

Lab 04. Sử dụng kiến thức đã học về Array và Session. Hãy xây dựng ứng dụng web tạo giỏ hàng, cho phép thêm sản phẩm vào giỏ hàng, cập nhật số lượng sản phẩm trên giỏ hàng, xóa tất cả sản phẩm giỏ hàng, xóa Session giỏ hàng.

+ Giao diện ứng dụng web tạo giỏ hàng

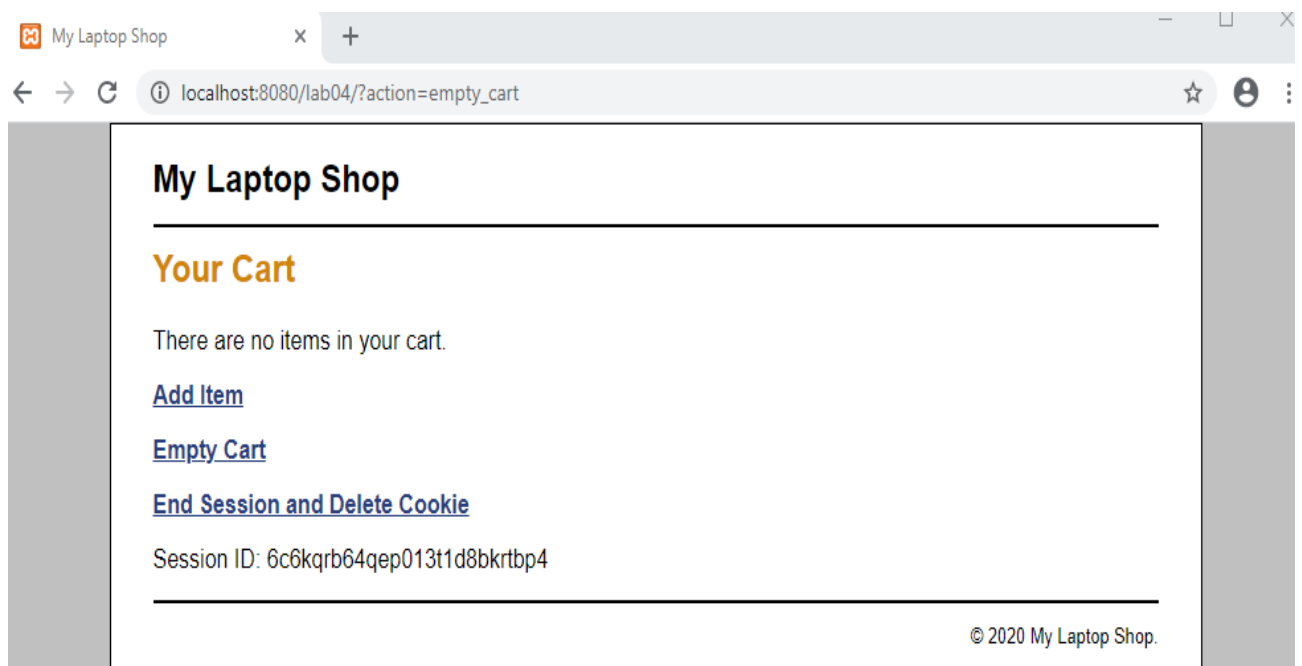
The screenshot shows a web browser window with the title 'My Laptop Shop'. The address bar shows 'localhost:8080/lab04/'. The page content includes a heading 'My Laptop Shop', a section titled 'Add Item', a dropdown menu for 'Name' with 'Dell N3558 (\$149.50)' selected, a dropdown for 'Quantity' with '1' selected, and an 'Add Item' button. Below this is a 'View Cart' link and a 'Session ID: 6c6kqrb64qep013t1d8bkrtbp4'. The footer shows '© 2020 My Laptop Shop.'

+ Giao diện khi người dùng thêm sản phẩm vào giỏ hàng

The screenshot shows the 'Your Cart' page of the 'My Laptop Shop'. It features a table with columns 'Item', 'Item Cost', 'Quantity', and 'Item Total'. The table lists three items: Dell N3558, Hp CS3012, and Asus X409JA. Below the table is a 'Subtotal' row showing a total of \$948.00 and an 'Update Cart' button. A message instructs the user to click 'Update Cart' to update quantities. Below the message are links for 'Add Item', 'Empty Cart', and 'End Session and Delete Cookie'. The 'Session ID: 6c6kqrb64qep013t1d8bkrtbp4' is displayed at the bottom. The footer shows '© 2020 My Laptop Shop.'

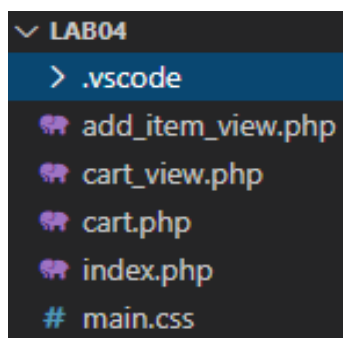
Item	Item Cost	Quantity	Item Total
Dell N3558	\$149.50	1	\$149.50
Hp CS3012	\$199.50	1	\$199.50
Asus X409JA	\$299.50	2	\$599.00
Subtotal			\$948.00

+ Giao diện khi người dùng xóa tất cả sản phẩm trên giỏ hàng



Gợi ý:

- **Bước 1.** Tạo cấu trúc ứng dụng web như hình.



- **Bước 2.** Xây dựng file **main.css** cho ứng dụng:

```
html {  
    background-color: rgb(192, 192, 192);  
}  
  
body {  
    font-family: Arial, Helvetica, sans-serif;  
    width: 760px;  
    margin: 0 auto;  
    padding: 0 2em;  
    background-color: white;  
    border: 1px solid black;  
}
```

```
header {  
  border-bottom: 2px solid black;  
  padding: .5em 0;  
}  
  
header h1 {  
  color: black;  
}  
  
aside {  
  float: left;  
  width: 150px;  
}  
  
section {  
  float: left;  
  width: 500px;  
}  
  
footer {  
  clear: both;  
  border-top: 2px solid black;  
}  
  
footer p {  
  text-align: right;  
  font-size: 80%;  
}  
  
h1 {  
  font-size: 150%;  
  margin: 0;  
  padding: .5em 0 .25em;  
}  
  
h2 {  
  font-size: 120%;  
  margin: 0;  
  padding: .25em 0 .5em;  
}  
  
h1, h2 {
```

```
    color: rgb(208, 133, 4);
}
ul {
    margin: 0 0 1em 0;
    padding: 0 0 0 2.5em;
}
li {
    margin: 0;
    padding: 0;
}
a {
    color: rgb(41, 64, 124);
    font-weight: bold;
}
a:hover {
    color: rgb(208, 133, 4);
}
form {
    margin: 0;
}
label {
    width: 5em;
    float: left;
    margin-right: 1em;
    text-align: right;
    margin-bottom: 1em;
}
table {
    width: 70%;
    border-collapse: collapse;
}
td, th {
    padding: .25em 0;
}
```

```
br {  
    clear: both;  
}  
  
/* the styles for the table header and footer */  
#cart_header th {  
    border-bottom: 2px solid black;  
}  
#cart_footer td {  
    text-align: right;  
    border-top: 2px solid black;  
}  
  
/* the styles for the classes */  
.right {  
    text-align: right;  
}  
.left {  
    text-align: left;  
}  
.cart_qty {  
    text-align: right;  
    width: 3em;  
}
```

- **Bước 3.** Xây dựng file **cart.php** chứa các hàm xử lý nghiệp vụ thêm sản phẩm, cập nhật số lượng, lấy tổng sản phẩm các mặt hàng trên giỏ hàng.

```
<?php  
  
// Add an item to the cart  
function add_item($key, $quantity) {  
    global $products;  
    if ($quantity < 1) return;  
    // If item already exists in cart, update quantity  
    if (isset($_SESSION['cart'][$key])) {  
        $quantity += $_SESSION['cart'][$key]['qty'];  
        update_item($key, $quantity);  
    }  
    return;  
}
```

```
}

// Add item

$cost = $products[$key]['cost'];

$total = $cost * $quantity;

$item = array(

    'name' => $products[$key]['name'],

    'cost' => $cost,

    'qty' => $quantity,

    'total' => $total

);

$_SESSION['cart'][$key] = $item;
}

// Update an item in the cart

function update_item($key, $quantity) {

    $quantity = (int) $quantity;

    if (isset($_SESSION['cart'][$key])) {

        if ($quantity <= 0) {

            unset($_SESSION['cart'][$key]);

        } else {

            $_SESSION['cart'][$key]['qty'] = $quantity;

            $total = $_SESSION['cart'][$key]['cost'] *

                $_SESSION['cart'][$key]['qty'];

            $_SESSION['cart'][$key]['total'] = $total;

        }

    }

}

// Get cart subtotal

function get_subtotal () {

    $subtotal = 0;

    foreach ($_SESSION['cart'] as $item) {

        $subtotal += $item['total'];

    }

    $subtotal_f = number_format($subtotal, 2);

    return $subtotal_f;
```

```
}  
?>
```

+ **Bước 4.** Xây dựng file **add_item_view.php** cho phép thêm sản phẩm vào giỏ hàng

```
<!DOCTYPE html>  
<html>  
<head>  
    <title>My Laptop Shop</title>  
    <link rel="stylesheet" type="text/css" href="main.css">  
</head>  
<body>  
    <header>  
        <h1>My Laptop Shop</h1>  
    </header>  
    <main>  
        <h1>Add Item</h1>  
        <form action="" method="post">  
            <input type="hidden" name="action" value="add">  
            <label>Name:</label>  
            <select name="productkey">  
                <?php foreach($products as $key => $product) :  
                    $cost = number_format($product['cost'], 2);  
                    $name = $product['name'];  
                    $item = $name . ' ($' . $cost . ')';  
                ?>  
                <option value="<?php echo $key; ?>">  
                    <?php echo $item; ?>  
                </option>  
            <?php endforeach; ?>  
            </select><br>  
            <label>Quantity:</label>  
            <select name="itemqty">  
                <?php for($i = 1; $i <= 10; $i++) : ?>  
                    <option value="<?php echo $i; ?>">  
                        <?php echo $i; ?>
```

```

        </option>
    <?php endforeach; ?>
</select><br>
<label>&nbsp;</label>
<input type="submit" value="Add Item">
</form>

<p><a href=".?action=show_cart">View Cart</a></p>
<p>Session ID: <?php echo session_id(); ?></p>
</main>
<footer>
<p class="copyright">
    &copy; <?php echo date("Y"); ?> My Laptop Shop.
</p>
</footer>
</body>
</html>

```

+ **Bước 5.** Xây dựng file **cart_view.php** cho phép cập nhật số lượng sản phẩm trên giỏ hàng.

```

<!DOCTYPE html>
<html>
<head>
    <title>My Laptop Shop</title>
    <link rel="stylesheet" type="text/css" href="main.css">
</head>
<body>
    <header>
        <h1>My Laptop Shop</h1>
    </header>
    <main>
        <h1>Your Cart</h1>
        <?php if (empty($_SESSION['cart']) || count($_SESSION['cart']) == 0) : ?>
            <p>There are no items in your cart.</p>
        <?php else: ?>
            <form action="" method="post">

```



```

<input type="hidden" name="action" value="update">
<table>
  <tr id="cart_header">
    <th class="left">Item</th>
    <th class="right">Item Cost</th>
    <th class="right">Quantity</th>
    <th class="right">Item Total</th>
  </tr>
  <?php foreach( $_SESSION['cart'] as $key => $item ) :
    $cost = number_format($item['cost'], 2);
    $total = number_format($item['total'], 2);
  ?>
  <tr>
    <td>
      <?php echo $item['name']; ?>
    </td>
    <td class="right">
      $<?php echo $cost; ?>
    </td>
    <td class="right">
      <input type="text" class="cart_qty"
        name="newqty[<?php echo $key; ?>]"
        value="<?php echo $item['qty']; ?>" />
    </td>
    <td class="right">
      $<?php echo $total; ?>
    </td>
  </tr>
<?php endforeach; ?>
  <tr id="cart_footer">
    <td colspan="3"><b>Subtotal</b></td>
    <td>$<?php echo get_subtotal(); ?></td>
  </tr>
</tr>

```

```

        <td colspan="4" class="right">
            <input type="submit" value="Update Cart">
        </td>
    </tr>
</table>

<p>Click "Update Cart" to update quantities in your
    cart. Enter a quantity of 0 to remove an item.
</p>
</form>

<?php endif; ?>

<p><a href=".?action=show_add_item">Add Item</a></p>
<p><a href=".?action=empty_cart">Empty Cart</a></p>
<p><a href=".?action=end_session">End Session and Delete Cookie</a></p>
<p>Session ID: <?php echo session_id(); ?></p>
</main>

<footer>

<p class="copyright">
    &copy; <?php echo date("Y"); ?> My Laptop Shop.
</p>
</footer>
</body>
</html>

```

+ **Bước 6.** Xây dựng file **index.php** để điều hướng các chức năng của giỏ hàng. (controller)

```

<?php
// Start session management with a persistent cookie
// $lifetime = 60 * 60 * 24 * 14;    // 2 weeks in seconds
// $lifetime = 0;                    // session cookie
$lifetime = 60 * 60 * 24 * 365 * 4; // 3 years in seconds
session_set_cookie_params($lifetime, '/');
session_start();

// Create a cart array if needed
if (empty($_SESSION['cart'])) { $_SESSION['cart'] = array(); }

```

```
// Create a table of products
$products = array();
$products['SP-1754'] = array('name' => 'Dell N3558', 'cost' => '149.50');
$products['SP-6289'] = array('name' => 'Hp CS3012', 'cost' => '199.50');
$products['SP-3408'] = array('name' => 'Asus X409JA', 'cost' => '299.50');

// Include cart functions
require_once('cart.php');

// Get the action to perform
$action = filter_input(INPUT_POST, 'action');
if ($action === NULL) {
    $action = filter_input(INPUT_GET, 'action');
    if ($action === NULL) {
        $action = 'show_add_item';
    }
}

// Add or update cart as needed
switch($action) {
    case 'add':
        $product_key = filter_input(INPUT_POST, 'productkey');
        $item_qty = filter_input(INPUT_POST, 'itemqty');
        add_item($product_key, $item_qty);
        include('cart_view.php');
        break;
    case 'update':
        $new_qty_list = filter_input(INPUT_POST, 'newqty', FILTER_DEFAULT, FILTER_REQUIRE_ARRAY);
        foreach($new_qty_list as $key => $qty) {
            if ($_SESSION['cart'][$key]['qty'] != $qty) {
                update_item($key, $qty);
            }
        }
        include('cart_view.php');
        break;
    case 'show_cart':
```

```
include('cart_view.php');  
break;  
case 'show_add_item':  
include('add_item_view.php');  
break;  
case 'empty_cart':  
unset($_SESSION['cart']);  
include('cart_view.php');  
break;  
case 'end_session':  
    // Clear session data from memory  
    $_SESSION = array();  
    // Clean up session ID  
    session_destroy();  
    // Delete the cookie for the session  
    $name = session_name();           // Get name of the session cookie  
    $expire = strtotime('-1 year');    // Create expiration date in the past  
    $params = session_get_cookie_params(); // Get session params  
    $path = $params['path'];  
    $domain = $params['domain'];  
    $secure = $params['secure'];  
    $httponly = $params['httponly'];  
    setcookie($name, "", $expire, $path, $domain, $secure, $httponly);  
    include('cart_view.php');  
    break;  
}  
?>
```