

Assignment 11: Implementing Product Inserts with MySQL

Objective: In this assignment, you will adapt the `add_product.php` page to insert new product data into a MySQL database rather than a JSON file. This task introduces students to the essentials of using SQL INSERT operations in PHP and helps build out the foundation for a scalable product catalog.

Requirements:

1. Create or Update the MySQL Products Table

- Ensure you have a `products` table in your MySQL database. This table will store all product information for the shopping cart application.

Table Schema for products:

```
CREATE TABLE products (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    name VARCHAR(255) NOT NULL,  
    price DECIMAL(10, 2) NOT NULL,  
    description TEXT NOT NULL  
);
```

2. Set Up `add_product.php` to Insert Products into MySQL

- Update `add_product.php` to include a form where users can add new products to the catalog with the following fields:
 - Product Name (text, required)
 - Price (decimal, required)
 - Description (text area, optional)
- When the form is submitted, validate the input to ensure:
 - The name field is not empty.
 - The price is a positive number.

3. Implement Insert Logic with MySQL and PDO

- When submitting the form, use PHP and PDO to insert the product data into the `products` table.

4. Testing the Insert Functionality

- Test your `add_product.php` page by entering product details and submitting the form.

- After submission, verify that the product is inserted into the MySQL products table by viewing it in a database management tool (e.g., phpMyAdmin).

Deliverables:

- **products.sql:** SQL file with CREATE TABLE and sample data for the products table.
- **Updated add_product.php:** The PHP file with the form and PDO insert functionality to add products to the MySQL database.
- **conn.php:** The PHP file for managing MySQL connections (use PDO here for consistency).
- **Sql-export.sql** – an export of your database with newly added data.

Grading Criteria:

- **Database Insert Functionality (40%):** The form data is successfully inserted into the MySQL database using PDO.
- **Form Validation (30%):** Proper validation is implemented for required fields and positive prices.
- **Code Organization and Readability (20%):** Code is well-organized and easy to read, with clear variable names and comments.
- **User Feedback (10%):** Appropriate feedback is provided to users upon successful or unsuccessful submission.