Information Technology for Logistics

Part 1: Web Application (PHP)

> Example: https://pm1-ct102-web.iecmu.com

LEMP Stack

The **LEMP stack** is a web hosting stack alternative to LAMP, where Apache is replaced with **Nginx (pronounced Engine-X)**:

- 🐧 **Linux** – operating system
- 🌍 **Nginx** – web server
- 🐬 **MariaDB** – database engine (MySQL compatible)
- 🐘 **PHP-FPM** – processes dynamic content

Guides

- Nginx

- MariaDB

- PHP

- Web Service

Let's make a bookstore website

Setup Database

```sql
CREATE DATABASE IF NOT EXISTS iebookstore;
```

Setup Database

```sql
CREATE TABLE IF NOT EXISTS iebookstore.booklist (
  isbn VARCHAR(20) PRIMARY KEY,
  title VARCHAR(255) NOT NULL
);

CREATE TABLE IF NOT EXISTS orderdetail (
  orderID INT AUTO_INCREMENT PRIMARY KEY,
  isbn VARCHAR(20) NOT NULL,
  quantity INT NOT NULL,
  FOREIGN KEY (isbn) REFERENCES booklist(isbn)
);
```

Setup Database

```sql
INSERT INTO iebookstore.booklist
          (isbn,
           title)
VALUES    ('9780135166307',
           'Clean Code'),
          ('9781491957660',
           'Fluent Python'),
          ('9780132350884',
           'Clean Architecture');
```

PHP

- `index.php`
- `booklist.php`
- `bookadd.php`
- `orderlist.php`
- `orderadd.php`