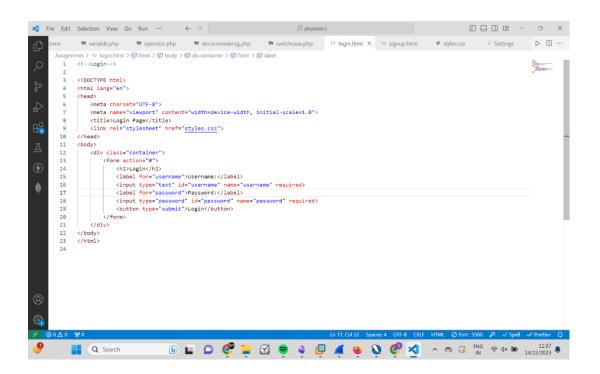
# Shaheed Sukhdev College of Business Studies University of Delhi

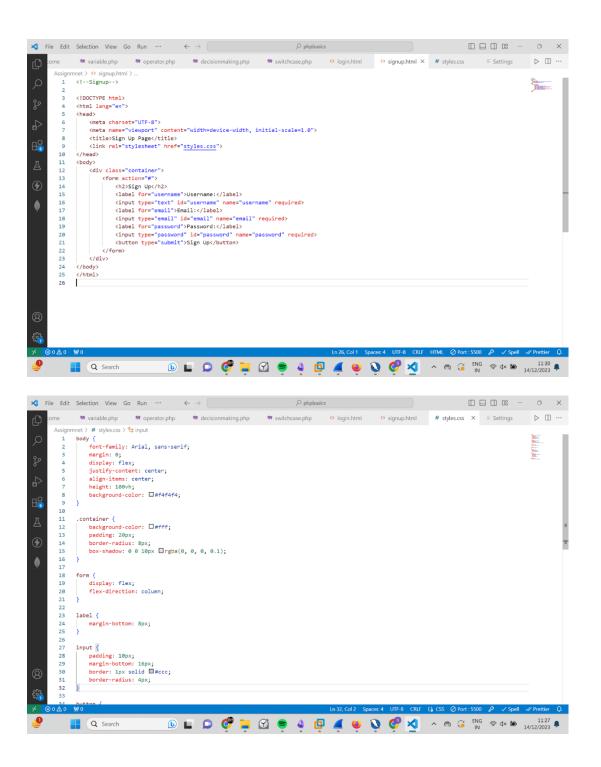
# Post Graduate Diploma in Cyber Security and Law

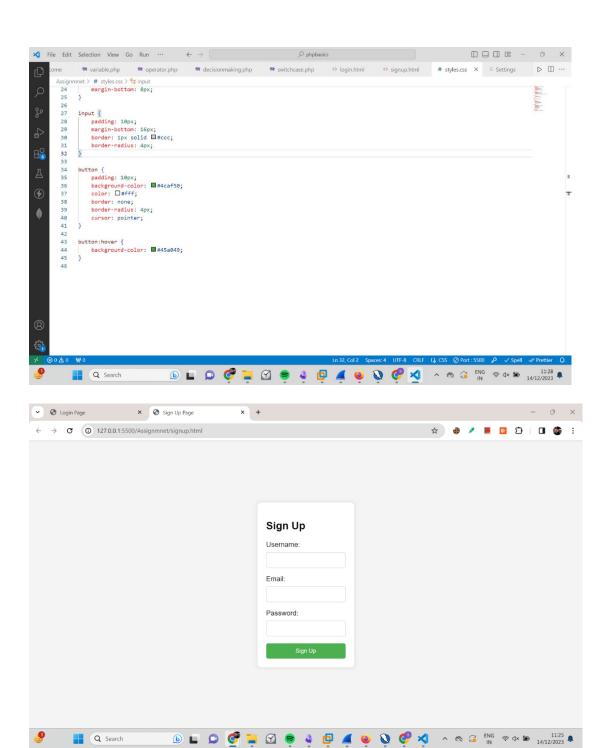
Sakshi Garg • Roll no-23726 • Subject-Web Applications • Semester-1

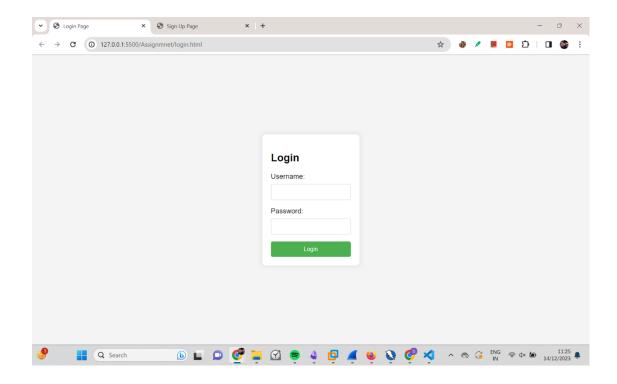
# HTML Login, XAMPP Setup, MYSQL <u>Databases</u>

1. Design signup and login page using HTML and CSS









# 2.XAMPP Setup

# What is XAMPP?

XAMPP is a popular open-source software stack that facilitates the deployment of a local server environment, including Apache, MySQL, PHP, and Perl.

# **Installation Steps:**

#### **Step 1: Download XAMPP**

- 1. Visit the official XAMPP website: <a href="https://www.apachefriends.org/index.html">https://www.apachefriends.org/index.html</a>
- 2. Download the appropriate version of XAMPP for your operating system (Windows, macOS, or Linux)

#### **Step 2: Install XAMPP**

- 1. Run the installer that you downloaded.
- 2. Follow the installation prompts. You can choose the components you want to install (e.g., Apache, MySQL, PHP, phpMyAdmin).
- 3. Select the installation directory (the default is usually fine).

## **Step 3: Start XAMPP Services**

- 1. After the installation is complete, start the XAMPP Control Panel.
- 2. Start the Apache and MySQL services by clicking the "Start" buttons next to them.

# **Step 4: Verify Installation**

- 1. Open your web browser and go to http://localhost or http://127.0.0.1.
- 2. If everything is set up correctly, you should see the XAMPP dashboard.

## **Step 5: Test PHP**

- 1. Create a simple PHP file (e.g., test.php) in the XAMPP htdocs directory.
- 2. Open your web browser and navigate to http://localhost/test.php. You should see the PHP information page.

# Step 6: Test MySQL

- 1. Open the XAMPP Control Panel.
- 2. Click on the "Admin" button next to MySQL, or go to http://localhost/phpmyadmin.
- 3. Log in to phpMyAdmin using the default credentials (usually, the username is "root," and there's no password by default).

# **Step 7: Configure Additional Settings**

- 1. Explore the XAMPP Control Panel for additional settings and configuration options.
- 2. Secure your MySQL installation by setting a password for the root user.

# **Step 8: Start Developing**

- 1. Place your web application files in the XAMPP htdocs directory.
- 2. Access your web application by navigating to http://localhost/your-app.

# 3. MYSQL Database

#### **BASIC COMMANDS**

#### Create Table-

Create table student (name varchar(30),id int not null primary key, address varchar(50),marks int);

#### Insert-

To insert the data in table we use insert into student(marks,id,name,address) values(78,13,'hajv','bvjj');

#### Select-

To select all the data from tables, select \* from table\_name

#### **QUESTION**

Create a database. Inside the database create a table with five user information. Put the details of tem users.

#### Solution-

To select any identify from tables, we use: Select id, name from table\_name;

To use where clause:

Select \* from student where id=34;

To use duplicate values: Insert into student values ()

Use alter for the the addition and subtraction: Alter table student add phoneNo int; Select \* from student;

To update the table:

Update student set phoneno - 1234 where id=12 Desc table

To modify the table:

Alter table student modify column name varchar(70); Desc student;

To drop the column:

Alter table student drop column phoneNo

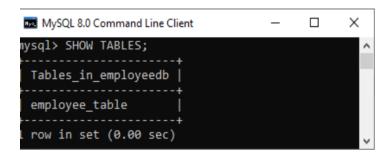
#### Order by:

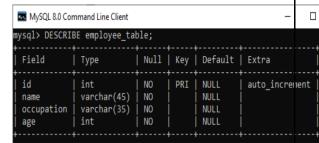
It's used to arrange an order(can be in ascending order or descending order

Select \* from student order by id;

Select \* from student;

```
MySQL 8.0 Command Line Client
                                           X
 Database
 employeedb
 information_schema
 myemployeedb
 mysql
 mysqltestdb
 mystudentdb
 mytestdb_copy
 performance_schema
  sakila
  sys
  testdb
 world
12 rows in set (0.01 sec)
mysql> USE employeedb;
Database changed
mysql> CREATE TABLE employee_table(
    -> id int NOT NULL AUTO_INCREMENT,
    -> name varchar(45) NOT NULL,
    -> occupation varchar(35) NOT NULL,
    -> age int NOT NULL,
    -> PRIMARY KEY (id)
    -> );
Query OK, 0 rows affected (1.47 sec)
```





## **SQL INJECTIONS**

#### What is SQL injection?

- It is a web security vulnerability that allows an attacker to interfere with the queries that an application makes to its databases
- This can allow an attacker to view data that are not normally able to be retrieved.
- In some situations an attacker attack to compromise the server, database, any other backend infrastructure.

#### What is the impact of SQL injection

• It can result in unauthorized access to sensitive data such as passwords, credit card numbers, personal user information

#### How to detect SQL injection vulnerability?

- Single quote character' and look for errors
- Boolean condition such as  $\underline{\text{or } 1=1 \text{ and or } 1=2 \text{ and look fo differences in the application response.}}$
- Payloads design to trigger time delays when executed look for differences within SQL queries and time taken to respond

#### **SQL** injection in different parts of query

- Most SQL vulnerabilities occur within where clause of a select query
- SQL injection vulnerability can occur at any location within the query and within different query types
- Some common query occurs update, insert, select statement and order by clause