Ahmed Noori

ID: 2210182

Instructor: Houssein Wehbe

Date: 5/6/2025

**“Development of the University Used Book Marketplace”**

**Introduction**

The University Used Book Marketplace project began with the goal of creating an online platform where students and faculty could buy and sell used books. The project initially focused on creating a simple front-end web design, followed by integrating PHP for backend functionality. In this report, I will explain the process of designing the website and integrating PHP, including challenges we faced and how we overcame them.

**Web Design - Unreal Design Phase**

The first phase of this project involved creating the website’s front-end. We started with an initial idea to design a marketplace that was user-friendly and visually appealing. The first step was to create a basic structure of the website using HTML and CSS. A simple layout was made that featured a login page and a marketplace section for users to browse available books.

However, during the design phase, I encountered some problems. The layout was initially chaotic, and there was a lack of alignment in the content. This made the website look less professional. In response to this, I decided to use better alignment and positioning strategies through CSS and adjusted the color scheme to give a better visual appearance. Even though the design was basic, the layout was clear and functional.

The initial design didn’t have much interactive content, and this was a major limitation. The website was static, meaning it only displayed information without allowing user interaction beyond the login page. I realized that adding interactivity was crucial for users to interact with the book listings effectively.

**PHP Integration for Dynamic Functionality**

After the front-end design, I moved to the PHP section to make the website interactive and dynamic. PHP was used to add login functionality and allow users to interact with the database.

One of the challenges in this phase was ensuring that the backend of the website communicated properly with the MySQL database. This database stored information about the books, including titles, authors, prices, and images. I encountered difficulties while connecting PHP to MySQL initially. I had to correct the configuration of the database and establish secure sessions to allow the login mechanism to function properly.

**Main parts that the full code covers:  
1. HTML Structure**

 It contains the basic structure of the web page (header, login form, book listings section).

 The code sets up input fields for users to log in, and sections to display books for sale and external books for purchase.

**2. CSS Styling:**

 It gives the webpage a visually appealing look with background images, proper alignments, and button styles.

 The style ensures that the website has a clean and functional design, providing good user experience.

**3. JavaScript Logic:**

 Handles the login process, allowing users to log in using predefined credentials.

 It manages dynamic book listings, allows users to post new books, and interact with the "Contact Seller" functionality.

**Conclusion**

The project was successfully developed into a simple, functioning used book marketplace. From creating an initial web design using HTML and CSS to integrating dynamic functionality using PHP, each step presented its own challenges. However, with persistence, these challenges were overcome, resulting in a fully functional website. The integration of PHP with MySQL and the creation of an intuitive front-end allowed users to buy books efficiently.

This project not only helped me understand the importance of seamless design and dynamic back-end functionality but also gave me valuable insight into how web development and server-side scripting work together to create a fully interactive web experience.

**References**

W3Schools. (n.d.). *PHP MySQL Tutorial*. <https://www.w3schools.com/php/php_mysql_intro.asp>

MDN Web Docs. (2023). *HTML Tutorial*. <https://developer.mozilla.org/en-US/docs/Web/HTML>

PHP Manual. (n.d.). *PHP: Hypertext Preprocessor*. <https://www.php.net/manual/en/>