

# IERG4210 Assignment Phase 2A & 2B



Name: Lau Long Ching

SID: 1155127347

Please refer to <https://github.com/leightonllc/IERG4210> for the git record.

## Phase 2A marking checklist

1. Instantiate a free Virtual Cloud Machine (Amazon EC2 recommended or other free VPS).

complete

The screenshot displays the AWS Management Console interface for an EC2 instance. The breadcrumb navigation shows 'EC2 > Instances > i-0d67ba04119225e84'. The main heading is 'Instance summary for i-0d67ba04119225e84' with an 'Info' link and buttons for 'Refresh', 'Connect', 'Instance state', and 'Actions'. Below this is a table of instance details:

|  |  |   |
|--|--|---|
| Instance ID<br>i-0d67ba04119225e84   | Public IPv4 address<br>3.13.126.10   open address                              | Private IPv4 addresses<br>172.31.19.109   |
| IPv6 address<br>-  | Instance state<br>Running  | Public IPv4 DNS<br>ec2-3-13-126-10.us-east-2.compute.amazonaws.com   open address |
| Hostname type<br>IP name: ip-172-31-19-109.us-east-2.compute.internal                              | Private IP DNS name (IPv4 only)<br>ip-172-31-19-109.us-east-2.compute.internal | Answer private resource DNS name<br>IPv4 (A)                                      |
| Instance type<br>t2.micro  | Elastic IP addresses<br>3.13.126.10 [Public IP]                                | VPC ID<br>vpc-6f417307  |
| AWS Compute Optimizer finding<br>Opt-in to AWS Compute Optimizer for recommendations.   Learn more | IAM Role<br>-  | Subnet ID<br>subnet-1b42d261  |

At the bottom, there are tabs for 'Details', 'Security', 'Networking', 'Storage', 'Status checks', 'Monitoring', and 'Tags'. The 'Details' tab is currently selected.

2. Apply necessary security configurations.

complete

- Apply proper firewall settings to your VM: block all ports except 22, 80 and 443 only

complete

Inbound rules

Outbound rules

Tags

Inbound rules (3)

Manage tags

Edit inbound rules

Filter security group rules

< 1 >

| Security group rule... ▾ | IP version ▾ | Type ▾ | Protocol ▾ | Port range ▾ |
|--------------------------|--------------|--------|------------|--------------|
| sgr-03873221f1ec00373    | IPv4         | HTTP   | TCP        | 80           |
| sgr-05f288fb444f9b15f    | IPv4         | SSH    | TCP        | 22           |
| sgr-085b9dc2932cc7de2    | IPv4         | HTTPS  | TCP        | 443          |

- Apply proper updates for the server software packages in a regular manner
- Hide the versions of OS, Apache, and PHP in HTTP response headers

complete

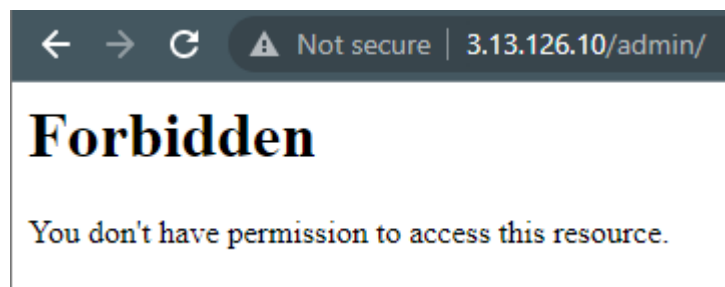
complete

```
C:\Users\User>curl -I 3.13.126.10
HTTP/1.1 200 OK
Date: Mon, 21 Feb 2022 10:45:08 GMT
Server: Apache
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate
Pragma: no-cache
Set-Cookie: PHPSESSID=u22u9docm81vcp2nf0gbrfdtej; path=/
Upgrade: h2,h2c
Connection: Upgrade
Content-Type: text/html; charset=UTF-8
```

- Do not display any PHP warnings and errors to the end users
- Disable directory index in Apache

complete

complete



3. Configure the VM so that your website is accessible at <http://s1155127347.ierng4210.ie.cuhk.edu.hk>

complete

- Apply for an elastic public IP, and ALWAYS associate it with the instantiated VM
- Submit your elastic IP through the provided Google Form link before 5pm, Feb 13, 2022
- TAs will then assign you a domain name and configure the DNS mapping for you
- Upload all your pages to the server. They should then be accessible through:
  - <http://3.13.126.10>, or
  - <http://s1155127347.ierng4210.ie.cuhk.edu.hk>

complete

complete

complete

## Phase 2B marking checklist

1. SQL: Create a database with the following structures

complete

```
sqlite> .schema
CREATE TABLE CATEGORIES ( CATID INTEGER PRIMARY KEY, NAME TEXT);
CREATE TABLE PRODUCTS ( PID INTEGER PRIMARY KEY, CATID INTEGER, NAME TEXT, PRICE REAL, DESCRIPTION TEXT, INVENTORY INTEGER,
FILENAME TEXT, FOREIGN KEY(CATID) REFERENCES CATEGORIES(CATID));
CREATE INDEX I1 ON PRODUCTS(CATID);
```

- A table for categories
  - Required columns: catid (primary key), name
  - Data: at least 2 categories of your choice
- A table for products (supposed to submit the list to PayPal, currently no function)
  - Required columns: pid (primary key), catid, name, price, description
  - Data: at least 2 products for each category

complete

complete

## 2. HTML, PHP & SQL: Create an admin panel <http://3.13.126.10/admin/admin.php>

complete

- Design several HTML forms to manage products in DB
  - Dropdown menu to select catid according to its name
  - Input fields for inputting name, price
  - Textarea for inputting description
  - File field for uploading an image (format: jpg/gif/png, size: <=10MB)
    - For the file uploaded, store it with its name based on the unique lastInsertId() (or other reasonable ways)

complete

complete

complete

complete

complete

- Design several HTML forms to manage categories in DB

complete

## 3. HTML, PHP, SQL: Update the main page created in Phase 1

complete

- Populate the category list from DB
- Based on the category selected by the user, populate the corresponding product list from DB
  - ☒ is reflected as a query string in the URL

complete

complete

## 4. HTML, PHP & SQL: Update the product details page created in Phase 1

complete

- Display the details of a product based on its DB record
- Display the inventory of a product based on its DB record

complete

complete

## 5. Support of automatic image resizing for product images

complete

- When a large image is uploaded, the server will resize it and show a thumbnail image in the panel
- On the main page, display thumbnails. On the product description page, display the larger image.

complete

complete

## 6. Supporting HTML5 Drag-and-drop file selection in the admin panel

complete

- Create a dropping area that takes an image

complete

Description \*

Inventory \*

Image \*

Choose File Drawing.png

Preview + Copy

- Display a thumbnail (i.e. smaller width and height) if the dropped file is an image; reject it otherwise

complete

Image \*

Choose File Drawing.png

Preview

Authentication System

```
graph TD
    AS[Authentication System] --> R[Registration]
    AS --> L[Log In]
    AS --> FP[Forgot Password]
    AS --> RP[Reset Password]
    R --> AH[Account Handling]
    L --> AF[Account Fetching]
    FP --> EH1[Error Handling]
    RP --> AF2[Account Fetching]
    AH --> EH2[Error Handling]
    AF --> EH3[Error Handling]
    AF2 --> EH4[Error Handling]
```

Edit