Assignment 2 Site Functionality Guide & Coding Considerations

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CST2355

.htaccess Files

* Two .htaccess files are included which invoke the Apache Server URL rewrite engine to rewrite the URLs for the site. The URLs have been rewritten so that the user does not need to include /public in the URL. Therefore, the site can be accessed by navigating to ‘localhost/Assignment2/index.php?page=home’ instead of ‘localhost/Assignment2/public/index.php?page=home’

Navbar

The navbar is the main element that ties the site’s webpages together. The nav can be found on every single one of the sites visitable pages, and provides links to get to some of the key pages of Webprogramazon.ca. The nav is sidebar-style and expands from left to right when the user hovers over it with their mouse, providing access to links to each of the key pages of the site. The links featured are a link to the home page, a link to the login page, a link to the products page, and a link to the contact page. Furthermore, every visible page also contains a fixed header which displays the website’s text logo as well as a link to the user’s shopping cart. This link will take them to the shopping cart if logged in, and will redirect them to the login page if not logged in.

Login

The login page allows users to login to Webprogramazon.ca so that they may begin shopping. The page features a login form, which is composed of two fields, and two buttons. The two fields of the login form are the email field and password field. If a user enters and email and password combination that exists within the webprogramazon database and clicks the login button, the page will set a session for the user and redirect them to their account. If either the email or password is invalid when the login button is clicked, an error message will be displayed and the form is not submitted. All validation for the login page is done through PHP, as this was necessary to handle form $\_POST data. Finally, the two buttons include the login button – a submit button, and the create account button – which redirects users to the create account page.

Registration & Edit Account

The registration page provides users with the ability to create an account with Webprogramazon so that they can begin shopping. The page contains a form with several fields as well as a “Create Account” button. The login fields include full name, email, password, retype password, address, city, province, postal code, and terms and conditions. Client-side validation through javascript is used for the create account form. RegEx strings are checked against user inputs to determine if they are valid. If any input is found to be invalid, the form will not submit. If all fields are valid, the form will submit and a SQL insert query will add the user to the webprogramazon database. Passwords are also encrypted using the BCrypt algorithm before being added to the database. The edit account page functions similarly, though it does not contain the terms and conditions field and password fields. Also, upon form submission, the edit page will update an existing user via a SQL Update query instead of an Insert query. Furthermore, the edit account page contains an extra sidebar that provides links to the different user account pages of the website. One final feature found on the edit account page is the “Delete Account” link. Clicking this link will prompt a confirmation message asking the user if they would like to remove their account. Upon confirming, a SQL Delete query will be executed. This query will remove the user’s account from the webprogramazon database.

Products & Home

The products page features all of the products available on the website and can be accessed regardless of whether the user is logged in. The page contains a scrollable display of all the products sold by Webprogramazon.ca. Each product container contains information about the product, as well as a button that will add the product to the cart if the user is logged in. If they are not logged in, clicking this button will redirect the user to the login page. Upon a successful login, the product will be added to the user’s cart. The products display on the Products page also features a counter which will tell the user how many products they are viewing, as well as a search and filter field. The user can filter by all products, or filter by individual product categories. Only products of the selected category will be displayed if a filter is applied. The search bar functions in tandem with the filter and will only search products that are of the selected product category. The search bar searches products by name.

The Home page features a similar display of the products offered by Webprogramazon. However, no counter, search, or filter fields are included on the home page. Another difference from the products page is that only the 9 most recently added products are displayed on the home page in descending order. This is done using a SQL Select \* query with a Limit of 9 applied. The product containers displayed on the home page also contain buttons which will allow the user to add the products to their cart. Similarly to the products page, if the user is not logged in, they are redirected to the login page, and the product is added to their cart upon a successful login.

Account

The account page contains the account details of the user, and can only be accessed when the user is logged in. The user account details are obtained through a SQL query and displayed in the pages’ form elements.

Shopping Cart

The shopping cart page is comprised of a scrollable table that will hold all the products that the user adds to their cart. Products are added from either the products are home pages. By default, when clicking the “Add to Cart” button of a product, the product is added to the cart with a quantity of one. If the button is clicked for a product that is already in the cart, the quantity will be updated, rather than adding a duplicate product to the cart. From the cart table users are also able to update product quantities and remove products from the cart. To update a quantity, the user must input their desired quantity and then click the “Update Cart” button. Total prices for each product, based on the product’s price times the quantity in the cart, as well as the total cost of all products in the cart are also displayed. At this time, as no payment authentication has been integrated, there is no checkout option available.

Coding Considerations

For this project, several special coding considerations should be described. The first of these is the use of the Apache Server scripting mentioned in the above .htaccess Files section. Other coding considerations involve the use of tutorials for the PHP user Login system and Cart system. To integrate the account and cart features, two tutorials were followed (references included at the end of this document and in code that uses them heavily). The code was modified and adapted to the needs of the website. Changes included changes in structure, omittance of tutorial code for features that were implemented through other methods (javascript validation), as well as adaption to the structure of the website. Furthermore, the overall style and some of the Javascript was reused and modified from previous assignment code. This code was also changed and restructured to meet the needs of the Webprogramazon website design. All other code was written specially for this website by the project developers.

References

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PHPTutorial. PHP Registration Form. phptutorial.net. (2023). https://www.phptutorial.net/php-tutorial/php-registration-form/. Retrieved April 1, 2024