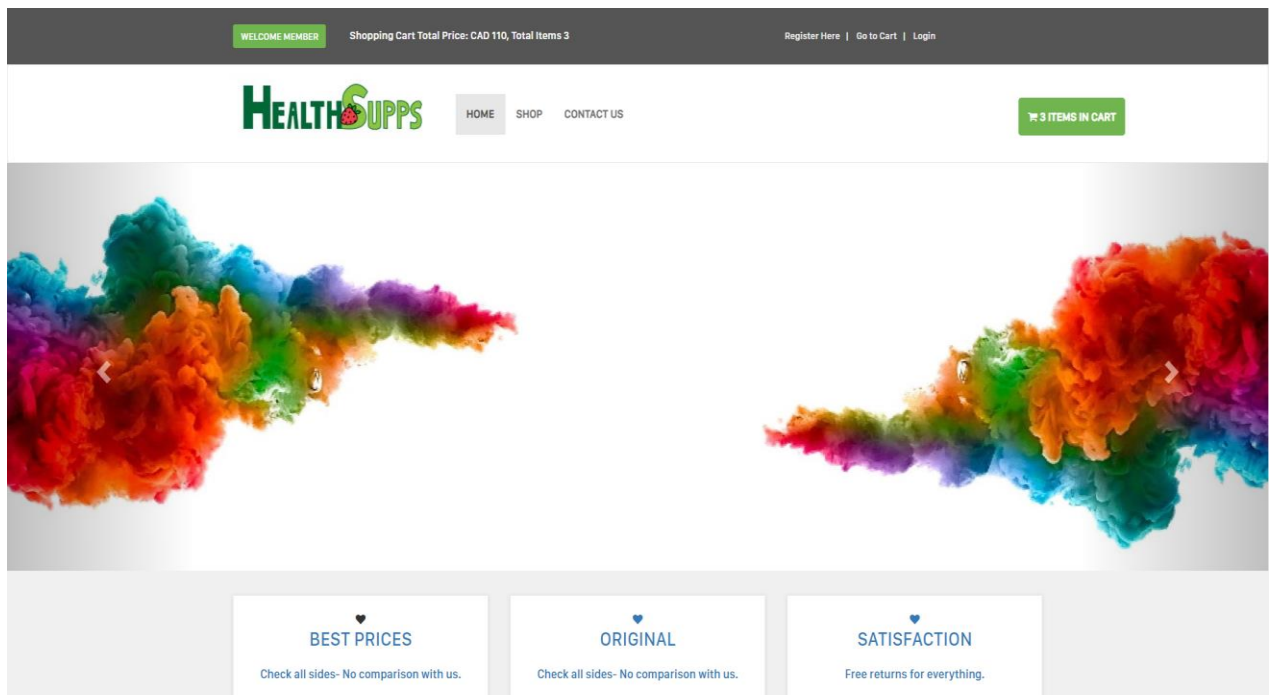# Technical Report

## HealthSupps

## By: Jastej Sehra , 301294753

# 1. DATABASE DESIGN

This is a website for supplements for health and also for bodybuilding. It has 2 Main categories. The first category is broader called 'categories' in the database. For an analogy, it is equivalent to parent categories like Mens, Womens and childrens in clothing. The second table is a smaller/less wider and more narrowed table called 'product-category' and includes filters within the first parent category. For analogy again, it is equivalent to Jackets, shirts, and jeans within a broader category for example Mens Clothing. (Note: The examples of mens, womens and jackets etc used are only to clear confusion and are not included in the actual database).

The 'categories' table includes 4 broad categories and consist of the following design decisions:

1. Protein,
2. Performance (which has 2 smaller categories of Pre workouts [smaller category table] and BCAAs [smaller category table])
3. Weight Management
4. Vitamins and Health (which has 2 smaller categories of Fat Burner [smaller category table] and Men's Health [smaller category table])

So, when a user clicks on Shop in the navigation bar, it shows a list of all the products available and then once clicked on the categories in the sidebar, it filters according to the categories.

Following is the ER Diagram That explains my database design and implementation:
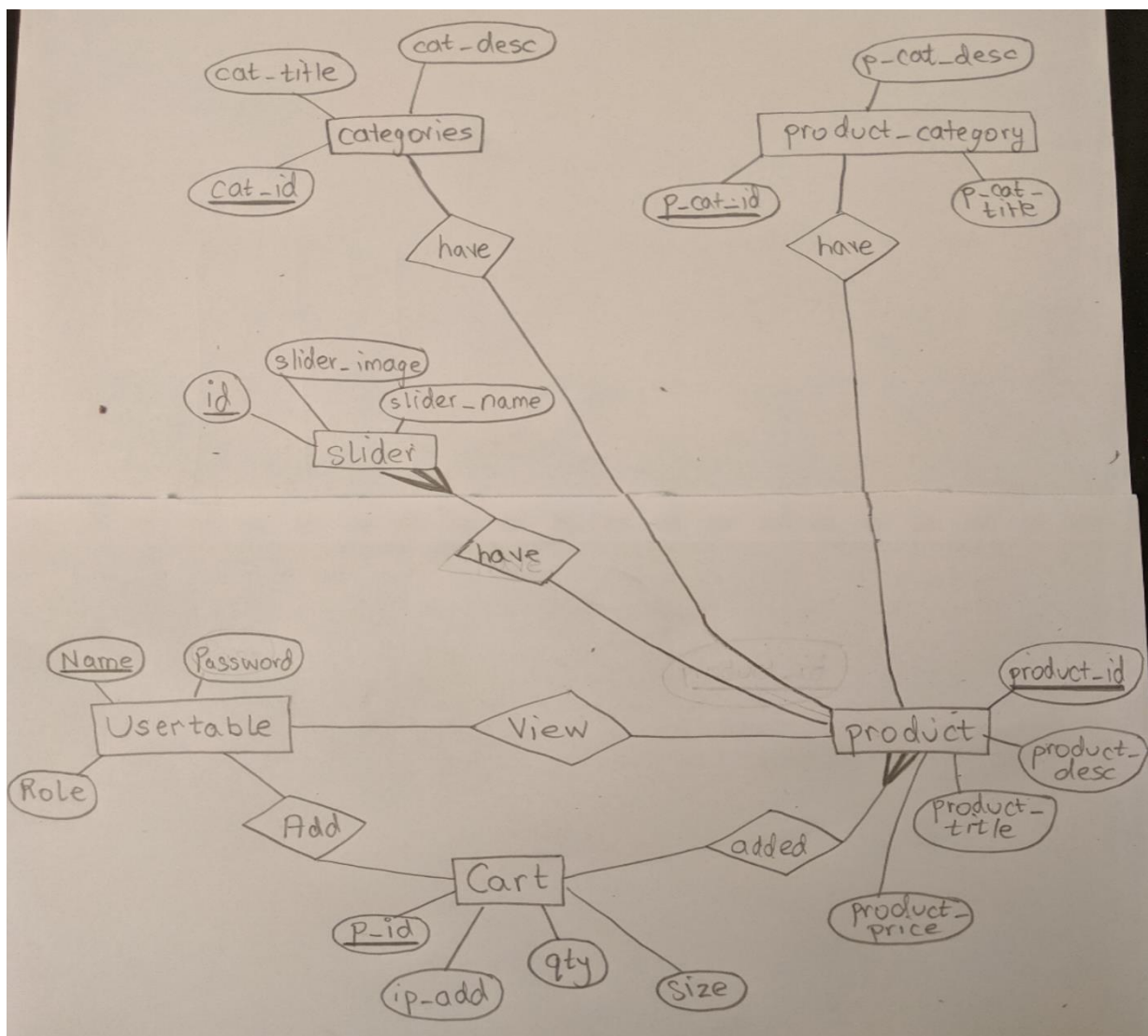
# 2. DATABASE CONNECTIVITY CODE

Before accessing the data in the database, first I set up the connection with server. After that, I have the html code brackets and then since after the script ends, the connection closes automatically, I did not close it manually. This kind of connection remains the same in 3 php pages, login.php, register.php, and validation.php. Validation.php connects both the login and register pages through a form that I am using , by implementing $_POST method.

```php
6
7    // 1. Create a connection to the database
8    @$dbhost = "localhost";
9    @$dbuser = "root";
10   @$dbpass = "";
11   @$dbname = "jastej_sehra";
12
13   // create new connection
14   $connection = mysqli_connect($dbhost, $dbuser, $dbpass, $dbname);
15   // Test if connection succeeded
16   if (mysqli_connect_errno()) {
17       die("Database connection failed:" .
18           mysqli_connect_error() .
19           "(" . mysqli_connect_errno() . ")"
20       );
21   }
22
23   $role = "";
24   if (isset($_POST['Register'])) {
25       $username = $_POST['username'];
26       $password = $_POST['password'];
27
28
29       $query = "select * from usertable where name = '$username'";
30       $result = mysqli_query($connection, $query);
31       $num = mysqli_num_rows($result);
32
33
34       if ($num >= 1) {
35           echo "<script>alert('Username Already Exists. Please choose a different username.')</script>";
36       } else {
37           $reg = "Insert into usertable(name,password,role) values ('$username','$password','member')";
38           mysqli_query($connection, $reg);
39           echo "<script>alert('Registration complete. Please Go to Login Page to Continue.')</script>";
```

Once the database is connected and the user/guest creates and account and logs in, then the main website comes to life , which allows the user to shop from the wide variety of supplements.

# 3. SECURE AUTHENTICATION HANDLING

For creating an account, I have used three php pages: validation.php, register.php and login.php where user creates an account, the details get saved in the table called usertable and then in validation.php, I check if the username exists, and if yes, then take the new member to the main page to shop. If the login info is wrong, it takes to a new page with red banner , stating that either wrong username or password entered. Below is the page when a wrong input is entered.

## Wrong Input

a) Either Username Does Not Exist

b) Or Wrong Password Entered

Please Try to | Login again | or | Register Here |

Below, is the validation.php part where it checks for a successful connection.

```php
$username = $_POST['username'];
$password = $_POST['password'];

echo $username;
echo $password;

$query = "select * from usertable where name = '$username' and password = '$password'";
$result = mysqli_query($connection, $query);
$num = mysqli_num_rows($result);

if($num == 1)
{
    $_SESSION['username'] = $username;
    header('Location:index-member.php');
}
else{
    header('Location:wrong-login.php');
    echo "USERNAME DOESNT EXIST";
}
```

Following is the code, where I check if a username already exists by using an index, and checking if the index is more than or equal to 1 resulting in "Username already exists.try again". If not, then it gets created.

```php
if (isset($_POST['Register'])) {
    $username = $_POST['username'];
    $password = $_POST['password'];


    $query = "select * from usertable where name = '$username'";
    $result = mysqli_query($connection, $query);
    $num = mysqli_num_rows($result);


    if ($num >= 1) {
        echo "<script>alert('Username Already Exists. Please choose a different username.')</script>";
    } else {
        $reg = "Insert into usertable(name,password,role) values ('$username','$password','member')";
        mysqli_query($connection, $reg);
        echo "<script>alert('Registration complete. Please Go to Login Page to Continue.')</script>";
    }
}
```

Basically, a non member cannot add anything to their cart. Following is a screenshot of how there is an option to register before adding an item to the cart. Also, when the details page of a product opens up, I put in a javascript alert message to Please register before adding to cart.
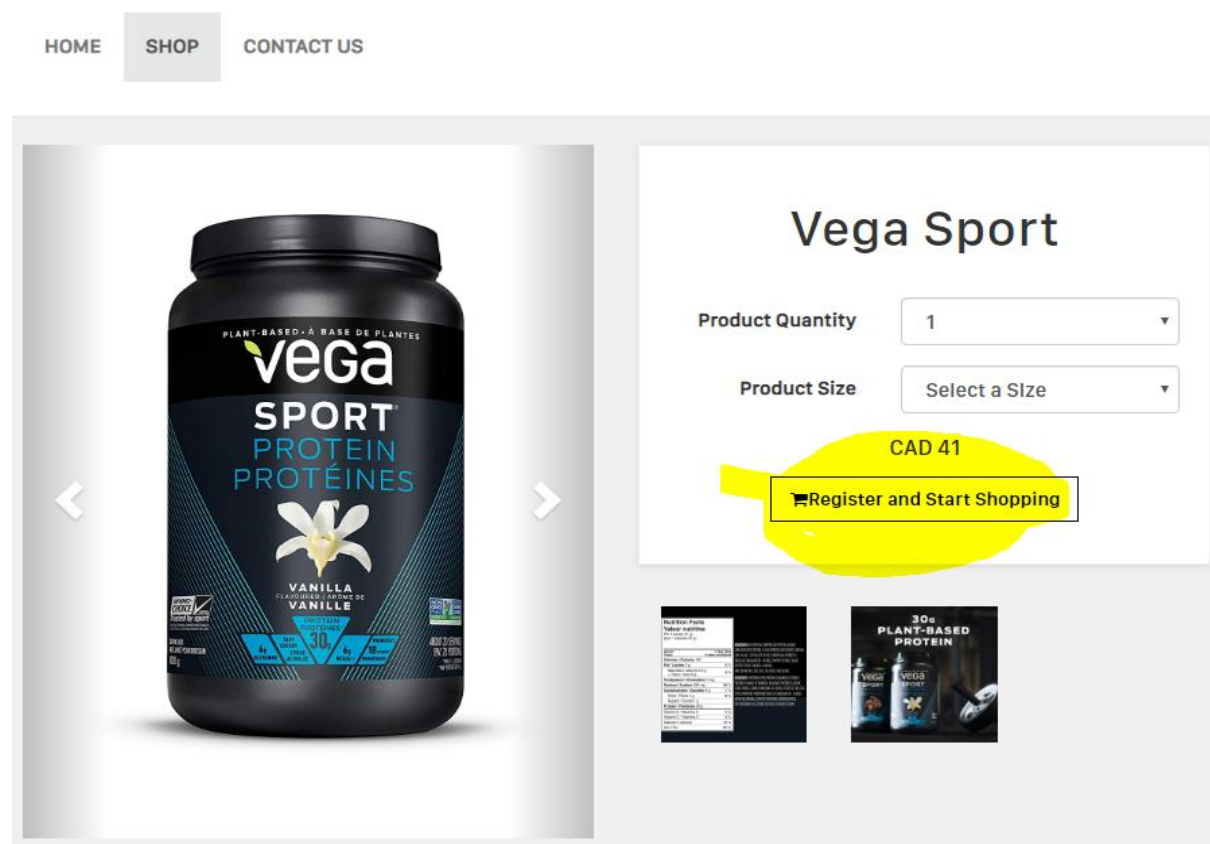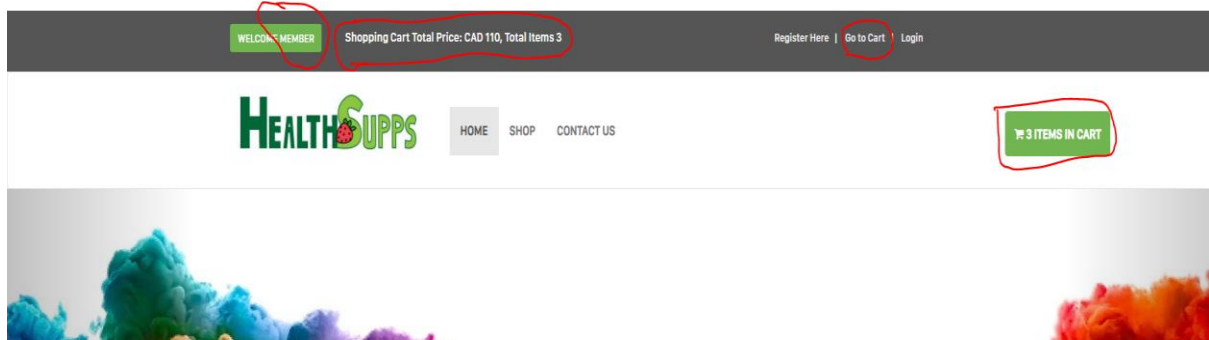
# 4. VISITORS

The index.php file opens firstly, which is a page slightly modified for the visitor/non member user to view the products and go through the website as a non-member. The website doesnot give any way or allow the non member to add products to the cart. Only option available is to view all the collection of products and view their details. Below is a comparison between the main page where 1)User is not registered, and hence user does not get any option for adding to cart. Versus 2) where user is signed in and can go to cart, add and delete items and checkout.

1) Non member navigation and dashboard snippet
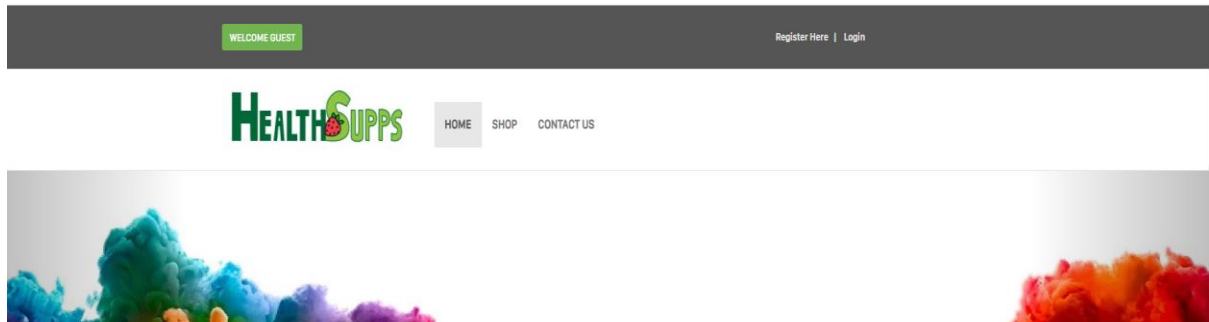


2) Member signed in, navigation and dashboard snippet



Visitors can view everything and every product including the details of a product, price and description but as showed above, cannot add it to cart. To shop, they are redirected to register and login and various checkpoints throughout the website.

# 4. MEMBERS REGISTRATION AND LOGIN

As discussed above, non members are requested and redirected to register and login to start adding products to cart. When a member is registered, their details page of a product looks slightly different than non-members, and includes options to add products to cart.
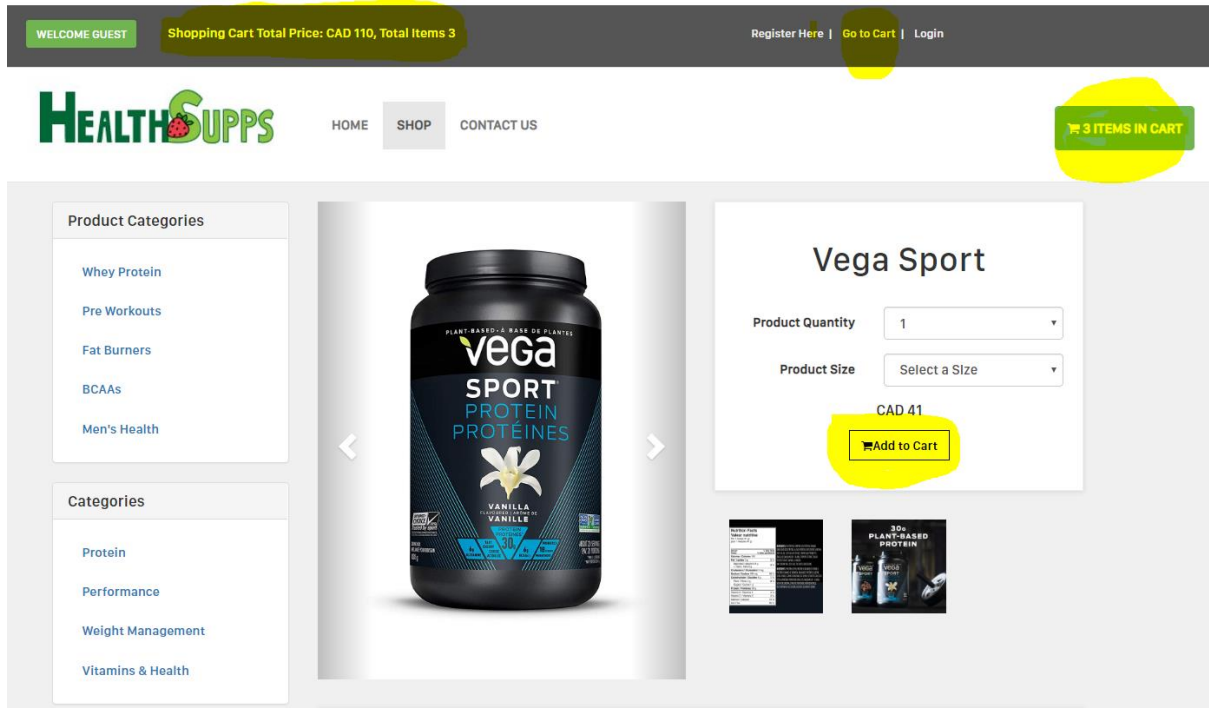


Register page is simple and has two fields to be filled and an option to go to the login page if already a member.
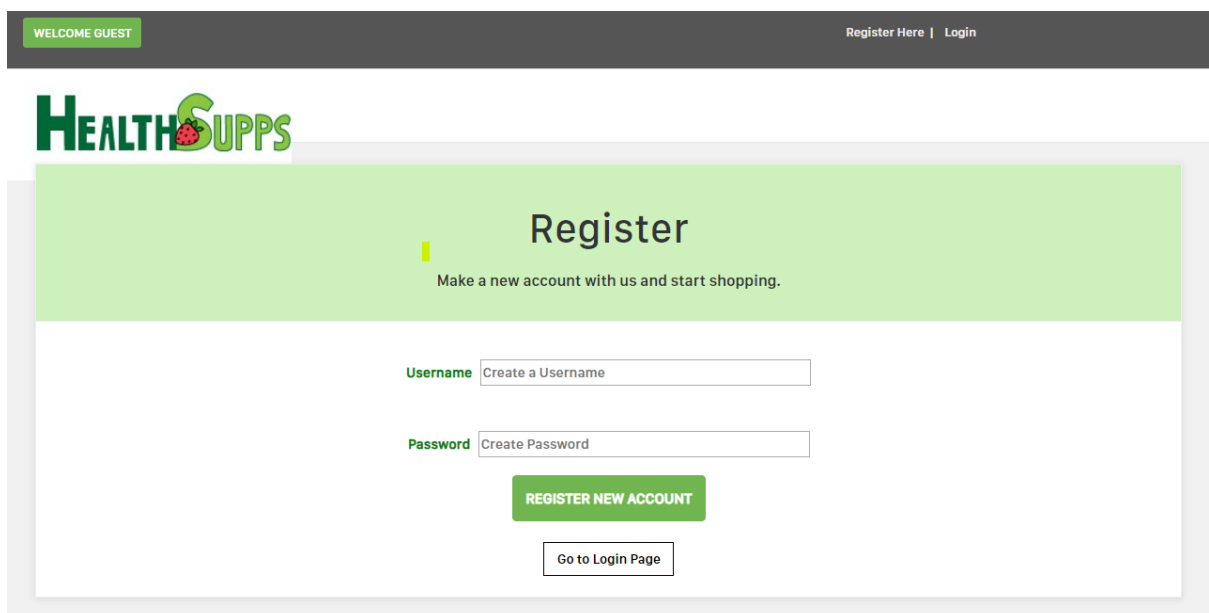


The login page is exact similar to the register page layout to induce consistency and avoid confusion. Once logged in, the shopping experience starts.

# HEALTH SUPPS

# Login

### Through your registered Username and Password.

**Username** Enter Username

**Password** Enter Password

LOGIN

or Make a New Account

Following is the cart page that only members can acess. To deleteitems, select the checkboxes and press update cart button on the bottom(Not show in image below). Order total is a formula involving multiplying the price of a product with its quantity selected.

## Shopping Cart

Currently you have 3 item(s) in your cart

| Product | | Quantity | Unit Price | Size | Delete | Sub Total |
|---------|---|----------|------------|------|--------|-----------|
| | Cellucor C4 Original Pre Workout | 2 | CAD55 | 2.2 Kgs Kg | ☐ | CAD 110 |
| | MuscleTech NitroTech Casein Gold | 4 | CAD44 | 2.2 Kgs Kg | ☐ | CAD 176 |
| | MuscleTech Phase8 Whey Protein Powder | 1 | CAD59 | 4.5 Kgs Kg | ☐ | CAD 59 |

## Order Summary

| | |
|---|---|
| Order Subtotal | **CAD 345** |
| Shipping and Handling | CAD 0.00 |
| Taxes | CAD 0.00 |
| **Total** | **CAD 345** |