Description:

Amazon Elastic Compute Cloud (Amazon EC2) provides scalable computing capacity in the Amazon Web Services (AWS) cloud. Using Amazon EC2 eliminates your need to invest in hardware up front so you can develop and deploy applications faster. You can use Amazon EC2 to launch as many or as few virtual servers as you need, configure security and networking, and manage storage. Amazon EC2 enables you to scale up or down to handle changes in requirements or spikes in popularity, reducing your need to forecast traffic.

Problem Statement:

Company ABC wants to move their product to AWS. They have the following things set up right now: 1. MySQL DB 2. Website (PHP) The company wants high availability on this product, therefore wants Auto Scaling to be enabled on this website.

Steps To Solve:

1. Launch an EC2 Instance

2. Enable Auto Scaling on these instances (minimum 2)

3. Create an RDS Instance

4. Create Database & Table in RDS instance:

a. Database name: intel

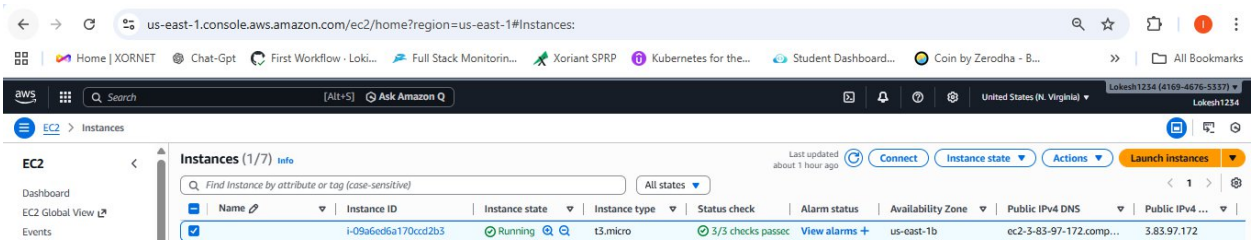
b. Table name: data

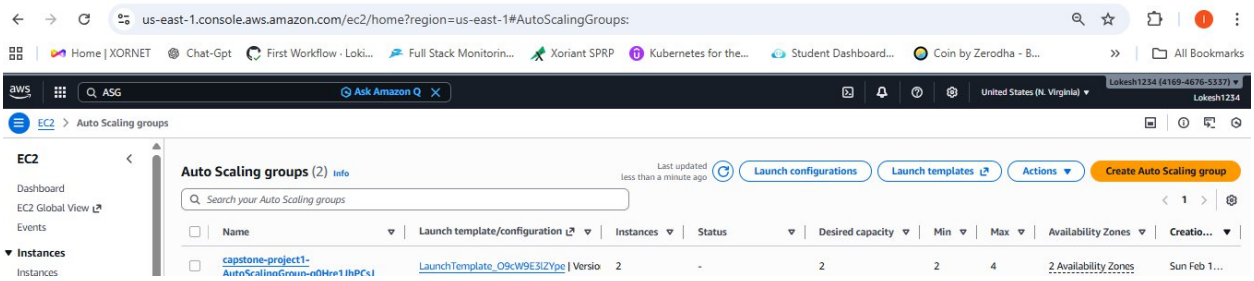
c. Database password: intel123

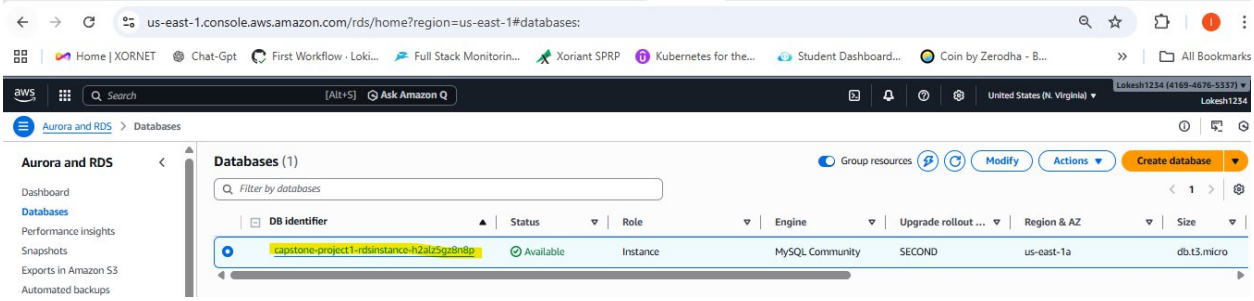
5. Change hostname in website

6. Allow traffic from EC2 to RDS instance

7. Allow all-traffic to EC2 instance

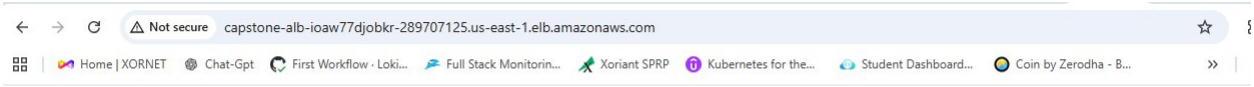







```
[ec2-user@ip-10-0-1-116 ~]$ mysql -h capstone-project1-rdsinstance-h2alz5gz8n8p.c0f862wsu1jd.us-east-1.rds.amazonaws.com \
> -P 3306 \
> -u admin \
> -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 269
Server version: 8.4.7 Source distribution

Copyright (c) 2000, 2026, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE intel;
ERROR 1007 (HY000): Can't create database 'intel'; database exists
mysql> USE intel;
Database changed
mysql> CREATE TABLE data (
    ->     id INT AUTO_INCREMENT PRIMARY KEY,
    ->     name VARCHAR(100),
    ->     value VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.05 sec)
```

```
Package php8.5-common-8.5.1-1.amzn2023.0.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-100-89 ~]$ php -v
PHP 8.5.1 (cli) (built: Dec 16 2025 15:59:07) (NTS gcc x86_64)
Copyright (c) The PHP Group
Built by Amazon Linux
Zend Engine v4.5.1, Copyright (c) Zend Technologies
    with Zend OPcache v8.5.1, Copyright (c), by Zend Technologies
[ec2-user@ip-172-31-100-89 ~]$ sudo dnf install -y httpd
Last metadata expiration check: 0:44:05 ago on Sun Feb 15 15:18:27 2026.
Package httpd-2.4.66-1.amzn2023.0.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-100-89 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-31-100-89 ~]$ sudo systemctl enable httpd
[ec2-user@ip-172-31-100-89 ~]$ sudo systemctl restart httpd
[ec2-user@ip-172-31-100-89 ~]$ sudo nano /var/www/html/info.php
[ec2-user@ip-172-31-100-89 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-100-89 html]$ ls -ltr
total 0
[ec2-user@ip-172-31-100-89 html]$ vi index.html
[ec2-user@ip-172-31-100-89 html]$ pwd
/var/www/html
[ec2-user@ip-172-31-100-89 html]$ sudo chmod -R 775 /var/www/html
```



Connected successfully to RDS!