



LAB 3

Platform-as-a-Service with Heroku

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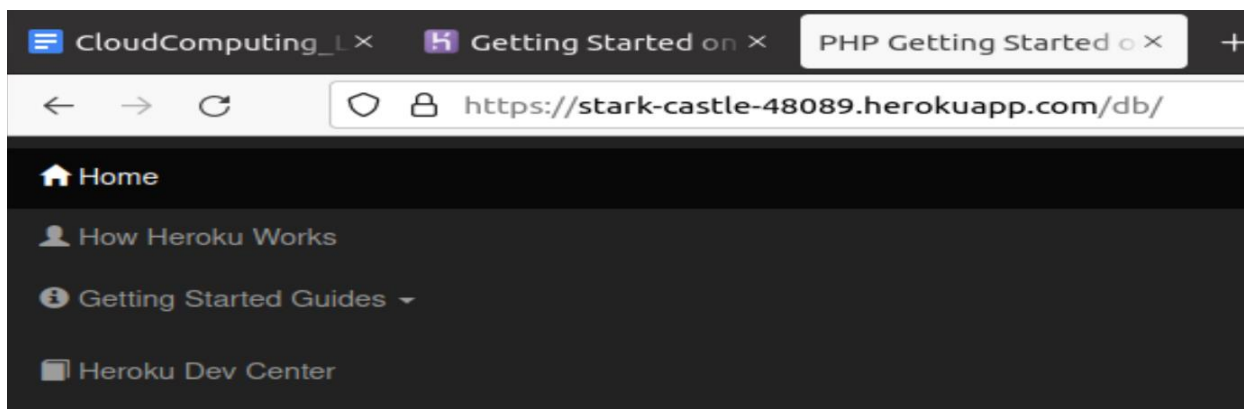
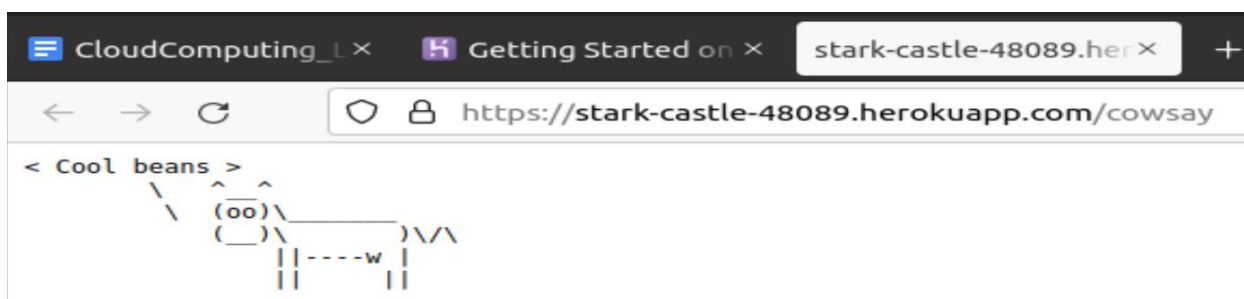
- **Note:** screenshots need to be clear and good-looking; submissions must be in PDF format.

Heroku is a platform as a service (PaaS) that enables developers to build, run, and operate applications entirely in the cloud. In this lab, you will learn about building, deploying, and managing your apps on Heroku by finishing the exercises below.

1. Deploying a sample PHP application with Heroku

<https://devcenter.heroku.com/articles/getting-started-with-php>

(Take 2 screenshots of the sample PHP application, one after “Push local changes” step and another after “Provision a database” step)



Got these rows from the database:

- hello database

2. Deploying a online shopping website to Heroku

2.1. Deploying an online-shopping website to run locally on your computer

- Install apache, php and heroku

```
$sudo apt update
$sudo apt install apache2 mysql-server mysql-client php
libapache2-mod-php php-mysql php-json php-xml php-mbstring php-
curl php-zip php-memcached php-redis php-apcu curl php-cli php-
mbstring unzip -y
```

- Install composer

```
$cd ~ && curl -sS https://getcomposer.org/installer -o
composer-setup.php
$HASH=`curl -sS https://composer.github.io/installer.sig`
$sudo php composer-setup.php --install-dir=/usr/local/bin --
filename=composer
```

- Clone the source of the website

```
$cd /var/www/html/
$sudo git clone https://github.com/TuanThai/ecomweb
$cd ecomweb
```

- Install required modules using composer

```
$sudo composer update
$sudo composer install
```

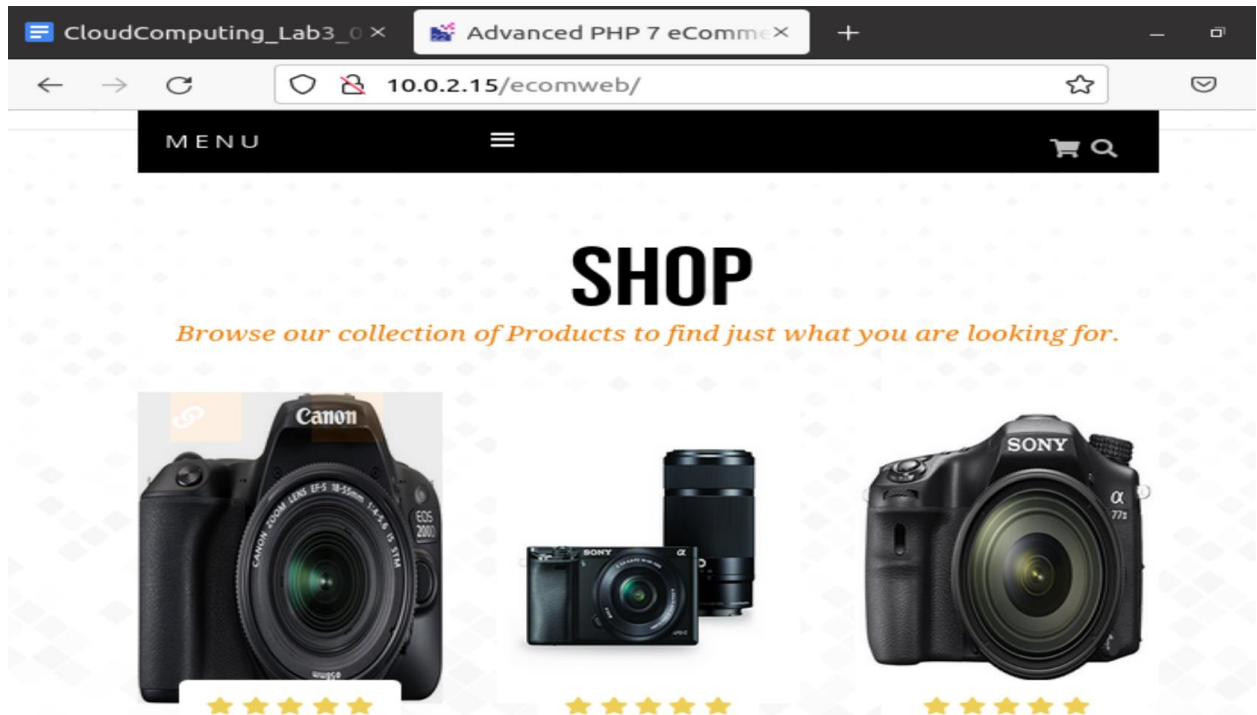
- Create a mysql user and import database

```
$sudo mysql
mysql>CREATE USER 'tmtuan'@'localhost' IDENTIFIED BY
'password';
mysql>CREATE DATABASE ecomweb;
mysql>GRANT ALL PRIVILEGES ON ecomweb.* TO
'tmtuan'@'localhost';
mysql>use ecomweb;
mysql>source ./config/db_dump.sql;
mysql>exit;
```

- Modify database configuration

```
$sudo nano ./config/.env
#Modify the content of .env file
export STORE_URL='http://localhost/ecomweb'
...
export DB_HOSTNAME='localhost'
export DB_USERNAME='tmtuan'
export DB_PASSWORD='password'
export DB_DATABASE='ecomweb'
export DB_PORT='3306'
```

- Access the website using a web browser: <http://localhost/ecomweb>



2.2. Deploying the website to Heroku

- Clone the source of the website

```
$cd ~ && git clone https://github.com/TuanThai/ecomweb && cd ecomweb
```

- Create heroku application

```
$sudo snap install --classic heroku
```

```
$heroku login
```

if the web browser cannot open automatically, please run it manually; then copy the log in link to the address bar.

```
$heroku create tuanshop
```

- Create database and import website data

```
$heroku addons:create cleardb:ignite
```

```
$heroku config
```

#You will get the database information as below:

```
#CLEARDB_DATABASE_URL:mysql://<username>:<password>@<server_name>/<database_name>?reconnect=true
```

```
$mysql --user=username --password=password --host=server_name database_name < ./config/db_dump.sql
```

- Modify database configuration

```
$nano ./config/.env.prod
```

#Modify the content of .env file

```
export STORE_URL='https://tuanshop.herokuapp.com'
```

```
...
```

```
export DB_HOSTNAME='server_name'
export DB_USERNAME='username'
export DB_PASSWORD='password'
export DB_DATABASE='database_name'
export DB_PORT='3306'
```

- Push the source code to heroku

```
$git add .
```

```
$git commit -m "Modify file .env.prod" # Cẩn thận lỗi dấu nháy
```

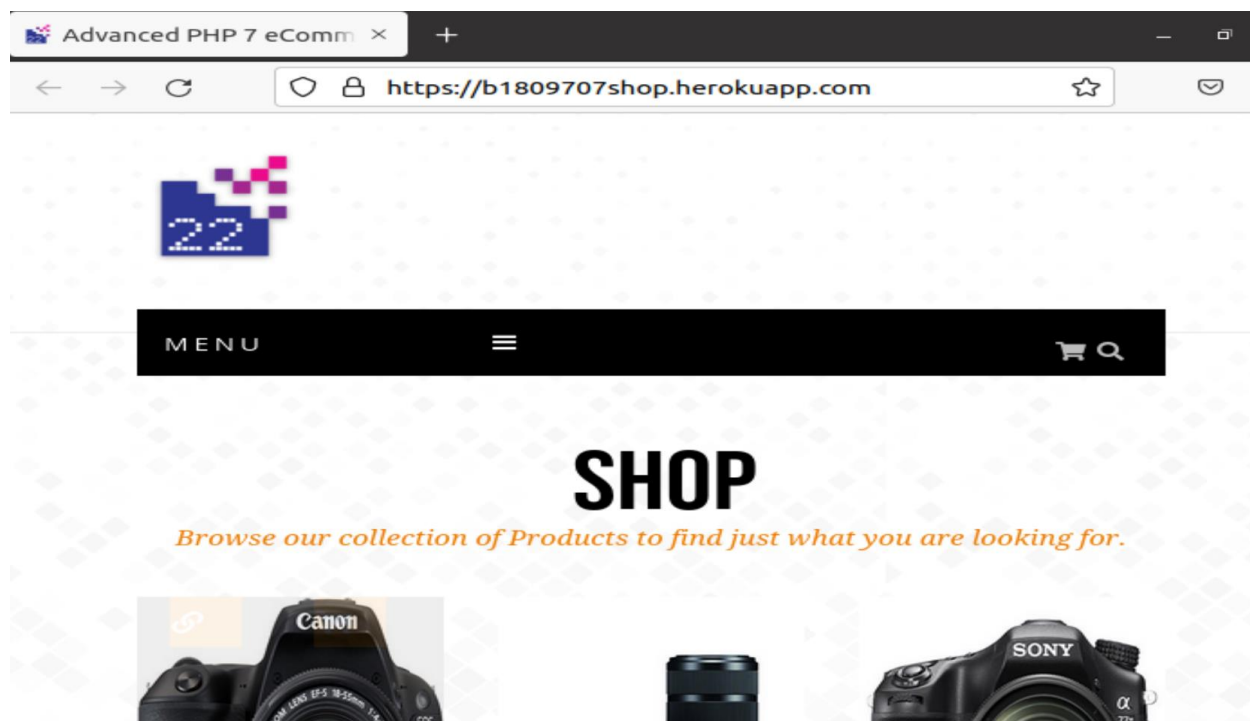
```
$git push heroku master
```

- Launch your application

```
$heroku open
```

(Take a screenshot of your website homepage on Heroku + and add your website URL here)

<https://b1809707shop.herokuapp.com>



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