

Activity: Storing and Retrieving Information Using Cookies

Problem Statement

Penelope is developing a Web site for BeautyInFitness. The company has recently started a fitness center that provides herbal therapies and body rejuvenation programs. Penelope is designing interactive Web pages for health and beauty sections. In addition to related information, each section contains a sub-section for FAQs, which is used to send visitors' queries to the company.

Penelope wants to track navigation history, every time a visitor navigates from one Web page to another. The information that the user entered in the previous page should be maintained when the visitor returns to that page. How can you help Penelope to incorporate the preceding requirement?

Solution

To solve the preceding problem, perform the following tasks:

1. Create the homepage.
2. Create the Thanks page.
3. Verify the solution.

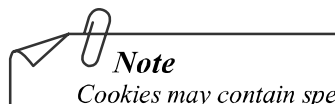
Task 1: Create the Homepage

To create the homepage of the Web site, perform the following steps:

1. Open a text editor such as Notepad.
2. Write the following code in the text editor:

```
<HTML>
<HEAD>
<SCRIPT>
function setCookie(name, value, expires, path, domain, secure)
{
    var thisCookie = name + "=" + escape(value) +
        ((expires) ? "; expires=" + expires.toGMTString() : "") +
        ((path) ? "; path=" + path : "") +
        ((domain) ? "; domain=" + domain : "") +
        ((secure) ? "; secure" : "");
    document.cookie = thisCookie;
    document.myForm1.submit();
}
```

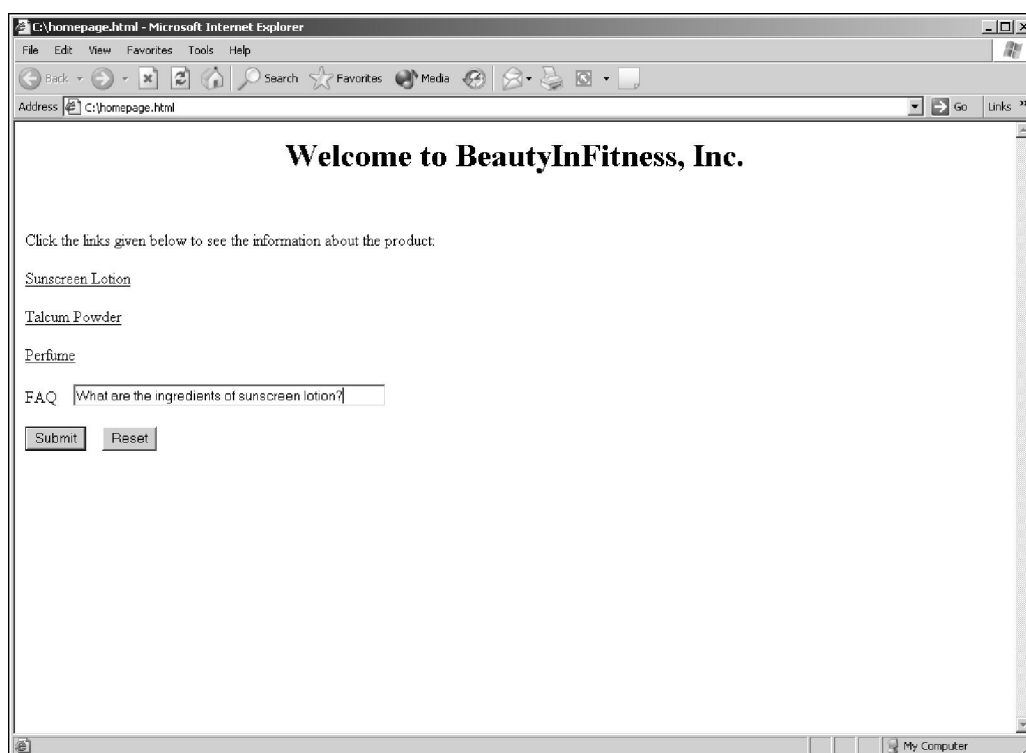

In the preceding code, the function `setCookie()` sets the name, value, expiry, domain, path, and the `secure` attributes of the cookie. The function, `GetCookie_name()`, accepts the name of the cookie from the user. The function `GetCookie_val()`, accepts the value of the cookie. When the user clicks the Submit button, the user calls the function `setCookie()` that stores the information entered by the user. The user can also reach the homepage of a particular product using the Product 1, Product 2, and Product 3 links.



Note

Cookies may contain special characters, which may result in erroneous read or write operations. To avoid problems while reading or writing values from or to cookies, you can use the `escape()` and `unescape()` functions. When writing values to a cookie, use the `escape()` function to convert special characters into their hexadecimal values so that accurate values are passed between the server and user's machine. Similarly, when reading values from a cookie, use the `unescape()` method so that accurate values are read back from the cookie.

The following figure displays the output of the preceding code.



Home Page of the Web Site

In the preceding figure, when the user enters a question in the FAQ text box and clicks the Submit button, the information entered by the user is stored in a cookie.

Task 2: Create the Thanks Page

To create the page, which will be displayed when the user clicks the **Submit** button in the home page, perform the following steps:

1. Open a text editor such as Notepad.
2. Write the following code in the text editor:

```
<HTML>
<HEAD>

<SCRIPT language="JavaScript">
/* Retrieve the cookie */
function GetCookie (c_name)
{
    var c_arg = c_name + "=";
    var c_alen = c_arg.length;
    var c_len = document.cookie.length;
    var x = 0;
    while (x < c_len)
    {
        var y = x + c_alen;
        if (document.cookie.substring(x, y) == c_arg)
            return getCookieVal (y);
        x = document.cookie.indexOf(" ", x) + 1;
        if (x == 0) break;
    }
    return null;
}

/* Retrieving the cookie value function */

function getCookieVal (offset) {
    var c_endstr = document.cookie.indexOf (";", offset);
    if (c_endstr == -1)
        c_endstr = document.cookie.length;
    return unescape(document.cookie.substring(offset, c_endstr));
}
</SCRIPT>
</HEAD>
<BODY>
Thanks for submitting your question!
<SCRIPT language="JavaScript">
document.write(GetCookie("FAQ"));
</SCRIPT>
<BR>
<BR>
<A HREF="homepage.html">Click here to go back to Home Page</A>
</BODY>
</HTML>
```

3. Save the file as **thanks.html**.

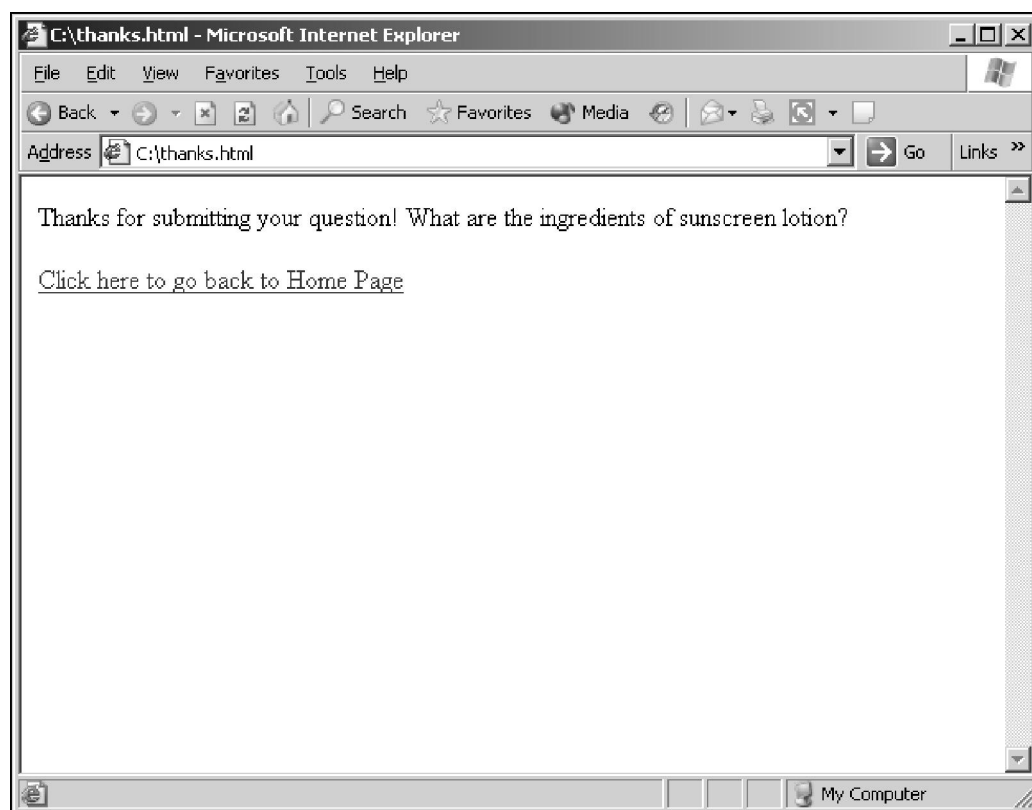
In the preceding code, the `GetCookie()` function is used to retrieve the name of the cookie that has been set by the `homepage.html`. The `getCookieVal()` function is used to retrieve the value of the cookie. The Click here to go back to Home Page hyperlink takes the user back to the homepage of the company Web site. Now when `homepage.html` opens, the user can again see the text that he or she entered in the FAQ text box earlier.

Task 3: Verify the Solution

To verify the solution, perform the following steps:

1. In the **homepage.html** file, enter **What are the ingredients of Sunscreen Lotion?** in the **FAQ** text box.
2. Click the **Submit** button. The **thanks.html** file opens and displays the FAQ text along with an additional message, **Thanks for submitting your question! What are the ingredients of sunscreen lotion?**

The following figure displays the output of the preceding task.



Viewing the Cookie Information in the thanks.html Page

In the preceding figure, when the user clicks the link, **Click here to go back to Home Page**, the control returns to the homepage.html Web page.