**PROGRAMMING ASSESSMENT**

**Task:**

1. Create a sign up form that includes fields for:
   1. First Name
   2. Last Name
   3. Email
   4. Phone
   5. Username
   6. Password
2. Create a login form that includes the fields for:
   1. Username
   2. Password
3. Create a post-login screen that show the following data in four different tables:
   1. All products along with their category names and supplier names.
   2. All products along with their prices, ***including products that do not*** have prices.
   3. All products, their category names, supplier names, and their current prices (***do not show the ones that do not have a price***).
   4. The total number of products ***and*** the average value of products for each supplier.

**Guidelines**:

1. **Frontend:**
   1. Implement basic client-side form validation using JavaScript.
   2. Required fields should not be empty.
   3. Email and phone should be in a valid format.
   4. Ensure proper HTML structure, labels, input types, and placeholders for each field.
2. **Backend:**
   1. Upon form submission, send data to a PHP backend using AJAX
   2. Data retrievals and interactions should be in JSON format
   3. Validate input server-side in PHP
   4. Write necessary SQL queries to retrieve data
   5. Return appropriate JSON responses for success or failure

**Evaluation Criteria:**

1. Your ability to efficiently use JavaScript to handle form interactions and AJAX requests.
2. Your ability to write SQL queries that efficiently retrieve required data (products, categories, suppliers, prices, etc.).
3. Your use of PHP for backend logic, including database interactions, data validation, and response handling.
4. Your ability to create visually appealing and functional HTML forms and tables.

**Database Schema**

**Tables**:

1. **categories**: Stores information about product categories.
2. **products**: Stores information about products.
3. **prices**: Stores pricing information for products.
4. **suppliers**: Stores information about suppliers.
5. To View the scheme in online please check the [link](https://test.portal.haystek.com/db_scheme.php)

**Sample Data - categories Table:**

| category\_id | category\_name |

|-------------|--------------------|

| 1 | Electronics |

| 2 | Books |

| 3 | Clothing |

**Sample Data - suppliers Table:**

| supplier\_id | supplier\_name |

|-------------|---------------|

| 1 | Supplier A |

| 2 | Supplier B |

| 3 | Supplier C |

**Sample Data - products Table:**

| product\_id | product\_name | category\_id | supplier\_id |

|------------|---------------------|-------------|-------------|

| 1 | Smartphone | 1 | 1 |

| 2 | Laptop | 1 | 2 |

| 3 | Tablet | 1 | 3 |

| 4 | Smartwatch | 1 | 4 |

| 5 | Bluetooth Speaker | 1 | 5 |

| 6 | Headphones | 1 | 6 |

| 7 | Camera | 1 | 7 |

| 8 | Television | 1 | 8 |

| 9 | E-Book Reader | 2 | 1 |

| 10 | Novel | 2 | 2 |

**Sample Data - prices Table:**

| price\_id | product\_id | price | start\_date | end\_date |

|----------|------------|-----------|------------|------------|

| 1 | 1 | 699.99 | 2024-01-01 | 2024-12-31 |

| 2 | 2 | 1199.99 | 2024-01-01 | 2024-06-30 |

| 3 | 3 | 399.99 | 2024-01-01 | 2024-12-31 |

| 4 | 4 | 199.99 | 2024-01-01 | 2024-12-31 |

| 5 | 5 | 89.99 | 2024-01-01 | 2024-12-31 |

| 6 | 6 | 59.99 | 2024-01-01 | 2024-12-31 |

| 7 | 7 | 499.99 | 2024-01-01 | 2024-12-31 |

| 8 | 8 | 799.99 | 2024-01-01 | 2024-12-31 |

| 9 | 9 | 129.99 | 2024-01-01 | 2024-12-31 |

| 10 | 10 | 24.99 | 2024-01-01 | 2024-12-31 |

**Sample Data - Users table**:

| user\_id | first\_name | last\_name | email | phone | username | password |

|---------|------------|-----------|-----------------------|--------------|------------|--------------------|

| 1 | John | Doe | johndoe@example.com | 123-456-7890 | johndoe123 | hashed\_password |

| 2 | Jane | Smith | janesmith@example.com | 987-654-3210 | janesmith1 | another\_hashed\_pass|

| 3 | Michael | Johnson | mike@example.com | 555-123-4567 | mikejohn | yet\_another\_hash |