Name = Arnav Sharma
Student ID = 35554704
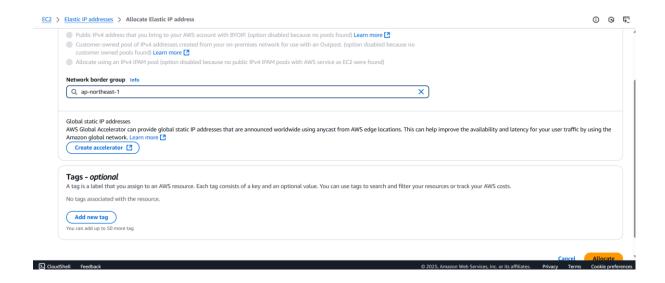
Assignment 2
Cloud Server project

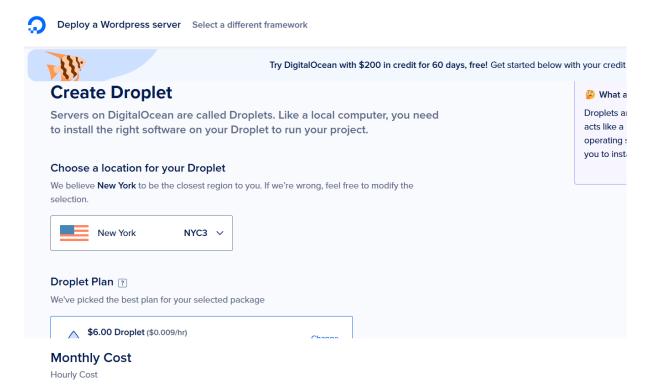**Name = Arnav Sharma**

Student ID = 35554704

Unit Name = Introduction to Server Environments and Architectures (ICT 1711)
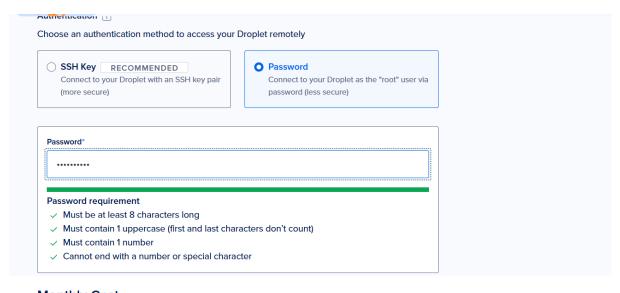
IP Address: - 209.38.62.119

DNS: - https://brixmart.shop/

Name = Arnav Sharma
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Creating the WordPress Server

Making the password the Droplet

Name = Arnav Sharma
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Authentication ⓘ

Choose an authentication method to access your Droplet remotely

○ **SSH Key** RECOMMENDED
Connect to your Droplet with an SSH key pair
(more secure)

● **Password**
Connect to your Droplet as the "root" user via
password (less secure)

Password*

••••••••••

Password requirement
✓ Must be at least 8 characters long
✓ Must contain 1 uppercase (first and last characters don't count)
✓ Must contain 1 number
✓ Cannot end with a number or special character

Monthly Cost
Hourly Cost

Making project-droplet to server

first-project DEFAULT
Update your project information under Settings

→ Move Resources

Resources   Activity   Settings

DROPLETS (1)

● ◊ wordpress-s-1vcpu-1gb-nyc3-01   134.122.8.202   Ⓦ Get started   +☁ +◊ Upsize ···

This is the IP address of WordPress

wordpress-s-1vcpu-1gb-nyc3-01
in ▣ first-project / 1 GB Memory / 25 GB Disk / NYC3 - WordPress 6.4.5 on Ubuntu 22.04 Ⓦ Get started   **Upsize Droplet** ON

ipv4: 134.122.8.202   ipv6: Enable now   Private IP: 10.108.0.2   Reserved IP: Enable now   Metrics agent: ···   Console: ▣ ?

Graphs
Access
Power

Upgrade your Droplet for additional metrics and alerting.   **Learn How to Update** ✕

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Setting DNS records for digital oceans.
Creating a record for www.
creating a record for brixmart.shop
to redirect the domain for both names.

DNS records

Type	Hostname	Value	TTL (seconds)	
A	www.brixmart.shop	directs to 209.38.62.119	3600	More ⌄
A	brixmart.shop	directs to 209.38.62.119	3600	More ⌄
NS	brixmart.shop	directs to ns1.digitalocean.com.	1800	More ⌄
NS	brixmart.shop	directs to ns2.digitalocean.com.	1800	More ⌄
NS	brixmart.shop	directs to ns3.digitalocean.com.	1800	More ⌄

Configuring DNS records for server redirect.

Use @ to create the record at the root of the domain or enter a hostname to create it elsewhere. A records are for IPv4 addresses only and tell a request where your domain should direct to.

HOSTNAME	WILL DIRECT TO	TTL (SECONDS)	
Enter @ or hostname *	Select resource or enter custom IP	Enter TTL 3600 ✓	Create Record

DNS records

Type	Hostname	Value	TTL (seconds)	
A	www.brixmart.shop	directs to 209.38.62.119	3600	More ⌄
A	brixmart.shop	directs to 209.38.62.119	3600	More ⌄
NS	brixmart.shop	directs to ns1.digitalocean.com.	1800	More ⌄
NS	brixmart.shop	directs to ns2.digitalocean.com.	1800	More ⌄
NS	brixmart.shop	directs to ns3.digitalocean.com.	1800	More ⌄

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Changing name servers from hostinger to digital oceans for domain redirects.

ns1.dns-parking.com
ns2.dns-parking.com

Select Nameservers

○ Use Hostinger nameservers (recommended)
◉ Change nameservers

ns1.digitalocean.com

ns2.digitalocean.com

ns3.digitalocean.com

Nameserver 4

Save   Cancel

Download Apache2: -

```
root@wordpress-s-1vcpu-1gb-nyc3-01:~# sudo apt install apache2
```

Installing SSL certificate.

Run this command to get a certificate and have Certbot edit your apache configuration automatically to serve it, turning on HTTPS access in a single step.

```
$ sudo certbot --apache
```

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Setting firewall. Opening ports for only HTTP, HTTPS, SSH and MySQL database for security.

Connecting to droplet ssh server.

Configuring/ installing WordPress server with droplet.

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Student ID = 35554704

```
IMPORTANT:
    After connecting to the Droplet for the first time,
    immediately add the WordPress administrator at http://134.122.8.202.

For help and more information, visit https://do.co/34TfYn8

*********************************************************************
To delete this message of the day: rm -rf /etc/update-motd.d/99-one-click
Last login: Sat Apr  5 09:20:21 2025 from 198.211.111.194
This script will copy the WordPress installation into
Your web root and move the existing one to /var/www/html.old
---------------------------------------------------
This setup requires a domain name.  If you do not have one yet, you may
cancel this setup, press Ctrl+C.  This script will run again on your next login
---------------------------------------------------
Enter the domain name for your new WordPress site.
(ex. example.org or test.example.org) do not include www or http/s
---------------------------------------------------
Domain/Subdomain name: brixmart.shop
Enabling conf block-xmlrpc.
To activate the new configuration, you need to run:
  systemctl reload apache2
Now we will create your new admin user account for WordPress.
Your Email Address: 35554704@student.murdoch.edu.au

Username: Arnavking

Password:

Blog Title: Brixmart

Is the information correct? [Y/n] y
```

```
/usr/bin/wp                100%[===========================================>]   6.72M  --.-KB/s    in 0.06s

2025-04-05 09:27:28 (116 MB/s) - '/usr/bin/wp' saved [7048108/7048108]


Completing the configuration of WordPress.WordPress is already installed.
Installing WP fail2ban - Advanced Security (5.4.0.1)
Downloading installation package from https://downloads.wordpress.org/plugin/wp-fail2ban.5.4.0.1.zip...
Unpacking the package...
Installing the plugin...
Plugin installed successfully.
Success: Installed 1 of 1 plugins.
Plugin 'wp-fail2ban' activated.
Success: Activated 1 of 1 plugins.
Installation complete. Access your new WordPress site in a browser to continue.
root@wordpress-s-1vcpu-1gb-nyc3-01:~#
```

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Installing lest Encrypt cerbot for SSL certificate.

```
Next, you have the option of configuring LetsEncrypt to secure your new site.  Before doing this, be sure that you have pointed your domain or subdomain to this server's IP
 address.  You can also run LetsEncrypt certbot later with the command 'certbot --apache'


Would you like to use LetsEncrypt (certbot) to configure SSL(https) for your new site? (y/n): y
Saving debug log to /var/log/letsencrypt/letsencrypt.log
Enter email address (used for urgent renewal and security notices)
 (Enter 'c' to cancel): 35554704@student.murdoch.edu.au

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Please read the Terms of Service at
https://letsencrypt.org/documents/LE-SA-v1.5-February-24-2025.pdf. You must
agree in order to register with the ACME server. Do you agree?
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
(Y)es/(N)o: y


- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Would you be willing, once your first certificate is successfully issued, to
share your email address with the Electronic Frontier Foundation, a founding
partner of the Let's Encrypt project and the non-profit organization that
develops Certbot? We'd like to send you email about our work encrypting the web,
EFF news, campaigns, and ways to support digital freedom.
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
(Y)es/(N)o: y
Account registered.
```

```
Which names would you like to activate HTTPS for?
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
1: brixmart.shop
2: www.brixmart.shop
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Select the appropriate numbers separated by commas and/or spaces, or leave input
blank to select all options shown (Enter 'c' to cancel): 1
Requesting a certificate for brixmart.shop

Certbot failed to authenticate some domains (authenticator: apache). The Certificate Authority reported these problems:
  Domain: brixmart.shop
  Type:   unauthorized
  Detail: 84.32.84.32: Invalid response from http://brixmart.shop/.well-known/acme-challenge/9m2PvIwoXzv--TpeftCKbqWlUyEzWxhvZSkgqJ49g_A: 500

Hint: The Certificate Authority failed to verify the temporary Apache configuration changes made by Certbot. Ensure that the listed domains point to this Apache server and
that it is accessible from the internet.

Some challenges have failed.
Ask for help or search for solutions at https://community.letsencrypt.org. See the logfile /var/log/letsencrypt/letsencrypt.log or re-run Certbot with -v for more details.
WordPress has been enabled at https://brixmart.shop  Please open this URL in a browser to complete the setup of your site.
/root/wp_setup.sh: line 133: break: only meaningful in a `for', `while', or `until' loop
Finalizing installation...
--2025-04-05 09:27:28--  https://raw.githubusercontent.com/wp-cli/builds/gh-pages/phar/wp-cli.phar
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.111.133, 185.199.109.133, 185.199.110.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.111.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 7048108 (6.7M) [application/octet-stream]
Saving to: '/usr/bin/wp'

/usr/bin/wp                 100%[===========================================>]   6.72M  --.-KB/s    in 0.06s

2025-04-05 09:27:28 (116 MB/s) - '/usr/bin/wp' saved [7048108/7048108]
```