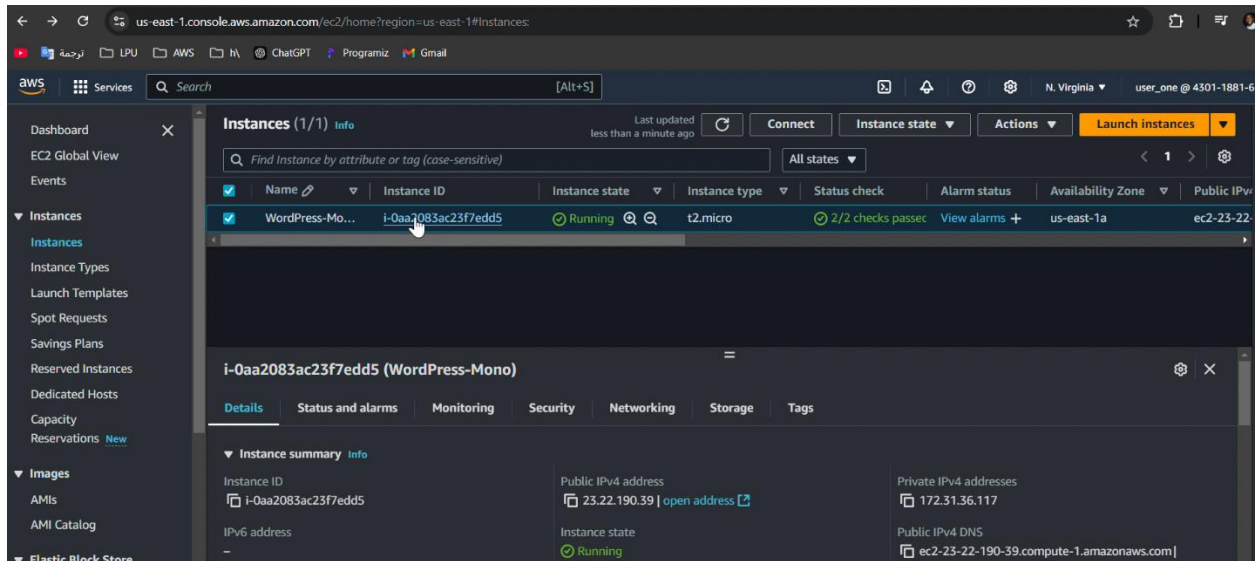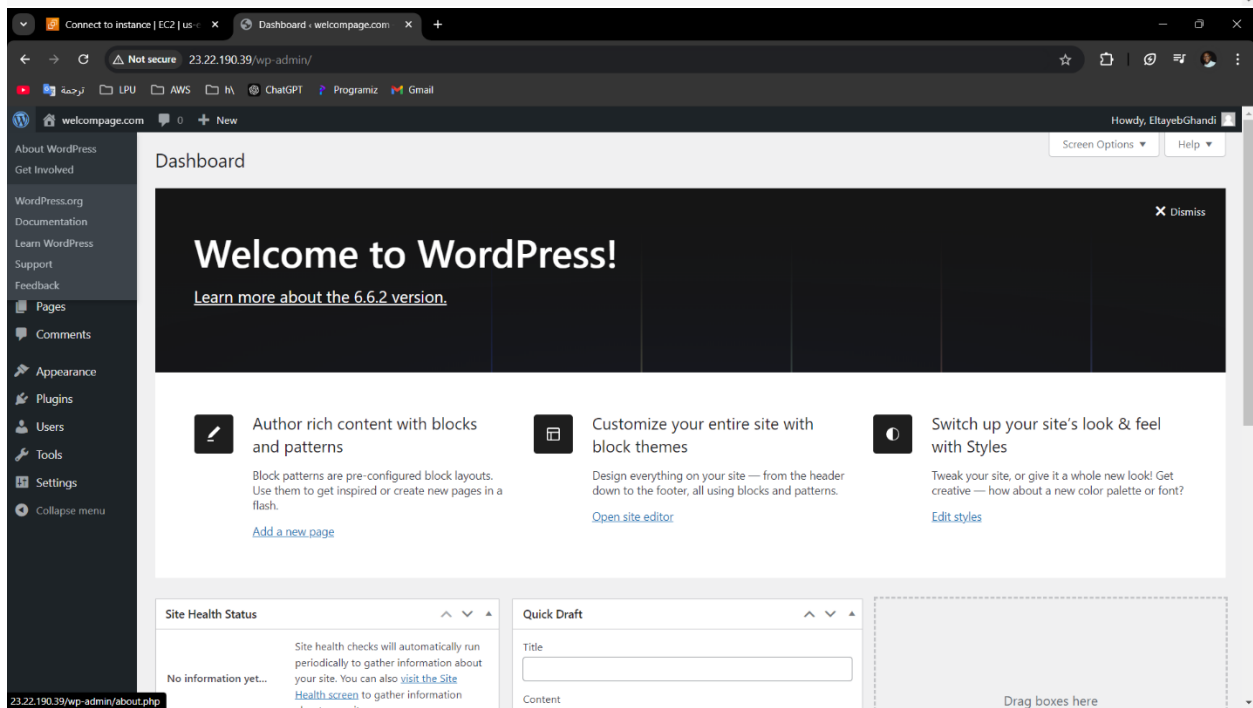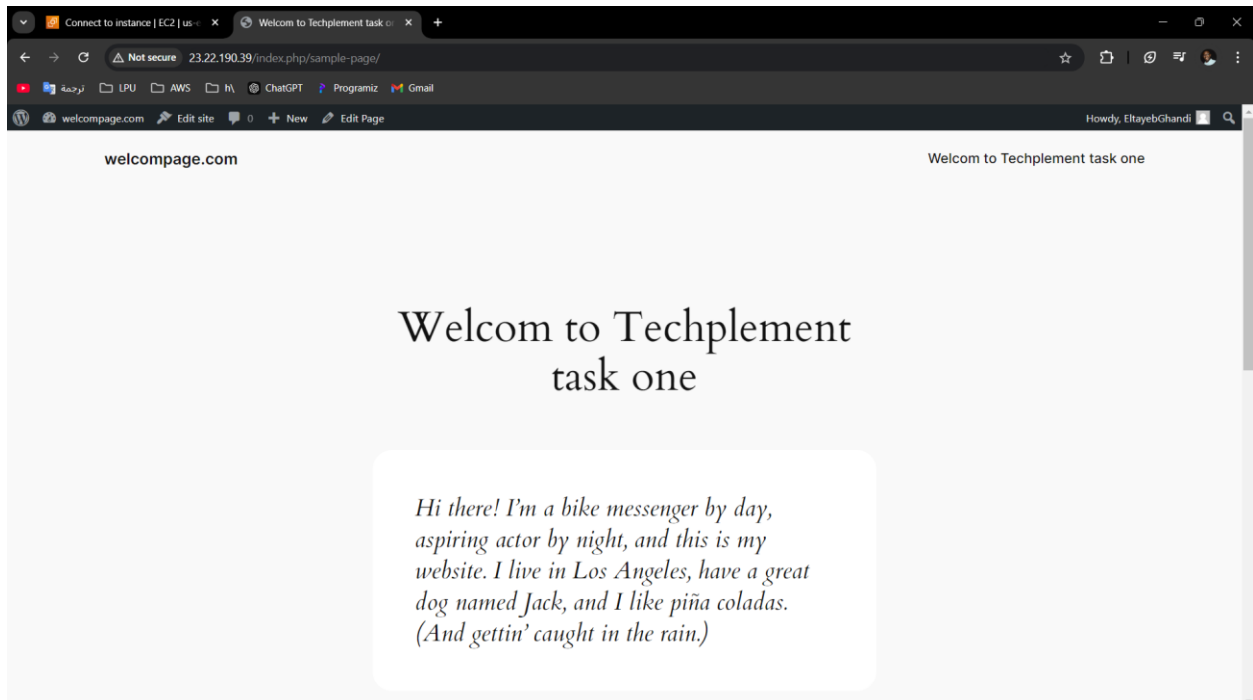# Techplement – week 1

❖ **Monolithic: -**

I created one instance for deploying both WordPress and MySQL, with ubuntu as AMI and type t2-micro.

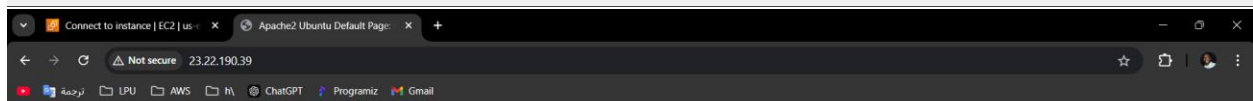- o The steps:
    1. Lunch instance with ports http, https, and ssh and named WordPress-mono.
    2. Connect to ssh using my personal terminal to start deploying.
    3. Updated and upgraded the instance.
    4. Downloaded apache2.
    5. Downloaded mysql-server.
    6. Restart and enable mysql.
    7. Then I log into my mysql and configure new table for WordPress with permission for user-name, password, and localhost.
    8. Then I reseat and enable my apache2.
    9. Then I downloaded the last WordPress package.
    10. Then I edit the file of WordPress by defining what I configure in mysql.

11.   Then I used my public IP to open the page of WordPress.

welcompage.com   Edit site   0   New   Edit Page   Howdy, EltayebGhandi

welcompage.com   Welcom to Techplement task one

Welcom to Techplement
task one

Hi there! I'm a bike messenger by day, aspiring actor by night, and this is my website. I live in Los Angeles, have a great dog named Jack, and I like piña coladas. (And gettin' caught in the rain.)

welcompage.com   0   New   Howdy, EltayebGhandi

About WordPress
Get Involved

WordPress.org
Documentation
Learn WordPress
Support
Feedback

Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu

Dashboard   Screen Options ▾   Help ▾

Welcome to WordPress!

Learn more about the 6.6.2 version.   ✕ Dismiss

Author rich content with blocks and patterns

Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.

Add a new page

Customize your entire site with block themes

Design everything on your site — from the header down to the footer, all using blocks and patterns.

Open site editor

Switch up your site's look & feel with Styles

Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?

Edit styles

Site Health Status

No information yet...   Site health checks will automatically run periodically to gather information about your site. You can also visit the Site Health screen to gather information

Quick Draft

Title

Content

Drag boxes here

23.22.190.39/wp-admin/about.php

Browser 1 — WordPress Login (23.22.190.39/wp-login.php)

Username or Email Address

EltayebGhandi

Password

●●●●●●●●●●●●●●●●● 👁

☑ Remember Me

Log In

Lost your password?

← Go to welcompage.com

Browser 2 — Apache2 Ubuntu Default Page (23.22.190.39)

Apache2 Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /usr/share/doc/apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|        `-- ports.conf
|-- mods-enabled
|        |-- *.load
|        `-- *.conf
|-- conf-enabled
|        `-- *.conf
|-- sites-enabled
|        `-- *.conf
```

- apache2.conf is the main configuration file. It puts the pieces together by including all remaining

❖ Microservices: -

I created two instances to deploy WordPress and MySQL.

o Steps:

1. I start by lunching WordPress instance and making separate security group for it.
2. Then I lunched another instance for MYSQL and mitigate only the permission for SSH and mysql/aurora, and make the source as the security group of wordpress.
3. Then I started to update and upgrade the EC2 instance of mysql.
4. Then downloading, reseat, enable, and configure it.
5. Then I start working on my wordpress instance, by deploying and configuring apache2, and wordpress package.
6. Then I accessed the website from the public IP of wordpress instance.

Window 1 (top):

Instance details | EC2 | us-east × | Welcome to 2nd part of task 1 × | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-0d94584349ca48fad

YouTube ترجمة LPU AWS h٨ ChatGPT Programiz Gmail

aws ::: Services 🔍 Search [Alt+S]   N. Virginia ▾   user_one @ 4301-1881-6803 ▾

Events

Instances
- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations *New*

Images
- AMIs
- AMI Catalog

Elastic Block Store
- Volumes
- Snapshots
- Lifecycle Manager

Network & Security
- Security Groups
- Elastic IPs

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance details Info

Platform
🔲 Ubuntu

Platform details
🔲 Linux/UNIX

Stop protection
Disabled

Instance auto-recovery
Default

AMI Launch index
0

Credit specification
standard

Usage operation
🔲 RunInstances

Enclaves Support
–

Allow tags in instance metadata
Disabled

AMI ID
🔲 ami-0866a3c8686eaeeba

AMI name
🔲 ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-a md64-server-20240927

Launch time
🔲 Wed Nov 06 2024 02:09:42 GMT+0530 (India Standar d Time) (about 1 hour)

Lifecycle
normal

Key pair assigned at launch
🔲 intern

Kernel ID
–

RAM disk ID
–

Boot mode
🔲 uefi-preferred

Use RBN as guest OS hostname
🔲 Disabled

Monitoring
disabled

Termination protection
Disabled

AMI location
🔲 amazon/ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-20240927

Stop-hibernate behavior
Disabled

State transition reason
–

State transition message
–

Owner
🔲 430118816803

Current instance boot mode
🔲 legacy-bios

Answer RBN DNS hostname IPv4
🔲 Enabled

CloudShell Feedback   © 2024, Amazon Web Services, Inc. or its affiliates.   Privacy Terms Cookie preferences

---

Window 2 (bottom):

Instance details | EC2 | us-east × | Welcome to 2nd part of task 1 × | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-0d94584349ca48fad

YouTube ترجمة LPU AWS h٨ ChatGPT Programiz Gmail

aws ::: Services 🔍 Search [Alt+S]   N. Virginia ▾   user_one @ 4301-1881-6803 ▾

Events

Instances
- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations *New*

Images
- AMIs
- AMI Catalog

Elastic Block Store
- Volumes
- Snapshots
- Lifecycle Manager

Network & Security
- Security Groups
- Elastic IPs

EC2 > Instances > i-0d94584349ca48fad

Instance summary for i-0d94584349ca48fad (mysql-instance) Info
Updated less than a minute ago

🔄 Connect Instance state ▾ Actions ▾

Instance ID
🔲 i-0d94584349ca48fad

IPv6 address
–

Hostname type
IP name: ip-172-31-34-100.ec2.internal

Answer private resource DNS name
IPv4 (A)

Auto-assigned IP address
🔲 54.242.201.138 [Public IP]

IAM Role
–

IMDSv2
Required

Public IPv4 address
🔲 54.242.201.138 | open address 🔗

Instance state
⊘ Running

Private IP DNS name (IPv4 only)
🔲 ip-172-31-34-100.ec2.internal

Instance type
t2.micro

VPC ID
🔲 vpc-097a7925d2e4fb029 🔗

Subnet ID
🔲 subnet-0a648ed85794cfbde 🔗

Instance ARN
🔲 arn:aws:ec2:us-east-1:430118816803:instance/i-0d94 584349ca48fad

Private IPv4 addresses
🔲 172.31.34.100

Public IPv4 DNS
🔲 ec2-54-242-201-138.compute-1.amazonaws.com | open address 🔗

Elastic IP addresses
–

AWS Compute Optimizer finding
ⓘ Opt-in to AWS Compute Optimizer for recommendations.
| Learn more 🔗

Auto Scaling Group name
–

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

CloudShell Feedback   © 2024, Amazon Web Services, Inc. or its affiliates.   Privacy Terms Cookie preferences

Screenshot 1 (Top)

Instance details | EC2 | us-east | Welcome to 2nd part of task 1

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-065a16e9fbb1cd09c

aws   Services   Search   [Alt+S]   N. Virginia ▾   user_one @ 4301-1881-6803 ▾

Events

Instances
- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations New

Images
- AMIs
- AMI Catalog

Elastic Block Store
- Volumes
- Snapshots
- Lifecycle Manager

Network & Security
- Security Groups
- Elastic IPs

Details   Status and alarms   Monitoring   Security   Networking   Storage   Tags

▼ Instance details   Info

Platform
Ubuntu

Platform details
Linux/UNIX

Stop protection
Disabled

Instance auto-recovery
Default

AMI Launch index
0

Credit specification
standard

Usage operation
RunInstances

Enclaves Support
–

Allow tags in instance metadata
Disabled

AMI ID
ami-0866a3c8686eaeeba

AMI name
ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-20240927

Launch time
Wed Nov 06 2024 02:05:51 GMT+0530 (India Standard Time) (about 1 hour)

Lifecycle
normal

Key pair assigned at launch
intern

Kernel ID
–

RAM disk ID
–

Boot mode
uefi-preferred

Use RBN as guest OS hostname
Disabled

Monitoring
disabled

Termination protection
Disabled

AMI location
amazon/ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-20240927

Stop-hibernate behavior
Disabled

State transition reason
–

State transition message
–

Owner
430118816803

Current instance boot mode
legacy-bios

Answer RBN DNS hostname IPv4
Enabled

CloudShell   Feedback

© 2024, Amazon Web Services, Inc. or its affiliates.   Privacy   Terms   Cookie preferences

Screenshot 2 (Bottom)

Instance details | EC2 | us-east | Welcome to 2nd part of task 1

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#InstanceDetails:instanceId=i-065a16e9fbb1cd09c

aws   Services   Search   [Alt+S]   N. Virginia ▾   user_one @ 4301-1881-6803 ▾

Events

Instances
- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations New

Images
- AMIs
- AMI Catalog

Elastic Block Store
- Volumes
- Snapshots
- Lifecycle Manager

Network & Security
- Security Groups
- Elastic IPs

EC2 > Instances > i-065a16e9fbb1cd09c

Instance summary for i-065a16e9fbb1cd09c (wordpress-instance) Info
Updated less than a minute ago

Connect   Instance state ▾   Actions ▾

Instance ID
i-065a16e9fbb1cd09c

IPv6 address
–

Hostname type
IP name: ip-172-31-33-172.ec2.internal

Answer private resource DNS name
IPv4 (A)

Auto-assigned IP address
3.82.42.239 [Public IP]

IAM Role
–

IMDSv2
Required

Public IPv4 address
3.82.42.239 | open address

Instance state
Running

Private IP DNS name (IPv4 only)
ip-172-31-33-172.ec2.internal

Instance type
t2.micro

VPC ID
vpc-097a7925d2e4fb029

Subnet ID
subnet-0a648ed85794cfbde

Instance ARN
arn:aws:ec2:us-east-1:430118816803:instance/i-065a16e9fbb1cd09c

Private IPv4 addresses
172.31.33.172

Public IPv4 DNS
ec2-3-82-42-239.compute-1.amazonaws.com | open address

Elastic IP addresses
–

AWS Compute Optimizer finding
Opt-in to AWS Compute Optimizer for recommendations.
Learn more

Auto Scaling Group name
–

Details   Status and alarms   Monitoring   Security   Networking   Storage   Tags
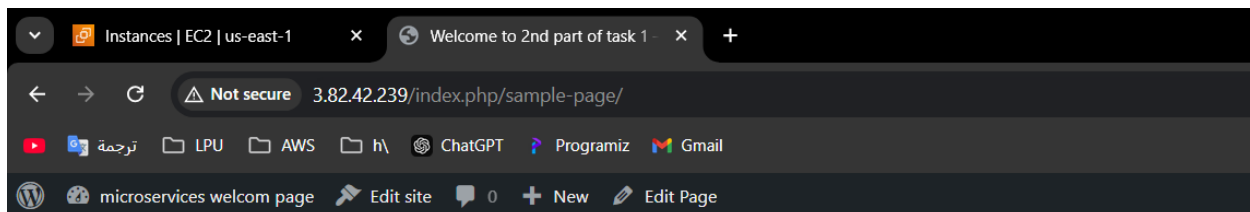
CloudShell   Feedback

© 2024, Amazon Web Services, Inc. or its affiliates.   Privacy   Terms   Cookie preferences

microservices welcom page Edit site 0 New Edit Page

microservices welcom page

Welcome to 2nd pa task 1

Available AWS Certifications

Professional
Two years of comprehensive experience designing, operating, and troubleshooting solutions using the AWS Cloud
Cost: $300 USD   Duration: 180 mins

Associate
One year of experience solving problems and implementing solutions using the AWS Cloud
Cost: $150 USD   Duration: 130 mins

aws certified
Solutions Architect
Professional

aws certified
DevOps Engineer
Professional

aws certified
Solutions Architect
Associate

aws certified
SysOps Administrator
Associate

aws certified
Developer
Associate

Architect   **Operations**   **Developer**

Foundational

aws certified

GNU nano 7.2   wp-config.php *
```
<?php
/**
 * The base configuration for WordPress
 *
 * The wp-config.php creation script uses this file during the installation.
 * You don't have to use the website, you can copy this file to "wp-config.php"
 * and fill in the values.
 *
 * This file contains the following configurations:
 *
 * * Database settings
 * * Secret keys
 * * Database table prefix
 * * ABSPATH
 *
 * @link https://developer.wordpress.org/advanced-administration/wordpress/wp-config/
 *
 * @package WordPress
 */

// ** Database settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define( 'DB_NAME','wordpress' );

/** Database username */
define( 'DB_USER', 'wpuser' );

/** Database password */
define( 'DB_PASSWORD', 'password' );

/** Database hostname */
define( 'DB_HOST', '172.31.34.100' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );

/** The database collate type. Don't change this if in doubt. */
define( 'DB_COLLATE', '' );

/**#@+
```

```
^G Help      ^O Write Out   ^W Where Is   ^K Cut      ^T Execute   ^C Location    M-U Undo    M-A Set Mark   M-] To Bracket
^X Exit      ^R Read File   ^\ Replace    ^U Paste    ^J Justify   ^/ Go To Line  M-E Redo    M-6 Copy       ^Q Where Was
```

❖ Ref: -
https://medium.com/@mudasirhaji/step-by-step-guide-on-how-to-install-mysql-8-server-on-aws-ec2linux-2-in-2024-72f3f14764b6

https://www.linkedin.com/pulse/setting-up-wordpress-mysql-two-different-ec2-mohit-agarwal/

https://www.linkedin.com/pulse/setting-up-wordpress-mysql-two-different-ec2-mohit-agarwal/