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# CLOUD COMPUTING

## KUIS 2

CONTINUED FROM THE UTS WEBSITE

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Arranged By:

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**PROGRAM STUDI D-IV TEKNIK INFORMATIKA**

**JURUSAN TEKNOLOGI INFORMASI**

**POLITEKNIK NEGERI MALANG**



## STEP 1

### (COMPONENT SET-UP)

#### ➤ START DATABASE

DB Systems in x941720080 (root) *Compartment*

Create MySQL DB System Actions

<input type="checkbox"/>	Name	DB System State	High Availability	HeatWave Cluster	HeatWave State	Create
<input type="checkbox"/>	<a href="#">database</a>	Inactive	Disabled	Disabled	-	Fri, O
<input type="checkbox"/>	<a href="#">uts</a>	Inactive	Disabled	Disabled	-	Fri, O

Start  
Stop  
Restart  
Copy OCID  
Create Manual Backup  
Edit Backup Plan

#### ➤ START INSTANCES

Instances in x941720080 (root) *Compartment*

The [Compute service](#) helps you provision VMs and bare metal instances to meet your compute and application requirements. An [instance](#) is a compute host. Choose between virtual machines (VMs) and bare metal instances. The image that you use to launch an instance determines its operating system and other software.


Create instance

Name	State	Public IP	Private IP	Shape	OCPU count	Memory (GB)	Availab
<a href="#">UTS</a> <small>Always Free</small>	Running	140.238.87.152	10.0.0.44	VM.Standard.E2.1.Micro	1	1	AD-3
<a href="#">VM-UBUNTU-RAJENDRA</a> <small>Always Free</small>	Running	132.226.129.209	10.0.0.72	VM.Standard.E2.1.Micro	1	1	AD-3

#### ➤ Installing Ubuntu server → sudo apt install apache2 -y

Tidak aman | http://140.238.87.152

Resident Evil 7 Bioh... Sniper Ghost Warri... F1 2017 Full Version WRC 7 Full Repack The Sims 4 Deluxe... Google Drive - peri... Copy of SimsEmpat...

 **Apache2 Ubuntu Default Page**

**ubuntu**

**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.



- **Install Composer** → [REFERENCES INSTALL](#)

```
composer
All settings correct for using Composer
Downloading...

Composer (version 2.1.14) successfully installed to: /usr/local/bin/composer
Use it: php /usr/local/bin/composer

ubuntu@uts:~$ composer --version
Composer version 2.1.14 2021-11-30 10:51:43
ubuntu@uts:~$
```

- **Install Mysql** → **sudo apt install mysql-client-core-8.0**

```
ubuntu@uts:~$ mysql --version
mysql Ver 8.0.27-0ubuntu0.20.04.1 for Linux on x86_64 ((Ubuntu))
ubuntu@uts:~$
```

- **Cloning Framework Apps to /var/www/html from github** → [FRAMEWORK-APPS](#)

```
ubuntu@uts:/var/www/html$ sudo git clone https://github.com/Rjndrkha/Kuis2-Cloud.git
Cloning into 'Kuis2-Cloud'...
remote: Enumerating objects: 9260, done.
remote: Counting objects: 100% (9260/9260), done.
remote: Compressing objects: 100% (6683/6683), done.
remote: Total 9260 (delta 2312), reused 9260 (delta 2312), pack-reused 0
Receiving objects: 100% (9260/9260), 14.85 MiB | 6.42 MiB/s, done.
Resolving deltas: 100% (2312/2312), done.
Updating files: 100% (8204/8204), done.
ubuntu@uts:/var/www/html$ l
Kuis2-Cloud/  ajc/  index.html
```

- **Install Node.js** → [REFERENCES INSTALL](#)

```
ubuntu@uts:~$ nodejs -v
v10.19.0
ubuntu@uts:~$
```

- **Install PHP** → **sudo apt-get install php-curl**

```
ubuntu@uts:~$ php --version
PHP 7.4.3 (cli) (built: Oct 25 2021 18:20:54) ( NTS )
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
with Zend OPcache v7.4.3, Copyright (c), by Zend Technologies
```

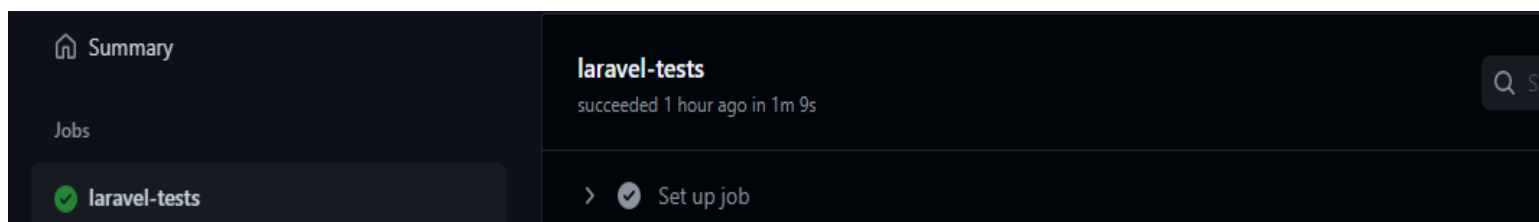


## STEP 2

### (Laravel CI Test , Docker , CD Hosting)

#### 1. Laravel CI Test Configuration

- Copy This Code to make Laravel CI Test → [LINK](#)
- Testing The Workflow

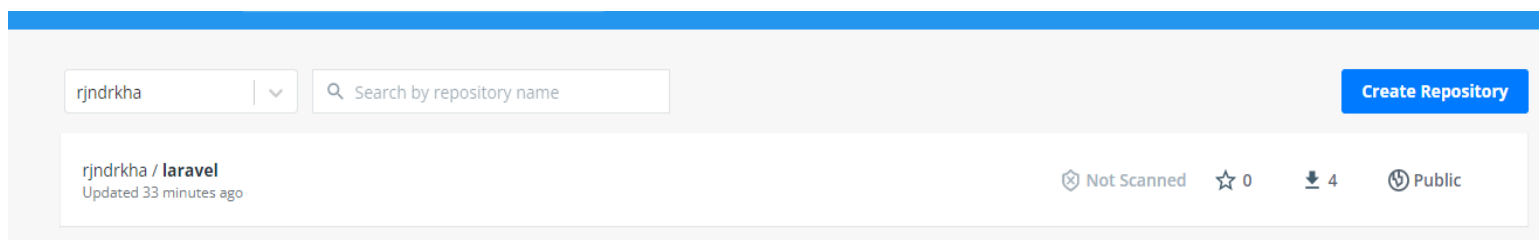


#### 2. Docker Create,Push Configuration

- Copy This Code to make Docker Image Laravel → [LINK](#)
- Pull Docker Image → [LINK](#)
- Make Sure Docker image already in The Computer!

```
PS C:\Users\Rajendra Rakha\Desktop\docker> docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
abdulr123/laravel   latest      177d990a1714  17 hours ago  712MB
alpine              latest      0a97eee8041e  4 weeks ago   5.61MB
docker/getting-started latest      eb9194091564  4 weeks ago   28.5MB
busybox             latest      7138284460ff  4 weeks ago   1.24MB
httpd               latest      1132a4fc88fa  7 weeks ago   143MB
PS C:\Users\Rajendra Rakha\Desktop\docker> abdulr123/laravel latest
abdulr123/laravel: The term 'abdulr123/laravel' is not recognized as a name of a cmdlet, function, script file, or executable program.
```

- Push To Docker Hub



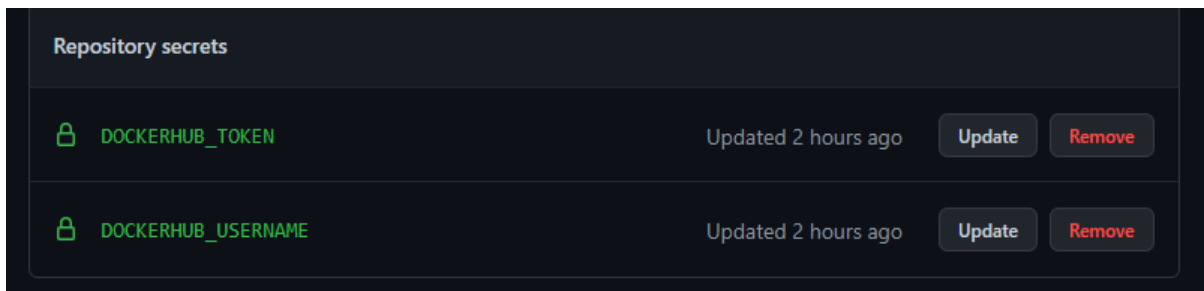


- **Make Acces Token For Github Workflow Access**

Access Tokens 1 of 1 token active [Upgrade for more](#) [New Access Token](#)

<input type="checkbox"/>	DESCRIPTION	SCOPE	LAST USED	CREATED	ACTIVE
<input type="checkbox"/>	GITHUB_QUIS	Read, Write, Delete	Dec 12, 2021 20:45:17	Dec 12, 2021 19:22:08	Yes

- **Copy To Github -> Setting -> Secrets And Also add docker use**



- **Testing the Workflow**

Rjndrkha / Kuis2-Cloud Public Unwatch 1 Fork 0 Star 0

[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

**Update docker-image.yml** Docker Image #9 Re-run all jobs

Summary

Jobs

**build**

**build**  
succeeded 1 minute ago in 2m 11s

Search logs

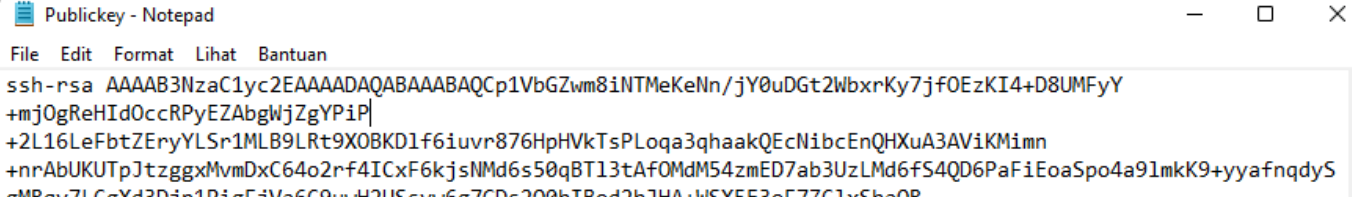
- > Set up job 2s
- > Run actions/checkout@v2 2s
- > Login to Dockerhub 0s
- > Build the Docker image 2m 6s
- > Post Login to Dockerhub 0s
- > Post Run actions/checkout@v2 1s
- > Complete job 0s



### 3. CD (Continous Delivery) Configuration

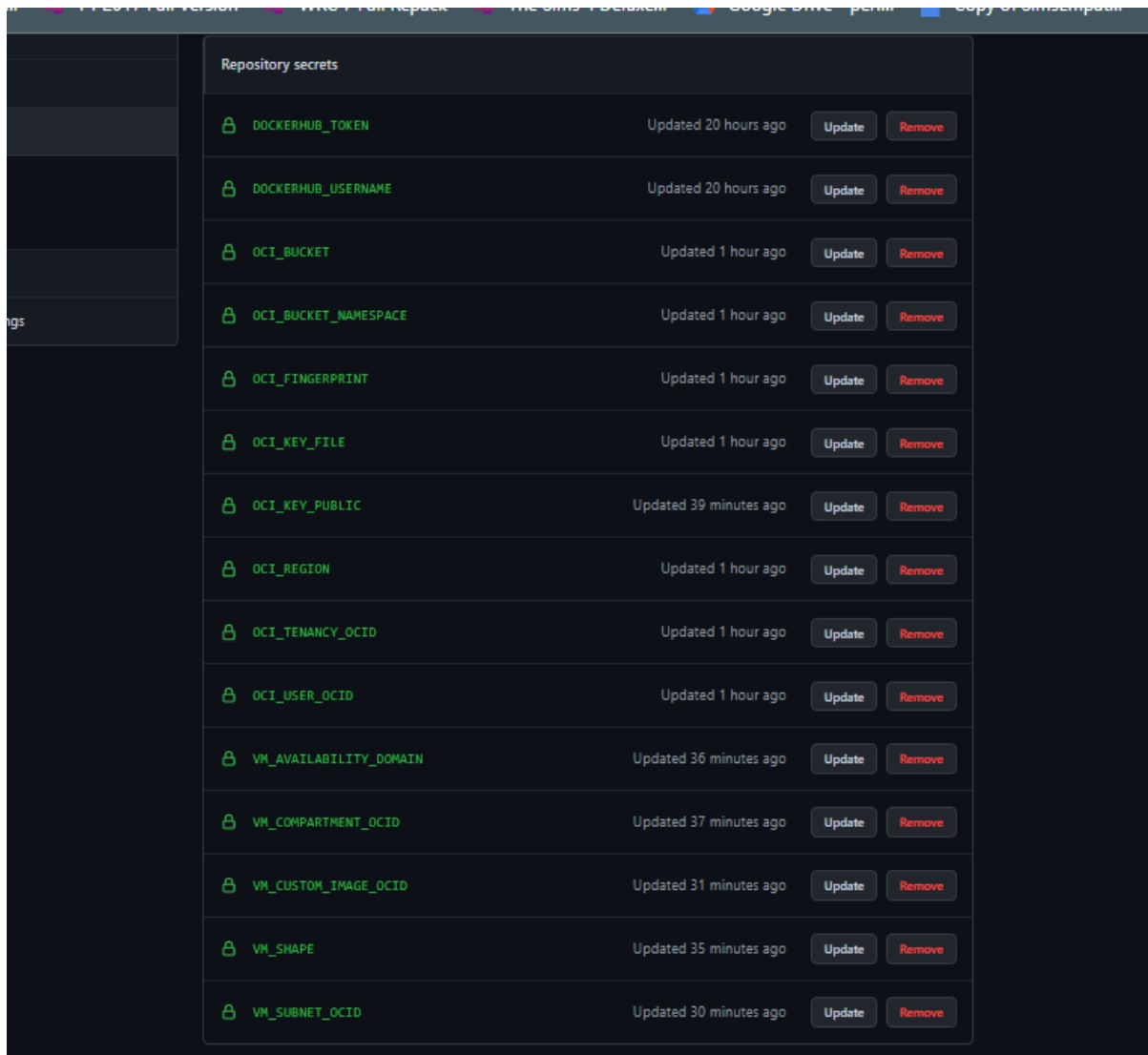
- Full Code Pipeline -> [LINK](#)
- How To Get Oci Secret and Others (SEE JOBSHEET 12 CLOUD
- Generate OCI\_KEY\_PUBLIC

```
C:\Users\Rajendra Rakha\Downloads>ssh-keygen -y -f oracleidentitycloudservice_1941720080-12-13-05-51.pem > Publickey.pub
```



```
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCP1VbGZwm8iNTMeKeNn/jY0uDGt2WbxrKy7jf0EzKI4+D8UMFyY
+mj0gReHIIdOccRPyEZAbgWjZgYPiP|
+2L16LeFbtZERYLSr1MLB9LRt9X0BKD1f6iuvr876HpHVkTsPLoqa3qhaakQEcnibcEnQHxuA3AViKMimn
+nrAbUKUTpJtzggxMvmDxC64o2rf4ICxF6kjsNMd6s50qBT13tAf0MdM54zmED7ab3UzLMd6fS4QD6PaFiEoaSpo4a91mkK9+yyafnqdyS
+MPBv7lCvYd3Dn1D1gE3V6fC9uH7IISu667G0c200hTRed2h7HA+WSY5E3eE77C1vShh0R
```

- Configuration in Secrets , Setting -> Secrets



Repository secrets		
	DOCKERHUB_TOKEN	Updated 20 hours ago <a href="#">Update</a> <a href="#">Remove</a>
	DOCKERHUB_USERNAME	Updated 20 hours ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_BUCKET	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_BUCKET_NAMESPACE	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_FINGERPRINT	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_KEY_FILE	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_KEY_PUBLIC	Updated 39 minutes ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_REGION	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_TENANCY_OCID	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	OCI_USER_OCID	Updated 1 hour ago <a href="#">Update</a> <a href="#">Remove</a>
	VM_AVAILABILITY_DOMAIN	Updated 36 minutes ago <a href="#">Update</a> <a href="#">Remove</a>
	VM_COMPARTMENT_OCID	Updated 37 minutes ago <a href="#">Update</a> <a href="#">Remove</a>
	VM_CUSTOM_IMAGE_OCID	Updated 31 minutes ago <a href="#">Update</a> <a href="#">Remove</a>
	VM_SHAPE	Updated 35 minutes ago <a href="#">Update</a> <a href="#">Remove</a>
	VM_SUBNET_OCID	Updated 30 minutes ago <a href="#">Update</a> <a href="#">Remove</a>



- **Testing Workflow**

Summary

Jobs

Build and Deploy

Build and Deploy

succeeded 22 hours ago in 15m 42s

Search logs

Login to Dockerhub

Build and push

Write config

Install OCI CLI

Fix Config File Permissions

Check Existing Instance

Create Instance

Get Instance IP

Wait for SSH

Deploy Deployment Configuration

Running Docker Compose

Post Login to Dockerhub

Post Checkout

Complete job



## View Image In Docker

← → ↻ https://hub.docker.com/repository/registry-1.docker.io/rjndrkha/cloudk2/tags?page=1&ordering=last\_updated

Apl Resident Evil 7 Bioh... Sniper Ghost Warri... F1 2017 Full Version WRC 7 Full Repack The Sims 4 Deluxe... Google Drive - peri... Copy of SimsEmpat... » Daftar bacaan

rjndrkha > Repositories > cloudk2 Using 0 of 1 private repositories. [Get more](#)

General **Tags** Builds Collaborators Webhooks Settings

**Advanced Image Management** [View preview](#)

View all your images and tags in this repository, clean up unused content, recover untagged images. Available with Pro, Team and Business subscriptions.

☐ Sort by Newest  [Delete](#)

TAG	DIGEST	OS/ARCH	LAST PULL	COMPRESSED SIZE
<a href="#">latest</a>	<a href="#">f6b04c6ba423</a>	linux/amd64	a few seconds ago	216.59 MB

Last pushed a few seconds ago by [rjndrkha](#)

docker pull rjndrkha/cloudk2:latest





### STEP 3

#### (LARAVEL CONFIGURATION & DATABASE)

➔ rename the file to make it shorter ➔ `sudo mv Kuis2-Cloud cloudk2`

```
ubuntu@uts:/var/www/html$ sudo mv Kuis2-Cloud cloudk2
ubuntu@uts:/var/www/html$ l
ajc/ cloudk2/ index.html
```

➔ Move to cloudk2 Directory ➔ `cd cloudk2`

```
ubuntu@uts:/var/www/html$ l
ajc/ cloudk2/ index.html
ubuntu@uts:/var/www/html$ cd cloudk2
ubuntu@uts:/var/www/html/cloudk2$ l
app/          ; composer.json  database/      package.json  resources/    storage/      vendor/
artisan       composer.lock  docker-compose.yml  phpunit.xml  routes/       tailwind.config.js  webpack.mix.js
bootstrap/    config/        package-lock.json  public/       server.php    tests/
ubuntu@uts:/var/www/html/cloudk2$
```

➔ Create Database On Mysql

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

mysql>
```

➔ Configure .env to Database Oracle

```
ubuntu@uts:/var/www/html/cloudk2$ sudo cp .env.example .env
ubuntu@uts:/var/www/html/cloudk2$ l
app/          composer.json  database/      package.json  resources/    storage/      vendor/
artisan       composer.lock  docker-compose.yml  phpunit.xml  routes/       tailwind.config.js  webpack.mix.js
bootstrap/    config/        package-lock.json  public/       server.php    tests/
ubuntu@uts:/var/www/html/cloudk2$ sudo nano .env

GNU nano 4.8
APP_NAME=Laravel
APP_ENV=local
APP_KEY=
APP_DEBUG=true
APP_URL=http://localhost

LOG_CHANNEL=stack
LOG_LEVEL=debug

DB_CONNECTION=mysql
DB_HOST=10.0.0.217
DB_PORT=3306
DB_DATABASE=shamo
DB_USERNAME=rajendra
DB_PASSWORD=123456789
```



## ➔ Composer Install ➔ sudo composer install

```
ubuntu@uts:/var/www/html/cloudk2$ sudo composer install
Do not run Composer as root/super user! See https://getcomposer.org/root for details
Continue as root/super user [yes]? yes
Installing dependencies from lock file (including require-dev)
Verifying lock file contents can be installed on current platform.
Nothing to install, update or remove
Package swiftmailer/swiftmailer is abandoned, you should avoid using it. Use symfony/mailer instead.
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> @php artisan package:discover --ansi
Discovered Package: facade/ignition
Discovered Package: fideloper/proxy
Discovered Package: fruitcake/laravel-cors
Discovered Package: jenssegers/agent
Discovered Package: laravel/fortify
Discovered Package: laravel/jetstream
Discovered Package: laravel/sail
Discovered Package: laravel/sanctum
Discovered Package: laravel/tinker
Discovered Package: livewire/livewire
Discovered Package: nesbot/carbon
Discovered Package: nunomaduro/collision
Discovered Package: yajra/laravel-datatables-oracle
Package manifest generated successfully.
80 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
ubuntu@uts:/var/www/html/cloudk2$
```

## ➔ Migrating Database ➔sudo php artisan migrate

```
ubuntu@uts:/var/www/html/cloudk2$ sudo php artisan migrate
Migration table created successfully.
Migrating: 2014_10_12_000000_create_users_table
Migrated: 2014_10_12_000000_create_users_table (148.21ms)
Migrating: 2014_10_12_100000_create_password_resets_table
Migrated: 2014_10_12_100000_create_password_resets_table (89.89ms)
Migrating: 2014_10_12_200000_add_two_factor_columns_to_users_table
Migrated: 2014_10_12_200000_add_two_factor_columns_to_users_table (200.68ms)
Migrating: 2019_08_19_000000_create_failed_jobs_table
Migrated: 2019_08_19_000000_create_failed_jobs_table (53.61ms)
Migrating: 2019_12_14_000001_create_personal_access_tokens_table
Migrated: 2019_12_14_000001_create_personal_access_tokens_table (63.76ms)
Migrating: 2021_01_06_035346_create_sessions_table
Migrated: 2021_01_06_035346_create_sessions_table (85.67ms)
Migrating: 2021_01_17_161413_create_products_table
Migrated: 2021_01_17_161413_create_products_table (10.56ms)
Migrating: 2021_01_17_161417_create_product_categories_table
Migrated: 2021_01_17_161417_create_product_categories_table (30.17ms)
Migrating: 2021_01_17_161427_create_product_galleries_table
Migrated: 2021_01_17_161427_create_product_galleries_table (9.87ms)
Migrating: 2021_01_17_161441_create_transactions_table
Migrated: 2021_01_17_161441_create_transactions_table (10.25ms)
Migrating: 2021_01_18_014436_add_roles_and_username_to_users_table
Migrated: 2021_01_18_014436_add_roles_and_username_to_users_table (21.04ms)
Migrating: 2021_03_10_095130_create_transaction_items_table
Migrated: 2021_03_10_095130_create_transaction_items_table (9.45ms)
ubuntu@uts:/var/www/html/cloudk2$
```

## ➔ Check Migration in Database

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

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

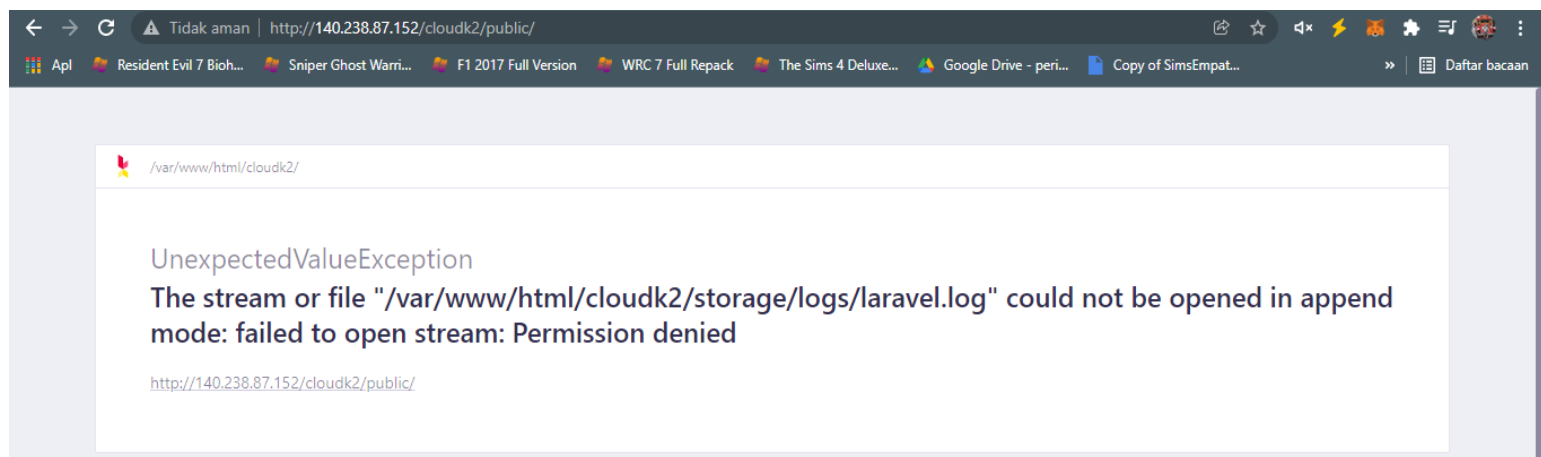


```
mysql> use shamo;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_shamo |
+-----+
| failed_jobs      |
| migrations       |
| password_resets  |
| personal_access_tokens |
| product_categories |
| product_galleries |
| products         |
| sessions         |
| transaction_items |
| transactions     |
| users            |
+-----+
11 rows in set (0.01 sec)

mysql>
```

➔ If Get error like image below , do this syntax below to grant permission



```
ubuntu@uts:/var/www/html/cloudk2$ cd /var/www/html/cloudk2
ubuntu@uts:/var/www/html/cloudk2$ cd ..
ubuntu@uts:/var/www/html$ sudo chgrp -R www-data cloudk2/
ubuntu@uts:/var/www/html$ sudo chmod -R 775 cloudk2/storage
ubuntu@uts:/var/www/html$
```



➔ **Add Laravel.conf**

```
ubuntu@uts:/var/www/html$ cd /etc/apache2/sites-available/  
ubuntu@uts:/etc/apache2/sites-available$ l  
000-default.conf default-ssl.conf  
ubuntu@uts:/etc/apache2/sites-available$ nano laravel.conf  
ubuntu@uts:/etc/apache2/sites-available$ sudo nano laravel.conf
```

```
GNU nano 4.8  
VirtualHost *:80>  
ServerAdmin rajendra@localhost  
DocumentRoot /var/www/html/cloudk2/public  
<Directory />  
Options FollowSymLinks  
AllowOverride None  
</Directory>  
<Directory /var/www/html/cloudk2>  
AllowOverride All  
</Directory>  
ErrorLog ${APACHE_LOG_DIR}/error.log  
CustomLog ${APACHE_LOG_DIR}/access.log combined  
</VirtualHost>
```

➔ **Activated Laravel.Conf**

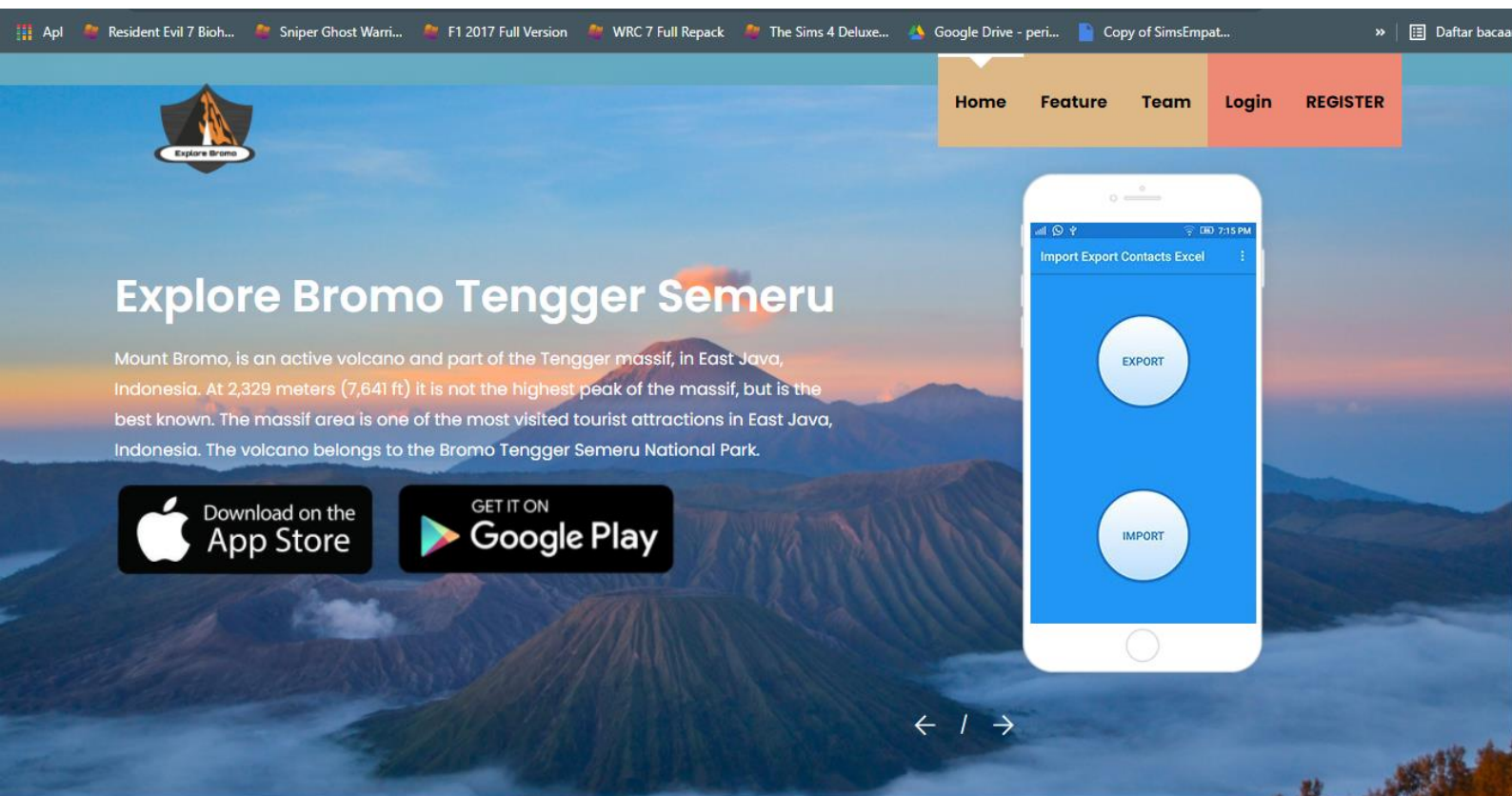
```
ubuntu@uts:~$ cd /etc/apache2/sites-available/  
ubuntu@uts:/etc/apache2/sites-available$ l  
000-default.conf default-ssl.conf laravel.conf  
ubuntu@uts:/etc/apache2/sites-available$ sudo a2enmod rewrite  
Enabling module rewrite.  
To activate the new configuration, you need to run:  
systemctl restart apache2  
ubuntu@uts:/etc/apache2/sites-available$ sudo a2dissite 000-default.conf  
Site 000-default disabled.  
To activate the new configuration, you need to run:  
systemctl reload apache2  
ubuntu@uts:/etc/apache2/sites-available$ sudo a2ensite laravel.conf  
Enabling site laravel.  
To activate the new configuration, you need to run:  
systemctl reload apache2  
ubuntu@uts:/etc/apache2/sites-available$ █
```

**Restart Apache2 ➔ sudo systemctl restart apache2**



## Preview Website

### [LINK WEBSITE](#)



### ➔ Add User Data For Login

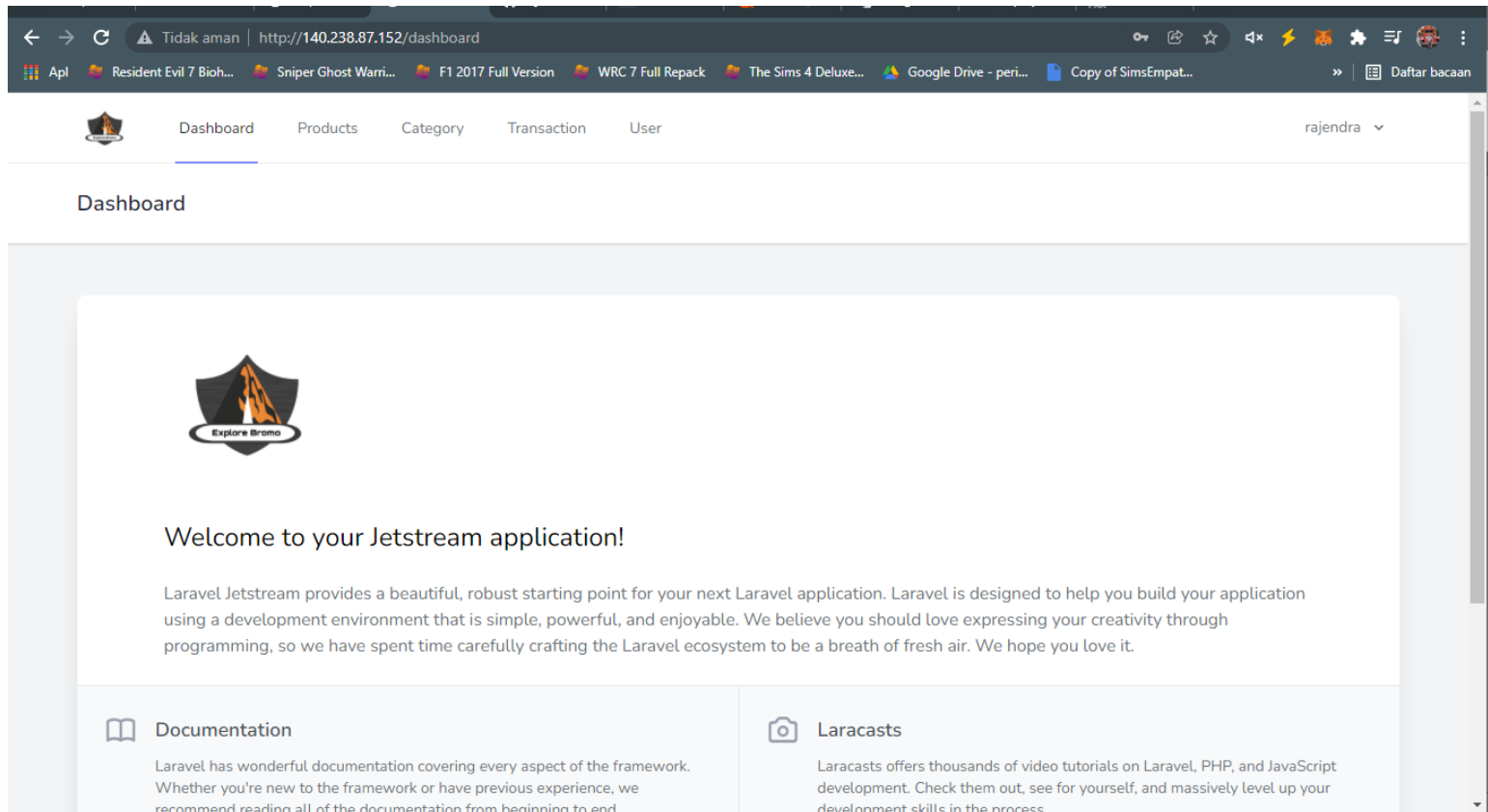
```
mysql> use shamo;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> INSERT INTO `users` (`id`, `name`, `email`, `username`, `roles`, `email_verified_at`, `password`, `two_factor_secret`, `two_factor_recovery_codes`, `remember_token`, `current_team_id`, `profile_photo_path`, `created_at`, `updated_at`) VALUES ('3', 'rajendra', 'rajendra.rakha29@gmail.com', 'rjndrkha', 'ADMIN', NULL, [REDACTED], NULL, NULL, NULL, NULL, NULL, NULL, NULL);
Query OK, 1 row affected (0.00 sec)
```

### LOGIN PAGE ➔



## DASHBOARD PAGE



## FULL LINK CODE

[GITHUB](#)