Task Summary: Setting Up Microservices Architecture with WordPress and MySQL

1. Overview:

We deployed a microservices architecture with two EC2 instances on AWS, one for hosting WordPress and the other for MySQL. The goal was to configure WordPress to use MySQL as its backend database.

2. Resources Used:

- Two EC2 instances:
  - One for WordPress hosting (t2.micro, Ubuntu AMI)
  - One for MySQL database (t2.micro, Ubuntu AMI)
- Security Groups:
  - Created and configured security groups for both instances to control inbound and outbound traffic.
- WordPress:
  - Installed and configured WordPress on the WordPress hosting instance.
  - Configured WordPress to use MySQL as its backend database.
- MySQL:
  - Installed and configured MySQL on the MySQL instance.
  - Adjusted MySQL configuration to allow external connections.

3. Steps Taken:

1. Launched two t2.micro EC2 instances using the Ubuntu AMI.
2. Configured security groups for both instances:
   - Allowed inbound traffic on port 22 (SSH) for administration.
   - Allowed inbound traffic on port 80 (HTTP) and 443 (HTTPS) for web traffic to WordPress.
   - Allowed inbound traffic on port 3306 (MySQL) from the WordPress instance's security group.
   - Allowed outbound traffic to all destinations for both instances.
3. Installed and configured WordPress on the WordPress instance:
   - Set up Apache web server and PHP.
   - Downloaded and configured WordPress files.
   - Configured WordPress to use MySQL database with appropriate credentials.
4. Installed and configured MySQL on the MySQL instance:
   - Installed MySQL server and client packages.

- Configured MySQL to listen on all network interfaces for external connections.

- Created a MySQL database and user for WordPress.

5. Tested the connectivity between the WordPress and MySQL instances to ensure they can communicate successfully.

6. Created a welcome page in WordPress to serve as the homepage of the website.

4. Outcome:

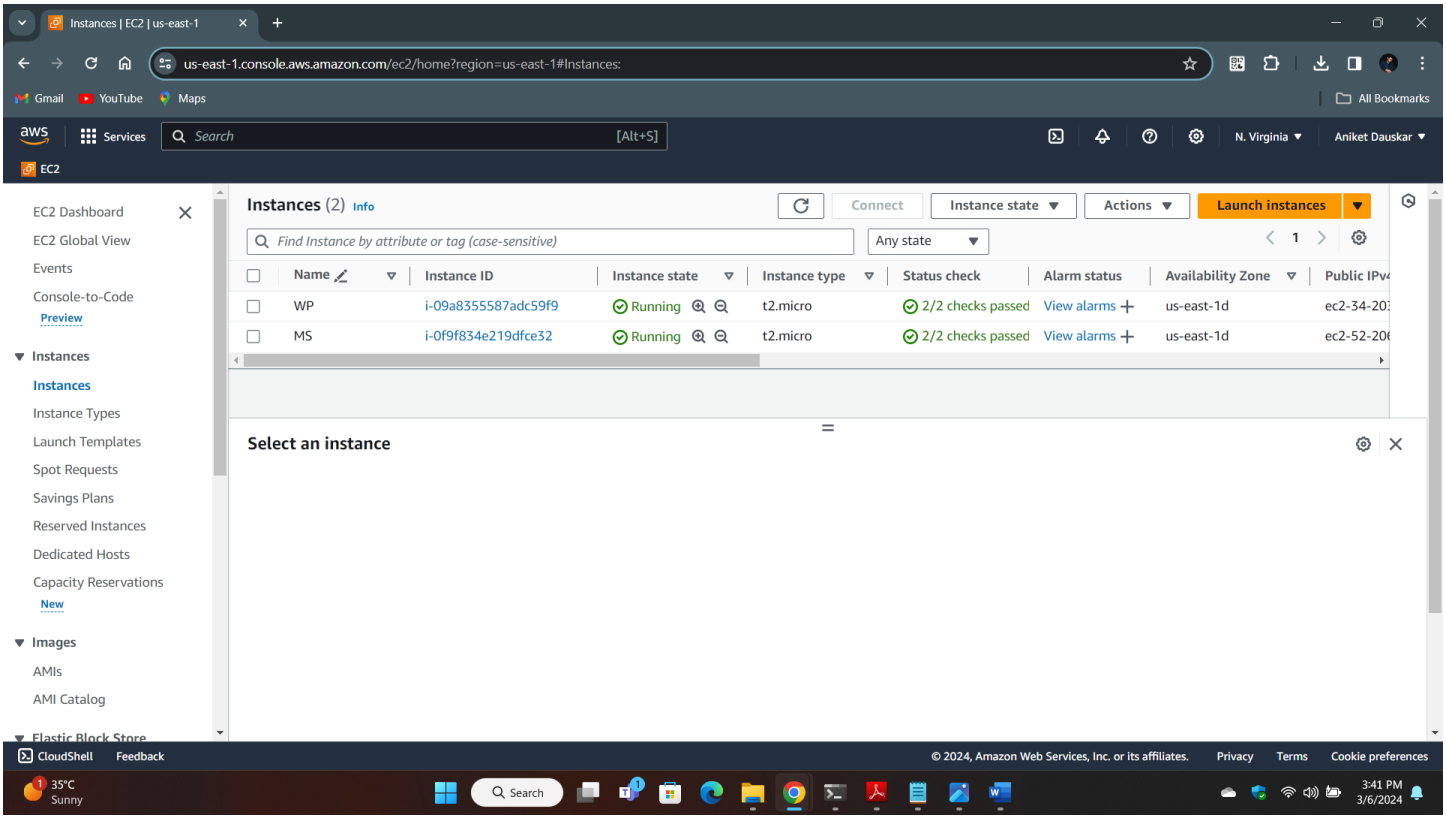
- Successfully deployed WordPress and MySQL on separate EC2 instances.

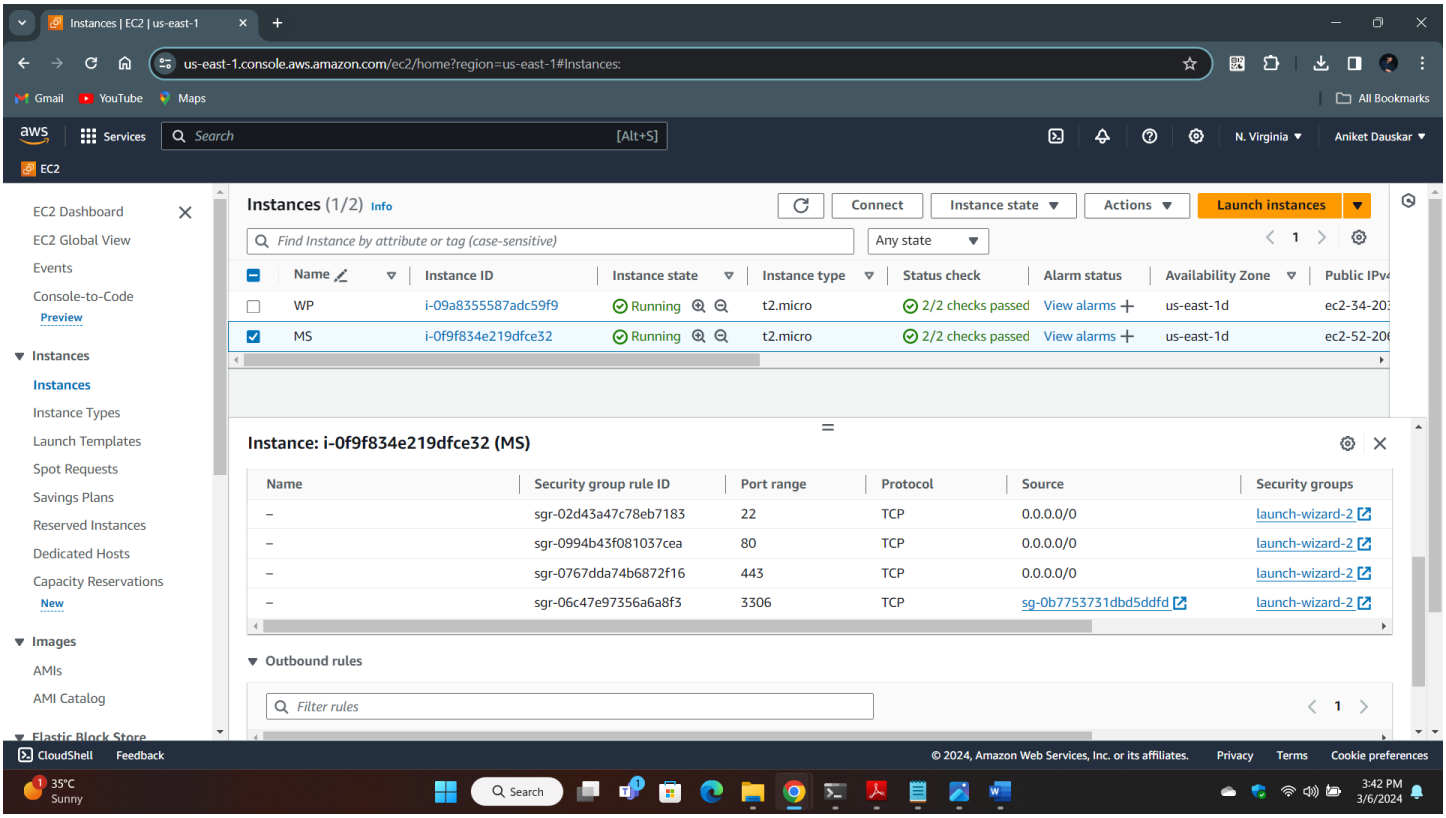
- Configured WordPress to use MySQL as its backend database.

- Established secure communication between the instances using security groups.

- Created a functional welcome page in WordPress to serve as the homepage of the website.

By following these steps, we have set up a scalable and efficient microservices architecture with WordPress and MySQL, ensuring optimal performance and security for the web application.

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Instances (1/2) Info
Connect
Instance state
Actions
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Status check
Alarm status
Availability Zone
Public IPv4
WP
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Running
t2.micro
2/2 checks passed
View alarms
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MS
i-0f9f834e219dfce32
Running
t2.micro
2/2 checks passed
View alarms
us-east-1d
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Security group rule ID
Port range
Protocol
Source
Security groups
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80
TCP
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Outbound rules
Filter rules
CloudShell
Feedback
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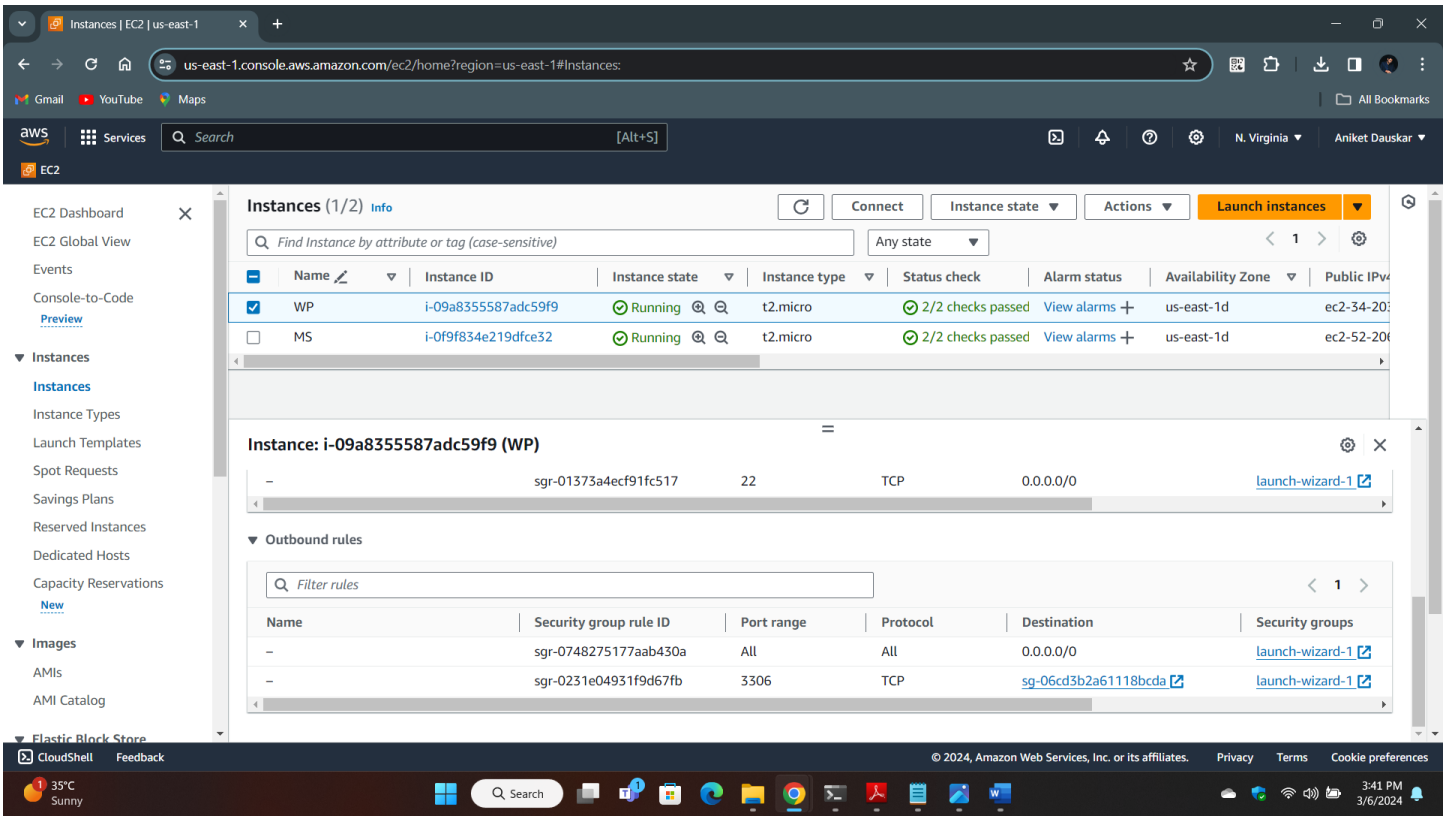
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Instances (1/2) Info
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Find Instance by attribute or tag (case-sensitive)
Any state
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4
WP
i-09a8355587adc59f9
Running
t2.micro
2/2 checks passed
View alarms
us-east-1d
MS
i-0f9f834e219dfce32
Running
t2.micro
2/2 checks passed
View alarms
us-east-1d
Instance: i-09a8355587adc59f9 (WP)
sgr-01373a4ecf91fc517
22
TCP
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Outbound rules
Filter rules
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Security group rule ID
Port range
Protocol
Destination
Security groups
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All
All
0.0.0.0/0
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TCP
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CloudShell
Feedback
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Privacy
Terms
Cookie preferences
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Sunny
Search
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