

IERG4210 Assignment Phase 2A & 2B



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Please click [here](#) for the GitHub page.

Please visit <http://3.13.126.10> or <http://s1155127347.ierg4210.ie.cuhk.edu.hk> to mark my assignment, thank you!

Phase 2A marking checklist

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

complete

A screenshot of the AWS Management Console showing the details of an EC2 instance. The breadcrumb navigation shows 'EC2 > Instances > i-0d67ba04119225e84'. The instance summary for 'i-0d67ba04119225e84' is displayed, updated less than a minute ago. The instance is in a 'Running' state. Key details include: Instance ID: i-0d67ba04119225e84, Public IPv4 address: 3.13.126.10, Private IPv4 address: 172.31.19.109, Instance state: Running, Public IPv4 DNS: ec2-3-13-126-10.us-east-2.compute.amazonaws.com, Private IP DNS name: ip-172-31-19-109.us-east-2.compute.internal, Instance type: t2.micro, VPC ID: vpc-6f417307, and Subnet ID: subnet-1b42d261. The bottom navigation bar includes tabs for Details, Security, Networking, Storage, Status checks, Monitoring, and Tags.

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

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

Q 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

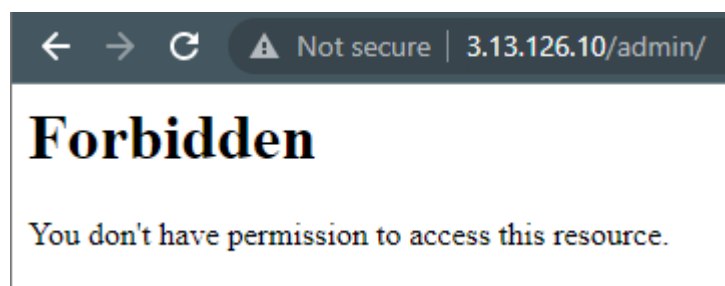
complete

```
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



- Configure the VM so that your website is accessible at <http://s1155127347.ierg4210.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.ierg4210.ie.cuhk.edu.hk>

complete

complete

complete

Phase 2B marking checklist

- 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

The screenshot shows the 'IERG4210 Phase 2B - Store Admin Panel'. It features six main sections for managing categories and products:

- New Category:** A form with a 'Category *' text input and an 'Add' button.
- Edit Category:** A form with a 'Select Category *' dropdown (showing 'Phone'), a 'Category *' text input, and an 'Edit' button.
- Delete Category:** A form with a 'Select Category *' dropdown (showing 'Phone') and a 'Delete' button.
- New Product:** A form with a 'Category *' dropdown (showing 'Phone'), and text inputs for 'Name *', 'Price *', 'Description *', 'Inventory *', and 'Image *'. There is a 'Choose File' button and 'No file chosen' text.
- Edit Product:** A form with a 'Select Product *' dropdown (showing 'SAMSUNG Galaxy S22 Ultra Smartphone'), a 'Category *' dropdown (showing 'Phone'), and text inputs for 'Name *', 'Price *', 'Description *', and 'Inventory *'.
- Delete Product:** A form with a 'Select Product *' dropdown (showing 'SAMSUNG Galaxy S22 Ultra Smartphone') and a 'Delete' button.

- 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

Edit