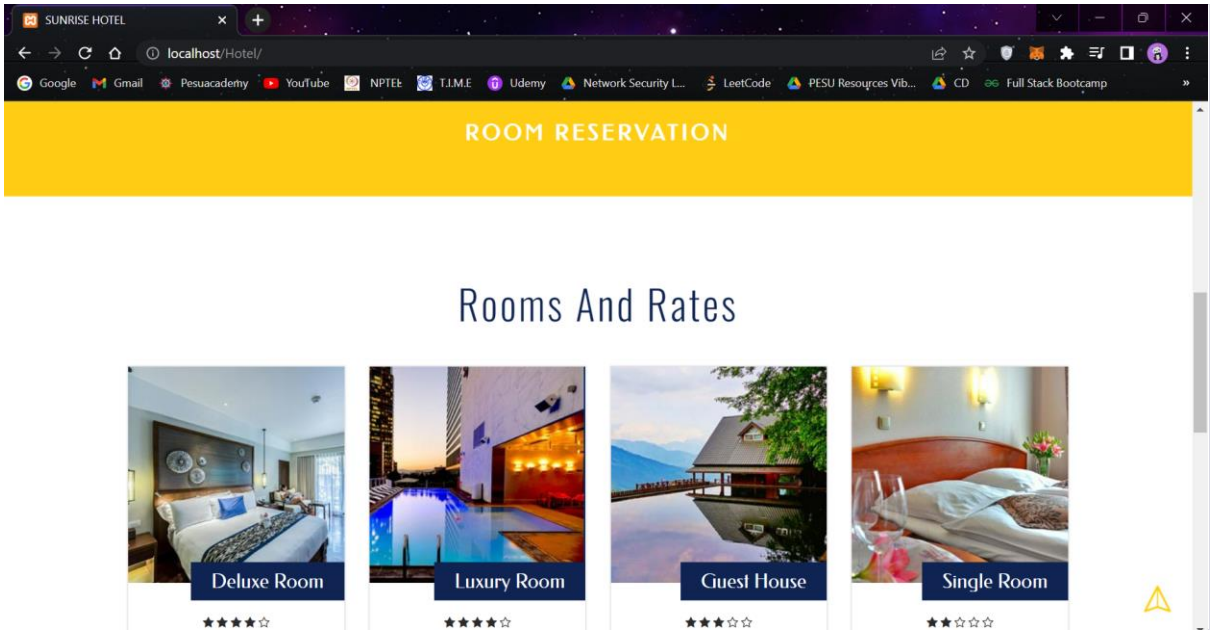
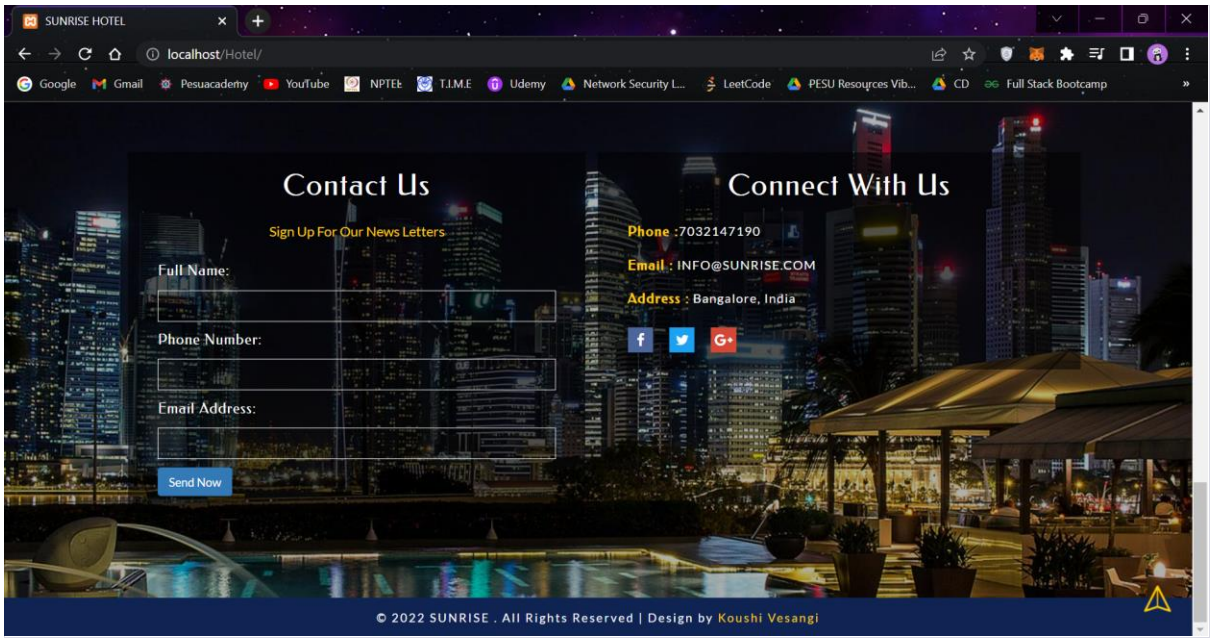
TASK-1 CRUD WEB APPLICATION




SUNRISE HOTEL
localhost/Hotel/
ROOM RESERVATION
Rooms And Rates
Deluxe Room
Luxury Room
Guest House
Single Room


SUNRISE HOTEL
localhost/Hotel/
Contact Us
Sign Up For Our News Letters
Full Name:
Phone Number:
Email Address:
Send Now
Connect With Us
Phone :7032147190
Email : INFO@SUNRISE.COM
Address : Bangalore, India
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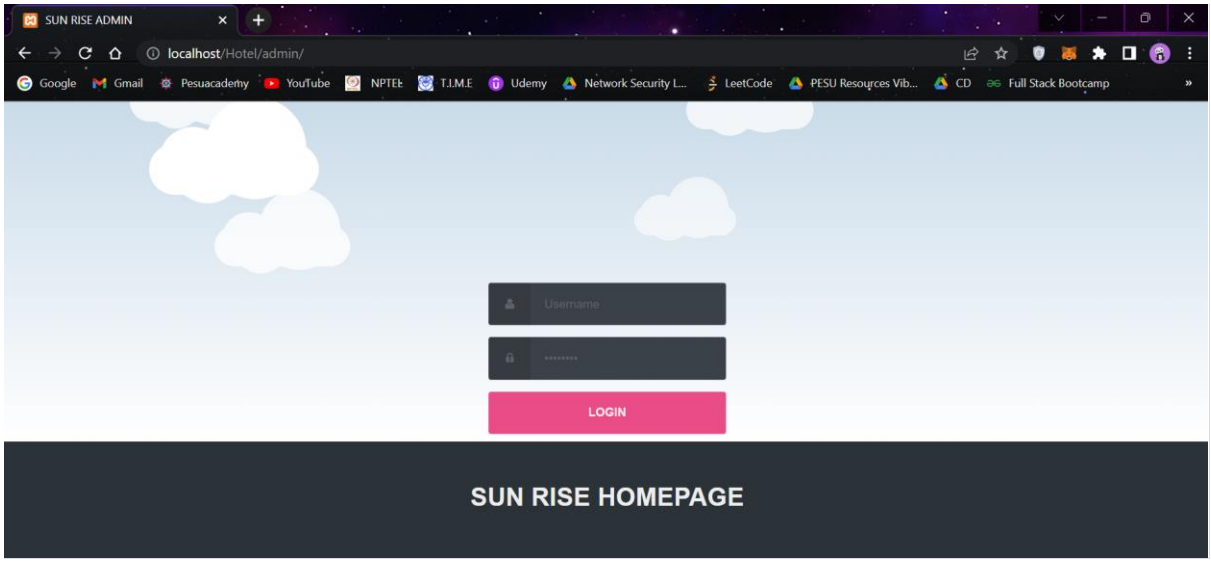
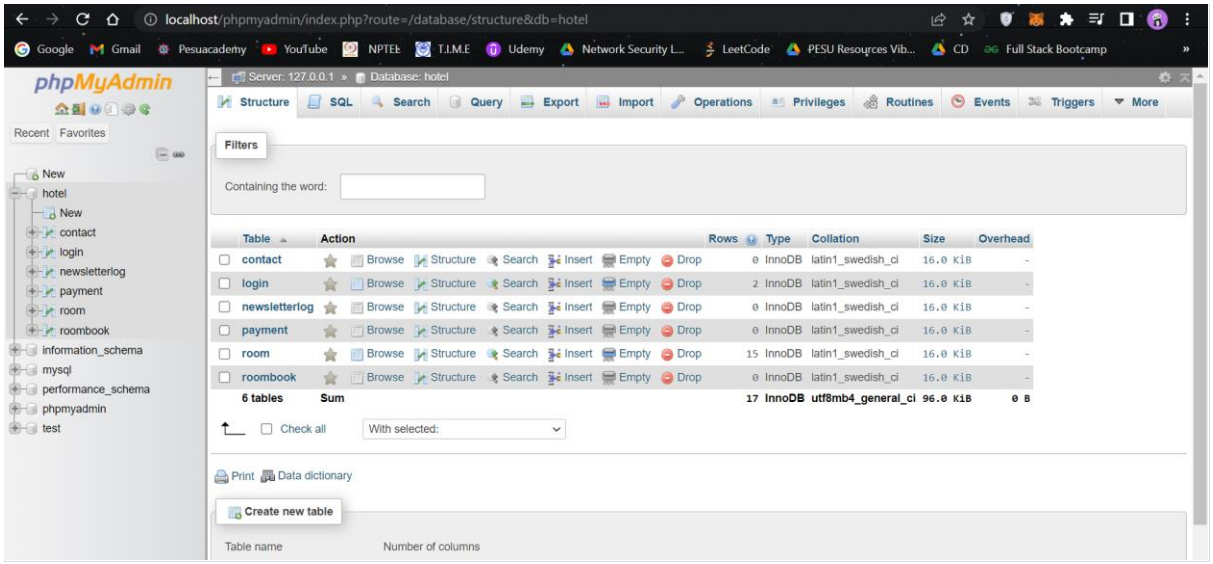
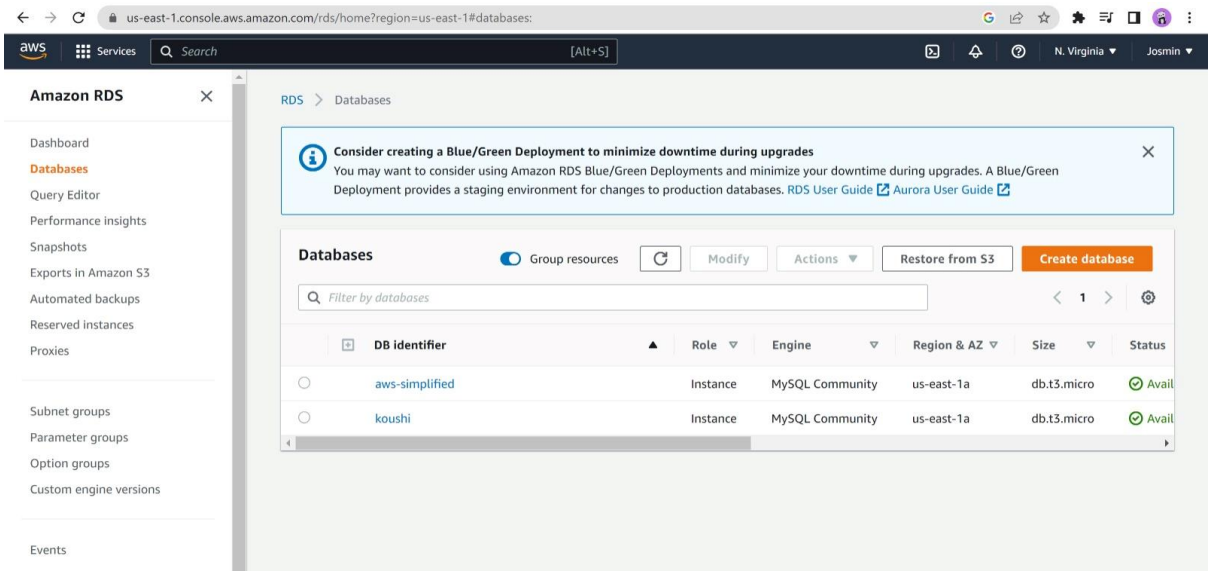
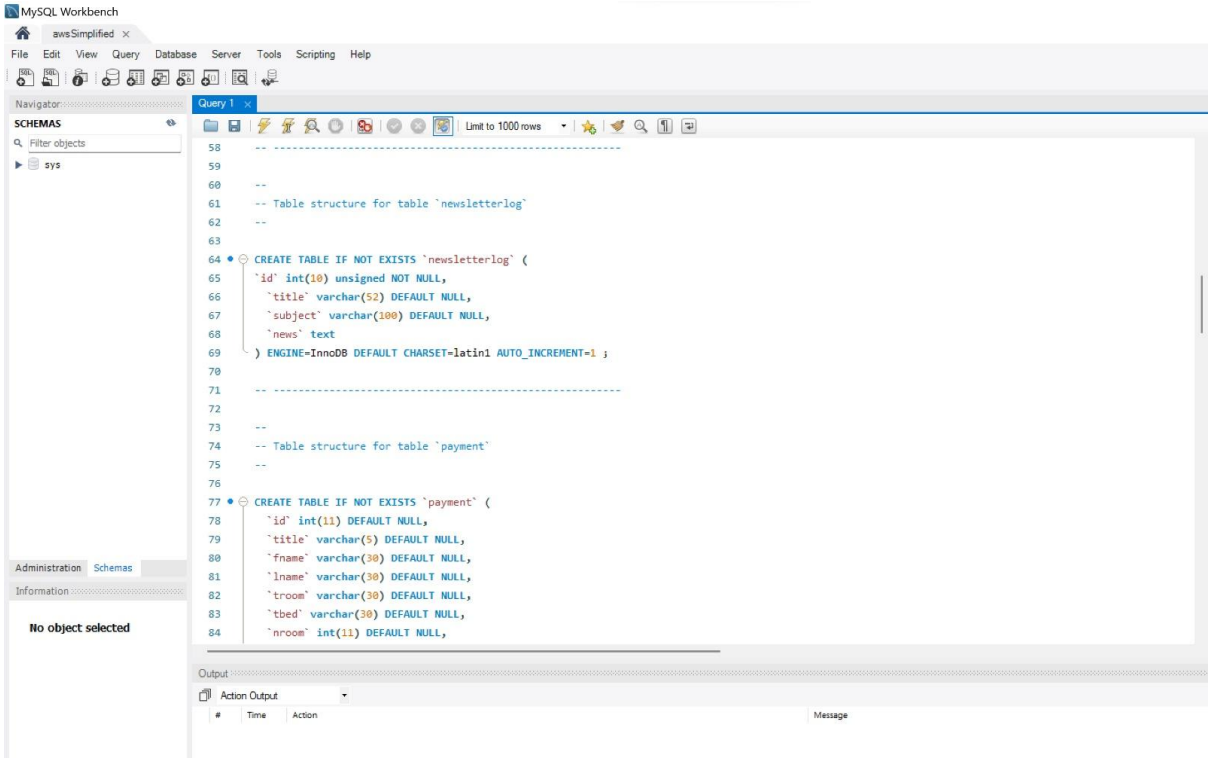


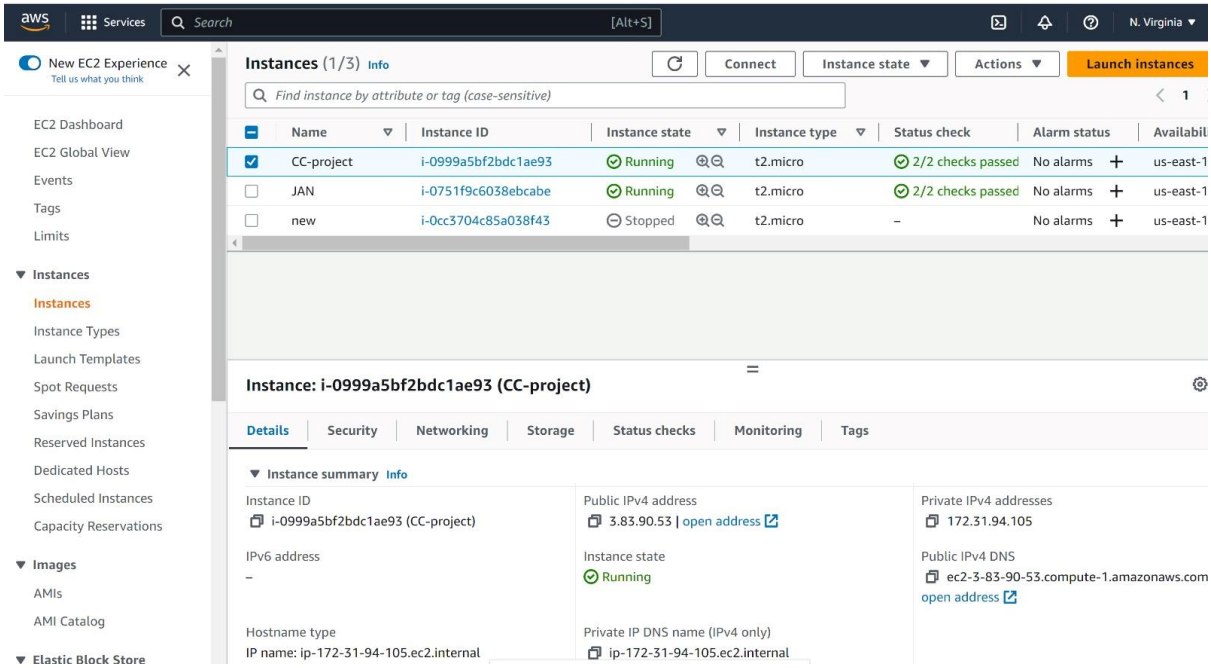


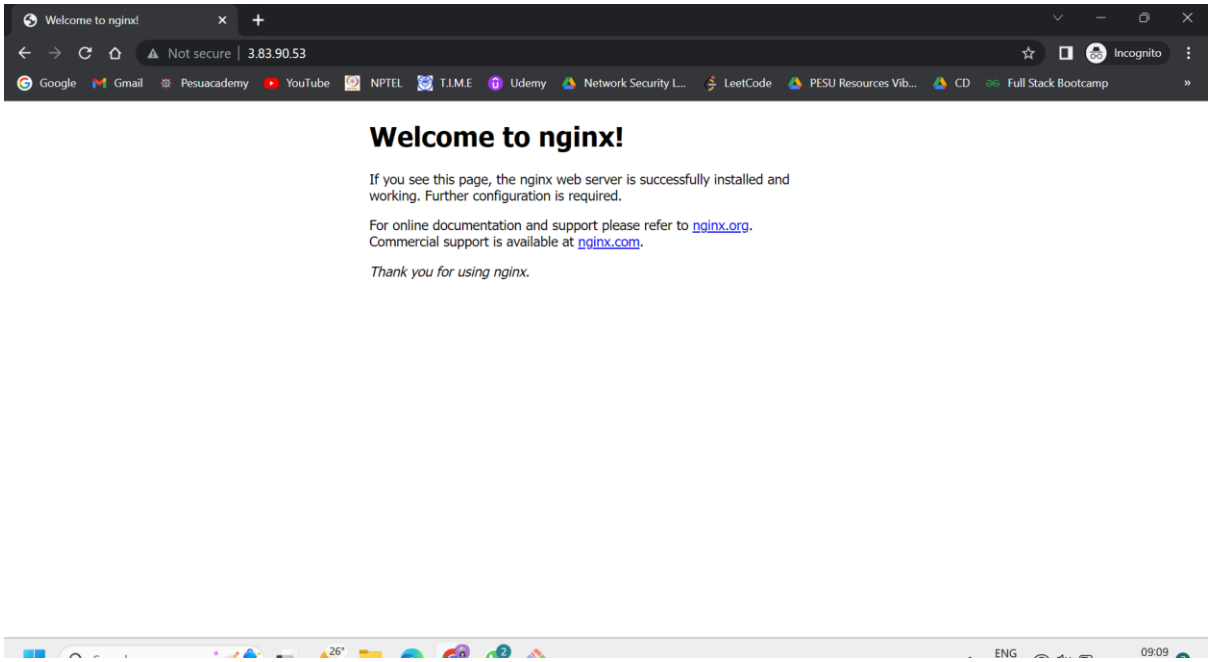
TASK-2 Deploying the database in AWS.


us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#databases:
aws
Services
Search
[Alt+S]
N. Virginia
Josmin
Amazon RDS
Dashboard
Databases
Query Editor
Performance insights
Snapshots
Exports in Amazon S3
Automated backups
Reserved instances
Proxies
Subnet groups
Parameter groups
Option groups
Custom engine versions
Events
RDS > Databases
Consider creating a Blue/Green Deployment to minimize downtime during upgrades
You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases. RDS User Guide Aurora User Guide
Databases
Group resources
Modify
Actions
Restore from S3
Create database
Filter by databases
1
DB identifier
Role
Engine
Region & AZ
Size
Status
aws-simplified
Instance
MySQL Community
us-east-1a
db.t3.micro
Avail
koushi
Instance
MySQL Community
us-east-1a
db.t3.micro
Avail


MySQL Workbench
awsSimplified
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
sys
Administration Schemas
Information
No object selected
Query 1
Limit to 1000 rows
-- Table structure for table `newsletterlog`
CREATE TABLE IF NOT EXISTS `newsletterlog` (
`id` int(10) unsigned NOT NULL,
`title` varchar(52) DEFAULT NULL,
`subject` varchar(100) DEFAULT NULL,
`news` text
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=1 ;
-- Table structure for table `payment`
CREATE TABLE IF NOT EXISTS `payment` (
`id` int(11) DEFAULT NULL,
`title` varchar(5) DEFAULT NULL,
`fname` varchar(30) DEFAULT NULL,
`lname` varchar(30) DEFAULT NULL,
`troom` varchar(30) DEFAULT NULL,
`tbed` varchar(30) DEFAULT NULL,
`nroom` int(11) DEFAULT NULL,
Output
Action Output
Time Action Message

TASK-3 **Deploying Web Application in EC2 instance.**

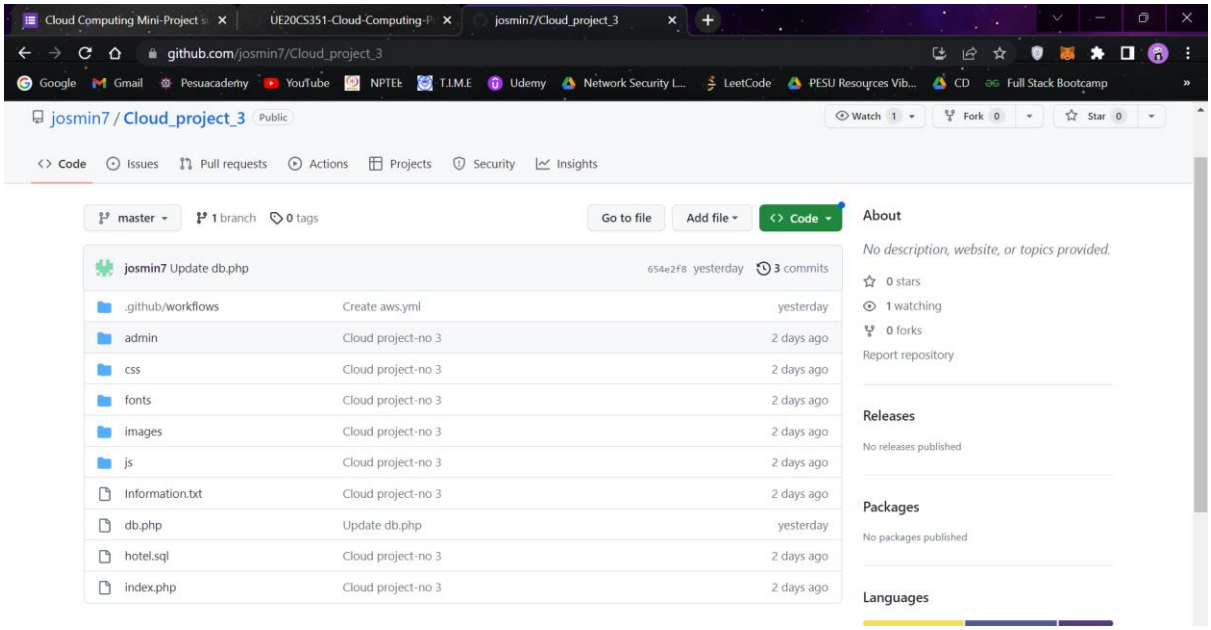




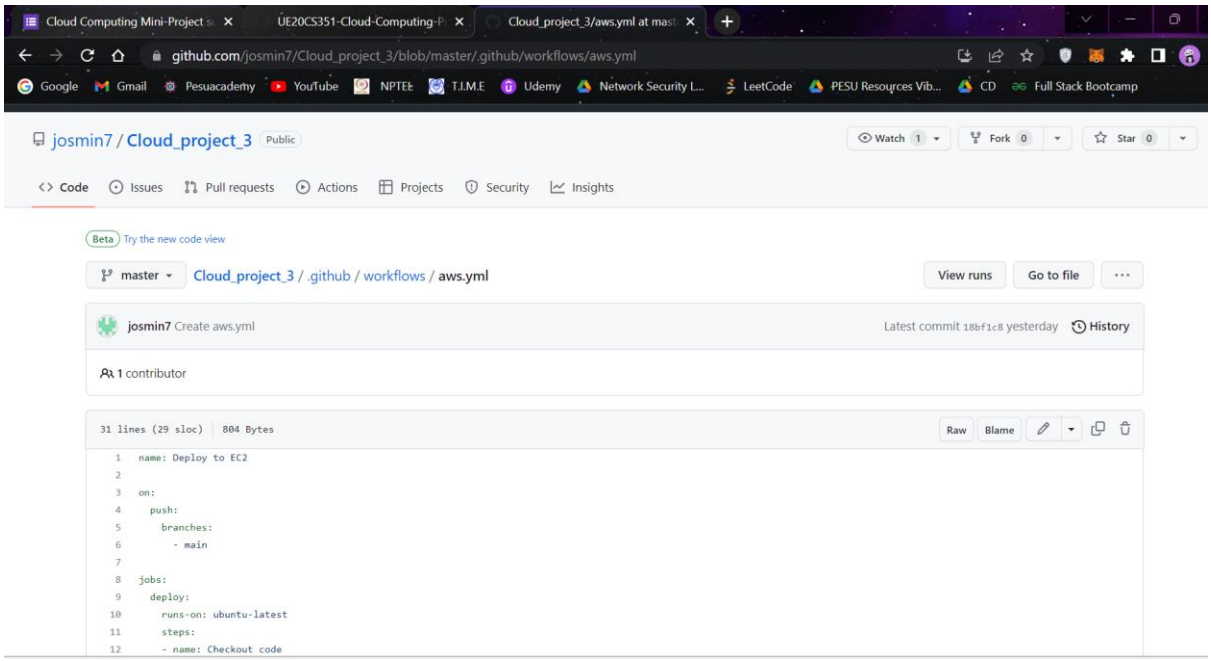
root@ip-172-31-94-105: /home/ubuntu

```
 nginx depends on nginx-core (>= 1.18.0-0ubuntu1.4) | nginx-full (>= 1.18.0-0ubuntu1.4) | nginx-light (>= 1.18.0-0ubuntu1.4) | nginx-extras (>= 1.18.0-0ub
  Package nginx-core is to be removed.
  Package nginx-full is not installed.
  Package nginx-light is not installed.
  Package nginx-extras is not installed.

(Reading database ... 62972 files and directories currently installed.)
Removing nginx-core (1.18.0-0ubuntu1.4) ...
Removing libnginx-mod-mail (1.18.0-0ubuntu1.4) ...
dpkg: nginx-common: dependency problems, but removing anyway as you requested:
 libnginx-mod-stream depends on nginx-common (= 1.18.0-0ubuntu1.4).
 libnginx-mod-http-xslt-filter depends on nginx-common (= 1.18.0-0ubuntu1.4).
 libnginx-mod-http-image-filter depends on nginx-common (= 1.18.0-0ubuntu1.4).

Removing nginx-common (1.18.0-0ubuntu1.4) ...
(Reading database ... 62941 files and directories currently installed.)
Preparing to unpack .../nginx_1.20.1-1~xenial_amd64.deb ...
Unpacking nginx (1.20.1-1~xenial) over (1.18.0-0ubuntu1.4) ...
(Reading database ... 62958 files and directories currently installed.)
Removing libnginx-mod-stream (1.18.0-0ubuntu1.4) ...
Removing libnginx-mod-http-image-filter (1.18.0-0ubuntu1.4) ...
Removing libnginx-mod-http-xslt-filter (1.18.0-0ubuntu1.4) ...
Setting up nginx (1.20.1-1~xenial) ...
Installing new version of config file /etc/default/nginx ...
Installing new version of config file /etc/init.d/nginx ...
Installing new version of config file /etc/logrotate.d/nginx ...
Installing new version of config file /etc/nginx/mime.types ...
Installing new version of config file /etc/nginx/nginx.conf ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for systemd (245.4-4ubuntu3.20) ...
root@ip-172-31-94-105:/home/ubuntu# service nginx start
root@ip-172-31-94-105:/home/ubuntu# systemctl status nginx
● nginx.service - nginx - high performance web server
     Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: enabled)
     Active: active (running) since Tue 2023-04-18 08:11:48 UTC; 11s ago
       Docs: https://nginx.org/en/docs/
    Process: 8312 ExecStart=/usr/sbin/nginx -c /etc/nginx/nginx.conf (code=exited, status=0/SUCCESS)
   Main PID: 8313 (nginx)
      Tasks: 2 (limit: 1141)
     Memory: 1.6M
     CGroup: /system.slice/nginx.service
             ├─8313 nginx: master process /usr/sbin/nginx -c /etc/nginx/nginx.conf
             └─8314 nginx: worker process

Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: Starting nginx - high performance web server...
Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: nginx.service: Can't open PID file /run/nginx.pid (yet?) after start: Operation not permitted
Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: Started nginx - high performance web server.
```

```
   Main PID: 8313 (nginx)
      Tasks: 2 (limit: 1141)
     Memory: 1.6M
     CGroup: /system.slice/nginx.service
             ├─8313 nginx: master process /usr/sbin/nginx -c /etc/nginx/nginx.conf
             └─8314 nginx: worker process

Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: Starting nginx - high performance web server...
Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: nginx.service: Can't open PID file /run/nginx.pid (yet?) after start: Operation not permitted
Apr 18 08:11:48 ip-172-31-94-105 systemd[1]: Started nginx - high performance web server.
root@ip-172-31-94-105:/home/ubuntu# service nginx restart
root@ip-172-31-94-105:/home/ubuntu# sudo nano /etc/nginx/sites-available/index.conf
root@ip-172-31-94-105:/home/ubuntu# sudo nano /etc/nginx/sites-available/index.conf
root@ip-172-31-94-105:/home/ubuntu# sudo ln -s /etc/nginx/sites-available/index.conf /etc/nginx/sites-enabled/
root@ip-172-31-94-105:/home/ubuntu# sudo nginx -t
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
nginx: configuration file /etc/nginx/nginx.conf test is successful
root@ip-172-31-94-105:/home/ubuntu#
```



Github workflow



```yaml

on:
  push:
    branches:
      - main

jobs:
  deploy:
    runs-on: ubuntu-latest
    steps:
    - name: Checkout code
      uses: actions/checkout@v2
    - name: Install dependencies
      run: sudo apt-get update && sudo apt-get install -y php-fpm
    - name: Copy files to EC2 instance
      uses: appleboy/scp-action@master
      with:
        host: ${{ secrets.EC2_HOST }}
        username: ${{ secrets.EC2_USER }}
        key: ${{ secrets.EC2_KEY }}
        source: ./
        target: /var/www/html
    - name: SSH into EC2 instance and restart PHP
      uses: appleboy/ssh-action@master
      with:
        host: ${{ secrets.EC2_HOST }}
        username: ${{ secrets.EC2_USER }}
        key: ${{ secrets.EC2_KEY }}
        script: |
          sudo service php7.4-fpm restart
```

Give feedback