

KOMPUTASI AWAN

Kuis 1

Oleh:

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**PROGRAM STUDI TEKNIK INFORMATIKA
JURUSAN TEKNOLOGI INFORMASI
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Kuis 1

Melakukan Setup aplikasi Wordpress di VM+DB (Membuat laporan dan push di repository github).

Install Wordpress Pada PaaS

A. Membuat Database

```
mysql> create database wordpress;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
| wordpress |
+-----+
5 rows in set (0.00 sec)

mysql> grant all privileges on wordpress.* to admin;
Query OK, 0 rows affected (0.00 sec)

mysql>
```

B. Download Wordpress Pada Folder /var/www/html dengan perintah.

- `wget https://wordpress.org/latest.tar.gz;`

```
ubuntu@vm-ubuntu1:~$ cd /var/www/html
ubuntu@vm-ubuntu1:/var/www/html$ sudo wget https://wordpress.org/latest.tar.gz;
--2021-11-04 15:34:18-- https://wordpress.org/latest.tar.gz
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 15087630 (14M) [application/octet-stream]
Saving to: 'latest.tar.gz'

latest.tar.gz      100%[=====>] 14.39M  1.71MB/s   in 63s

2021-11-04 15:35:22 (233 KB/s) - 'latest.tar.gz' saved [15087630/15087630]

ubuntu@vm-ubuntu1:/var/www/html$
```

C. Mengetrak Wordpress Pada Folder /var/www/html dengan perintah :

- `sudo tar xzvf latest.tar.gz`

```
ubuntu@vm-ubuntu1: /var/www/html
wordpress/wp-admin/js/custom-background.js
wordpress/wp-admin/js/color-picker.min.js
wordpress/wp-admin/js/auth-app.js
wordpress/wp-admin/js/code-editor.js
wordpress/wp-admin/js/common.js
wordpress/wp-admin/js/set-post-thumbnail.min.js
wordpress/wp-admin/js/postbox.min.js
wordpress/wp-admin/js/color-picker.js
wordpress/wp-admin/js/password-strength-meter.js
wordpress/wp-admin/js/customize-nav-menus.js
wordpress/wp-admin/js/editor-expand.js
wordpress/wp-admin/js/code-editor.min.js
wordpress/wp-admin/js/set-post-thumbnail.js
wordpress/wp-admin/options-permalink.php
wordpress/wp-admin/widgets.php
wordpress/wp-admin/setup-config.php
wordpress/wp-admin/install.php
wordpress/wp-admin/admin-header.php
wordpress/wp-admin/post-new.php
wordpress/wp-admin/themes.php
wordpress/wp-admin/options-reading.php
wordpress/wp-trackback.php
wordpress/wp-comments-post.php
ubuntu@vm-ubuntu1: /var/www/html$
```

- `sudo rm rf latest.tar.gz`

```
ubuntu@vm-ubuntu1: /var/www/html$ sudo rm latest.tar.gz
ubuntu@vm-ubuntu1: /var/www/html$
```

D. Selanjutnya menginstall extension mysql

Install dan mengaktifkannya pada php.ini. Berikut adalah perintah untuk menginstall extension mysql pada php.

- `sudo apt-get install php-mysql`

```
ubuntu@vm-ubuntu1: ~
ubuntu@vm-ubuntu1:~$ sudo apt install php7.4
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php7.4 php-common php7.4-cli php7.4-common php7.4-json
  php7.4-opcache php7.4-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php7.4 php-common php7.4-cli php7.4-common php7.4-json
  php7.4-opcache php7.4-readline
0 upgraded, 8 newly installed, 0 to remove and 19 not upgraded.
Need to get 4016 kB of archives.
After this operation, 18.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal/main amd64 p
hp-common all 2:75 [11.9 kB]
Get:2 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4-common amd64 7.4.3-4ubuntu2.7 [980 kB]
Get:3 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4-json amd64 7.4.3-4ubuntu2.7 [19.2 kB]
Get:4 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4-opcache amd64 7.4.3-4ubuntu2.7 [198 kB]
Get:5 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4-readline amd64 7.4.3-4ubuntu2.7 [12.6 kB]
Get:6 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4-cli amd64 7.4.3-4ubuntu2.7 [1421 kB]
Get:7 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 libapache2-mod-php7.4 amd64 7.4.3-4ubuntu2.7 [1364 kB]
Get:8 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main
amd64 php7.4 all 7.4.3-4ubuntu2.7 [9248 B]
Fetched 4016 kB in 3s (1561 kB/s)
Selecting previously unselected package php-common.
(Reading database ... 70871 files and directories currently installed.)
Preparing to unpack .../0-php-common_2%3a75_all.deb ...
Unpacking php-common (2:75) ...
Selecting previously unselected package php7.4-common.
Preparing to unpack .../1-php7.4-common_7.4.3-4ubuntu2.7_amd64.deb ...
Unpacking php7.4-common (7.4.3-4ubuntu2.7) ...
Selecting previously unselected package php7.4-json.
Preparing to unpack .../2-php7.4-json_7.4.3-4ubuntu2.7_amd64.deb ...
Unpacking php7.4-json (7.4.3-4ubuntu2.7) ...
Selecting previously unselected package php7.4-opcache.
Preparing to unpack .../3-php7.4-opcache_7.4.3-4ubuntu2.7_amd64.deb ...
Unpacking php7.4-opcache (7.4.3-4ubuntu2.7) ...
Selecting previously unselected package php7.4-readline.
Preparing to unpack .../4-php7.4-readline_7.4.3-4ubuntu2.7_amd64.deb ...
Unpacking php7.4-readline (7.4.3-4ubuntu2.7) ...
```

```

ubuntu@vm-ubuntu1: ~
ubuntu@vm-ubuntu1:~$ sudo apt-get install php-mysql
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  php7.4-mysql
The following NEW packages will be installed:
  php-mysql php7.4-mysql
0 upgraded, 2 newly installed, 0 to remove and 19 not upgraded.
Need to get 123 kB of archives.
After this operation, 487 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal-updates/main amd64 php7.4-mysql amd64 7.4.3-4ubuntu2.7 [121 kB]
Get:2 http://ap-osaka-1-ad-1.clouds.archive.ubuntu.com/ubuntu focal/main amd64 php-mysql all 2:7.4+75 [2000 B]
Fetched 123 kB in 1s (90.4 kB/s)
Selecting previously unselected package php7.4-mysql.
(Reading database ... 71007 files and directories currently installed.)
Preparing to unpack .../php7.4-mysql_7.4.3-4ubuntu2.7_amd64.deb ...
Unpacking php7.4-mysql (7.4.3-4ubuntu2.7) ...
Selecting previously unselected package php-mysql.
Preparing to unpack .../php-mysql_2%3a7.4+75_all.deb ...
Unpacking php-mysql (2:7.4+75) ...
Setting up php7.4-mysql (7.4.3-4ubuntu2.7) ...

Creating config file /etc/php/7.4/mods-available/mysqlnd.ini with new version

Creating config file /etc/php/7.4/mods-available/mysqli.ini with new version

Creating config file /etc/php/7.4/mods-available/pdo_mysql.ini with new version
Setting up php-mysql (2:7.4+75) ...
Processing triggers for libapache2-mod-php7.4 (7.4.3-4ubuntu2.7) ...
Processing triggers for php7.4-cli (7.4.3-4ubuntu2.7) ...
ubuntu@vm-ubuntu1:~$

```

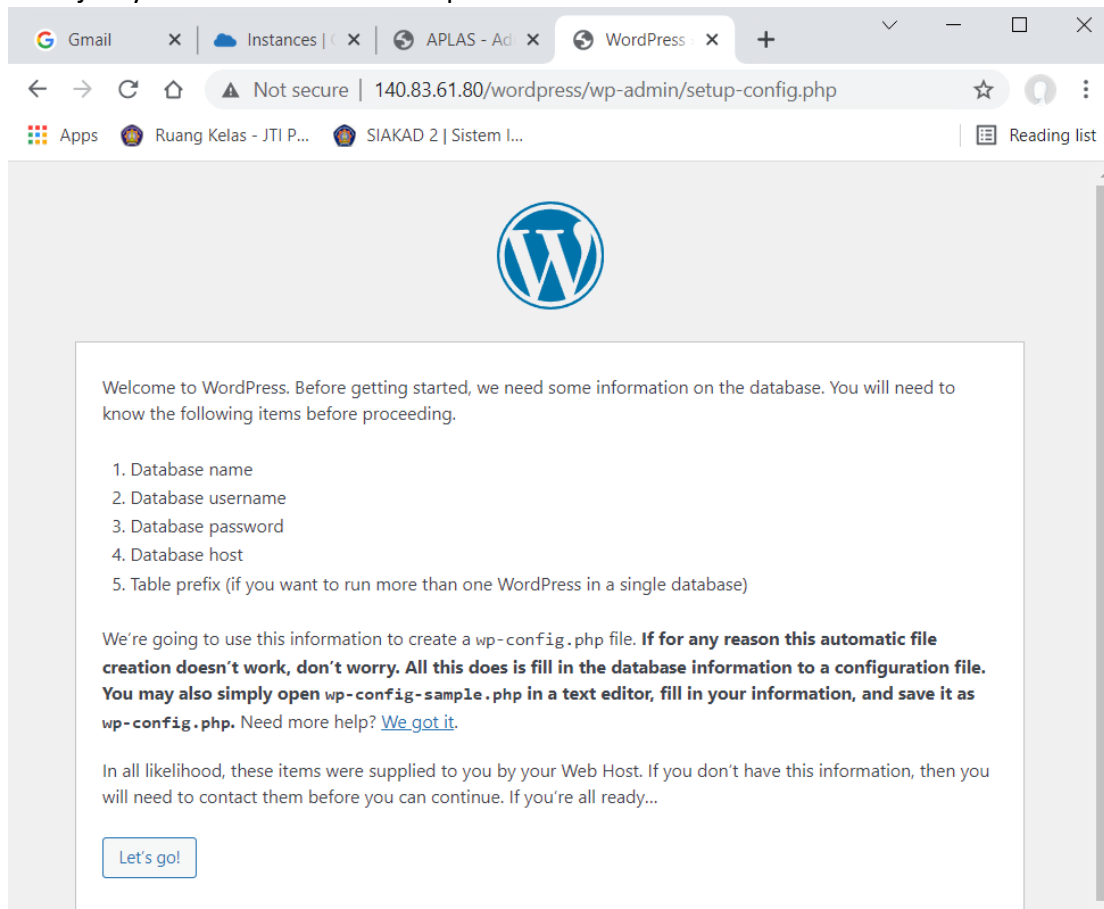
- sudo service apache2 restart
- sudo chown www-data:www-data -R *

```

ubuntu@vm-ubuntu1:~$ cd /etc/php/7.4/apache2
ubuntu@vm-ubuntu1:/etc/php/7.4/apache2$ sudo service apache2 restart
ubuntu@vm-ubuntu1:/etc/php/7.4/apache2$ sudo chown www-data:www-data -R *
ubuntu@vm-ubuntu1:/etc/php/7.4/apache2$

```


E. Selanjutnya Proses Instalasi Wordpress Melalui Browser



Gmail x Instances | Oracle Cloud Infrastr... x APLAS - Administrator Site x WordPress - Setup Configuration x +

← → ↻ ⚠ Not secure | 140.83.61.80/wordpress/wp-admin/setup-config.php?step=1 ☆ ⓘ ⋮

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Below you should enter your database connection details. If you're not sure about these, contact your host.


Database Name	<input type="text" value="wordpress"/>	The name of the database you want to use with WordPress.
Username	<input type="text" value="admin"/>	Your database username.
Password	<input type="password" value="@2001bRaHi"/>	Your database password.
Database Host	<input type="text" value="10.0.0.126"/>	You should be able to get this info from your web host, if localhost doesn't work.
Table Prefix	<input type="text" value="wp_"/>	If you want to run multiple WordPress installations in a single database, change this.

Disini saya tidak bisa membuat file wp-config secara otomatis, maka saya harus membuatnya secara manual dengan meng-copy paste isi teks berikut.

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← → ↻ ⚠ Not secure | 140.83.61.80/wordpress/wp-admin/setup-config.php?step=2 ☆ ⓘ ⋮

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Unable to write to wp-config.php file.

You can create the wp-config.php file manually and paste the following text into it.

```
<code>
</code>
```

After you've done that, click "Run the installation".

Kita perlu mengeditnya dengan perintah sudo nano wp-config.php

```
ubuntu@vm-ubuntu1:~$ cd /var/www/html/wordpress
ubuntu@vm-ubuntu1:/var/www/html/wordpress$ sudo nano wp-config.php
```

```
ubuntu@vm-ubuntu1: /var/www/html/wordpress
GNU nano 4.0 wp-config.php Modified
<?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 web site, you can copy this file to "wp-config.php"
 * and fill in the values.
 *
 * This file contains the following configurations:
 *
 * * MySQL settings
 * * Secret keys
 * * Database table prefix
 * * ABSPATH
 *
 * @link https://wordpress.org/support/article/editing-wp-config-php/
 *
 * @package WordPress
 */

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

/** MySQL database username */
define( 'DB_USER', 'admin' );

/** MySQL database password */
define( 'DB_PASSWORD', '@2001lBrAhI' );

/** MySQL hostname */
define( 'DB_HOST', '10.0.0.126' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8mb4' );


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

/**#@+
 * Authentication unique keys and salts.
 *
 * Change these to different unique phrases! You can generate these using
 * the [link https://api.wordpress.org/secret-key/1.1/salt/ WordPress.org secret-key service].
 *
 * You can change these at any point in time to invalidate all existing cookies.
 */
```

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← → ↻ ⚠ Not secure | 140.83.61.80/wordpress/wp-admin/install.php

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Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Don't worry, you can always change these settings later.

Site Title

Praktikum Sistem Terdistribusi

Username

admin

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password

p1bjw@SO(dghMhrVMK

Strong

Hide

Important: You will need this password to log in. Please store it in a secure location.

Your Email

1941720235@student.polinem

Double-check your email address before continuing.

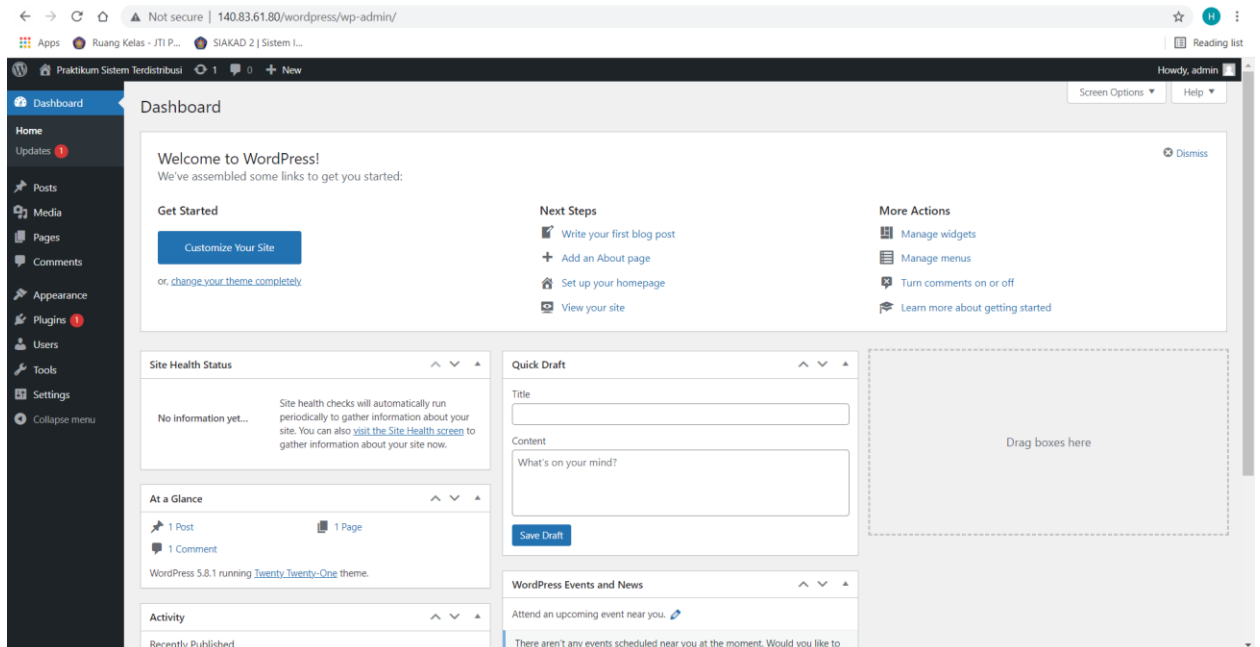
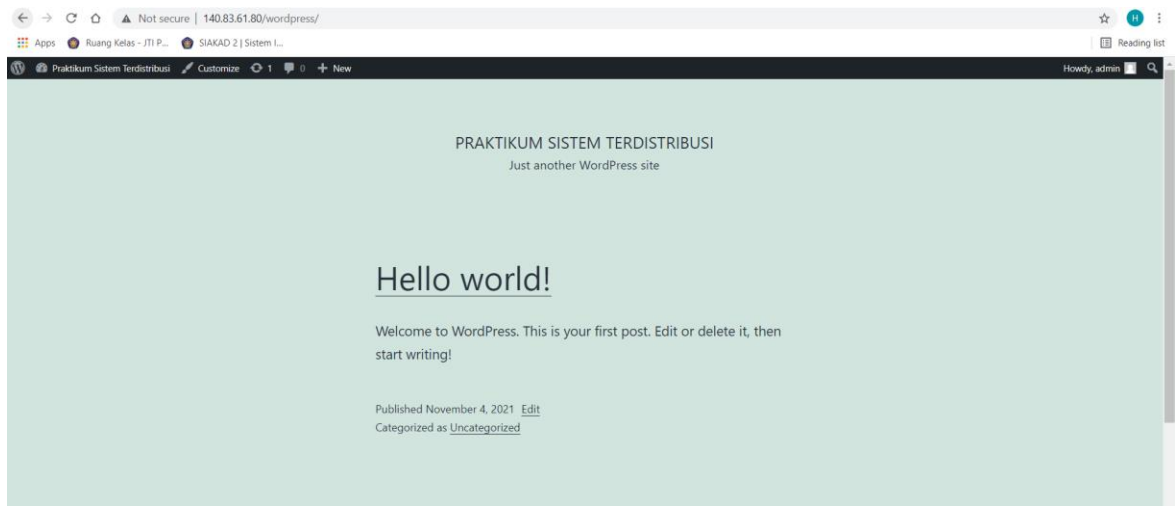
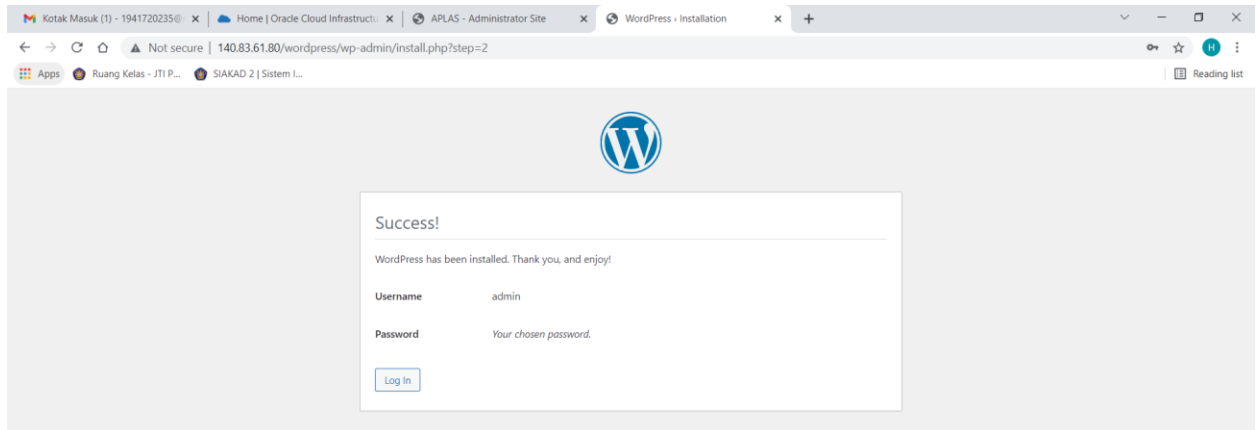
Search engine visibility

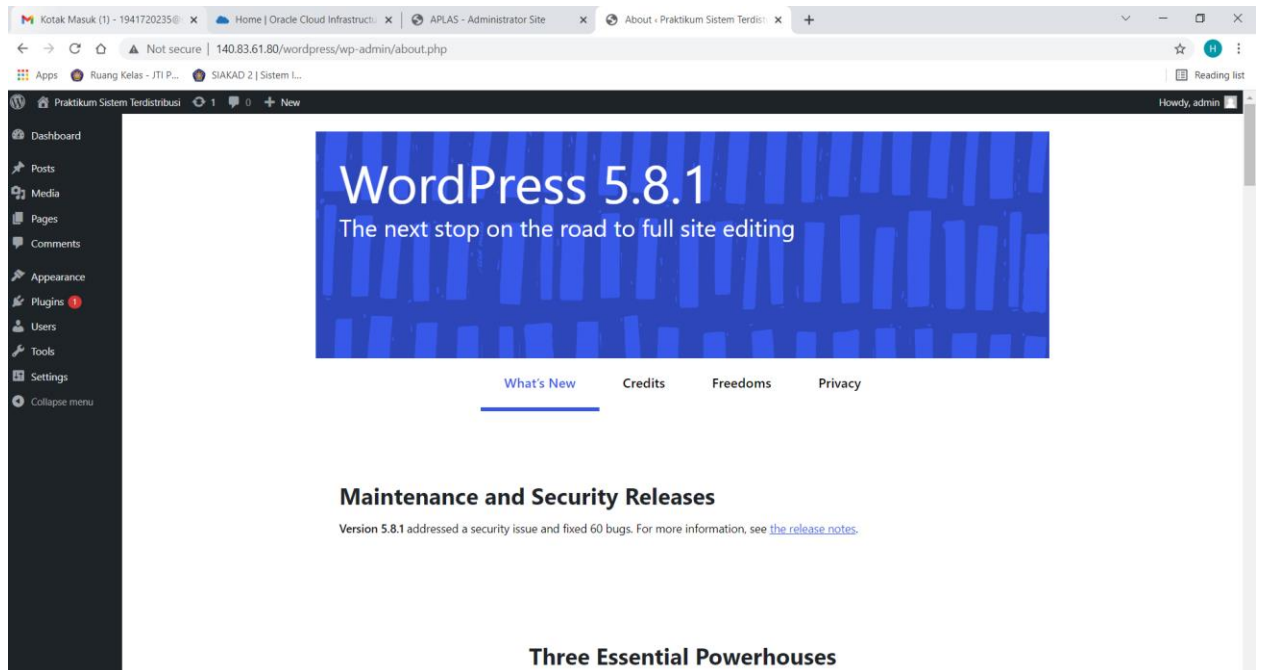
☐ Discourage search engines from indexing this site

It is up to search engines to honor this request.

Install WordPress

Pengisian Data Sukses Dilakukan





Tugas Praktikum PaaS

Cari aplikasi php yang memiliki database kemudian upload ke server dan buat databasenya. Disini saya menggunakan aplikasi web berbasis PHP, yaitu CRUD pendaftaran siswa baru

1. Mengakses instance dengan SSH

```
ubuntu@vm-ubuntu1: ~  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:       https://ubuntu.com/advantage  
  
System information as of Thu Nov  4 18:05:45 UTC 2021  
  
System load:  0.0          Processes:            130  
Usage of /:   4.8% of 44.97GB Users logged in:       0  
Memory usage: 27%         IPv4 address for ens3: 10.0.0.225  
Swap usage:   0%  
  
* Super-optimized for small spaces - read how we shrank the memory  
  footprint of MicroK8s to make it the smallest full K8s around.  
  
  https://ubuntu.com/blog/microk8s-memory-optimisation  
  
21 updates can be applied immediately.  
15 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Last login: Thu Nov  4 17:48:36 2021 from 125.166.12.114  
ubuntu@vm-ubuntu1:~$
```

2. Mengakses MySQL dan mengkoneksikan database

```
ubuntu@vm-ubuntu1:~$ mysql -u admin -p -h 10.0.0.126  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 112  
Server version: 8.0.27-cloud MySQL Enterprise - Cloud  
  
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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>
```

3. Membuat database pendaftaransiswa lalu mengecek apakah database berhasil dibuat, dan memberikan privileges database kepada user.

```
mysql> create database pendaftaransiswa;
Query OK, 1 row affected (0.01 sec)

mysql> show databases;
+-----+
| Database                |
+-----+
| information_schema      |
| mysql                   |
| pendaftaransiswa        |
| performance_schema      |
| sys                     |
| wordpress                |
+-----+
6 rows in set (0.00 sec)

mysql> grant all privileges on pendaftaransiswa.* to admin;
Query OK, 0 rows affected (0.01 sec)

mysql>
```

4. Keluar dari mysql dan masuk ke direktori /var/www/html untuk mendapatkan aplikasi php pendaftaransiswa dari repositori

```
ubuntu@vm-ubuntu1:~$ cd /var/www/html
ubuntu@vm-ubuntu1:/var/www/html$ sudo git clone https://github.com/petaniicode/tutorial-php-mysql.git
Cloning into 'tutorial-php-mysql'...
remote: Enumerating objects: 16, done.
remote: Total 16 (delta 0), reused 0 (delta 0), pack-reused 16
Unpacking objects: 100% (16/16), 4.60 KiB | 1.53 MiB/s, done.
ubuntu@vm-ubuntu1:/var/www/html$
```

- Mengecek folder hasil cloning dari repository

```
ubuntu@vm-ubuntu1:/var/www/html$ ls
index.html  tutorial-php-mysql  wordpress
ubuntu@vm-ubuntu1:/var/www/html$
```

5. Mengecek file dengan format .sql supaya bisa mengimpor table-table untuk database pendaftaransiswa

```
ubuntu@vm-ubuntu1:/var/www/html$ ls tutorial-php-mysql
README.md  form-daftar.php  hapus.php  list-siswa.php  proses-edit.php
config.php  form-edit.php    index.php  pendaftaran_siswa.sql  proses-pendaftaran.php
ubuntu@vm-ubuntu1:/var/www/html$
```

6. Masuk ke MySQL untuk mengimpor file .sql dari folder tutorial-
php➡mysql/pendaftaran_siswa.sql

```
ubuntu@vm-ubuntu1:/var/www/html$ mysql -u admin -p -h 10.0.0.126 pendaftaransiswa < /var/www/html/tutorial-php-mysql/pendaftaran_siswa.sql
Enter password:
ubuntu@vm-ubuntu1:/var/www/html$
```

7. Melihat table yang diimpor tadi pada database pendaftaransiswa, untuk memastikan apakah berhasil diimpor

```
ubuntu@vm-ubuntu1: ~
mysql -u admin -p -h 10.0.0.126
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 130
Server version: 8.0.27-cloud MySQL Enterprise - Cloud

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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> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| pendaftaransiswa |
| performance_schema |
| sys |
| wordpress |
+-----+
6 rows in set (0.00 sec)

mysql> use pendaftaransiswa;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_pendaftaransiswa |
+-----+
| calon_siswa |
+-----+
1 row in set (0.00 sec)

mysql>
```

8. Mengedit file konfigurasi php

```

ubuntu@vm-ubuntu1:~$ cd /var/www/html
ubuntu@vm-ubuntu1:/var/www/html$ cd tutorial-php-mysql
-bash: cd: tutorial-php-mysql: No such file or directory
ubuntu@vm-ubuntu1:/var/www/html$ ls
index.html  tutorial-php-mysql  wordpress
ubuntu@vm-ubuntu1:/var/www/html$ cd tutorial-php-mysql
ubuntu@vm-ubuntu1:/var/www/html/tutorial-php-mysql$ ls
README.md      form-edit.php  list-siswa.php  proses-pendaftaran.php
config.php     hapus.php     pendaftaran_siswa.sql
form-daftar.php index.php      proses-edit.php
ubuntu@vm-ubuntu1:/var/www/html/tutorial-php-mysql$

```

➤ File index.php

```

ubuntu@vm-ubuntu1: /var/www/html/tutorial-php-mysql
GNU nano 4.8      wp-index.php      Modified
<?php
<html>
<head>
<title>Pendaftaran Siswa Baru | SMA Darul Ulum 3</title>
</head>
<body>
<header>
<h3>Pendaftaran Siswa Baru</h3>
<h1>SMA Darul Ulum 3</h1>
</header>
<h4><Menu></h4>
<nav>
<ul>
<li><a href="form-daftar.php">Daftar Baru</a></li>
<li><a href="list-siswa.php">Pendaftar</a></li>
</ul>
</nav>
<?php if(isset($_GET['status'])): ?>
<p>
<?php
if($_GET['status'] == 'sukses') {
echo "Pendaftaran siswa baru berhasil!";
} else {
echo "Pendaftaran gagal!";
}
?>
</p>
<?php endif: ?>
</body>
</html>

```

➤ File config.php

```

ubuntu@vm-ubuntu1: /var/www/html/tutorial-php-mysql
GNU nano 4.8      config.php      Modified
<?php

$server = "10.0.0.126";
$user = "admint";
$password = "@2001IbRaHi";
$nama_database = "pendaftaran_siswa";

$db = mysqli_connect($server, $user, $password, $nama_database);

if( !$db ){
die("Gagal terhubung dengan database: " . mysqli_connect_error());
}

?>

```

9. Setelah itu kita coba jalankan aplikasinya

Pendaftaran Siswa Baru

SMK Coding

Menu

- [Daftar Baru](#)
- [Pendaftar](#)