Coding Temple e-Commerce Site

Purpose

Through your participation in Coding Temple's Full Stack .NET Development program, you will learn the tools and technologies required to build a fully-functional web application from scratch. Completion of this task will demonstrate your proficiency of the material covered in class. As such, each student is expected to complete their project independently. You may ask questions of classmates and instructors, but you may not share code! The project is to represent your own work, so that you may show it to prospective employers as a demonstration of your own capability.

Overview

An e-Commerce Site is often thought of as an online storefront, in that one or more products or services are made available to the end user for purchase. To that end, a proper e-Commerce Site should feature one or more products, often grouped into categories, and a means by which an end user can provide payment (and possibly shipping) information in order to complete a transaction. Details of that transaction should be placed into some sort of persistent data store (e.g. a database).

Note: In a real-life scenario, the transaction details are often integrated into an existing line-of-business system so orders can be assembled, packed, and shipped. For the purpose of the final project, we will not be creating those line-of-business integrations.

Punch-list

The following list provides a set of criteria that each student should seek to fulfill when completing the final project. In some cases, variations on this list may be allowed, but students should speak to an instructor beforehand to ensure that their final product is still in line with the spirit of the assignment.

- o Students must think of an original idea for products and/or services sold. Ideas must be unique to each cohort of students (e.g. two students in the same group are discouraged from both building a store that sells pizzas)
- o Students must source image assets for products, as well as any images needed for their site
- o Students should do some customization of styles such that fonts & colors are not using the built-in browser styles.
- o A site should include a home page. The home page of an e-Commerce site often displays some sort of featured products and/or deals to entice potential buyers.
- o From the home page, an end user should be able to quickly locate one or more products/services for purchase. This can be done via a search box that directs to a search results page, or navigating to a page that shows many products/services within the same category. Alternatively, links to featured products from the main page may also be acceptable.
- o A site should include enough information about the product/service such that the purchaser has a very good idea of what they are buying. This might include images of the product, a description, or a list of specifications about the product/service.
- o A user should be able to select a product or service for purchase. Some sites only allow purchase of a single thing at a time, while others might allow for multiple products to be purchased at once.

- o The site should provide a way to allow users to view and edit the product(s) and quantities they are purchasing prior to checking out. (e.g. a user might decide they only want two pizzas instead of three, or they want pepperoni on their pizza).
- o When a user is ready to complete their order, the site should provide a way to collect information about that user to complete the transaction (payment information, shipping & billing addresses, scheduling of services).
- o The site should include some logic to make sure that user information is valid (e.g. phone number has sufficient digits, email is well formatted), and prompt the user to correct errors when possible.
- o Once all payment information is determined to be valid, the order is "placed", and the user is directed to a receipt page.

Additional Punch-List Items

The items below are not required for the assignment, but will go far in demonstrating competency of the materials presented.

- o The site should include a mechanism for users to log-in and log-out. Logged in users will pick up the site in the state they left it in (e.g. if they had two pizzas in their cart when they logged out, those pizzas will still be in the cart).
    - o Logged in users might also be able to review their previous orders on some sort of "Order History" page
    - o The checkout process for logged-in users could be streamlined by allowing users to save address and payment information.
- o The site should include a mechanism for certain users to be considered site administrators, allowing them to access functionality that normal users cannot see (e.g. seeing all orders for all customers, editing placed orders, editing products).
- o Payment information can be brokered through a third-party API (e.g. PayPal, Braintree) so that sensitive information is not directly stored in the database for the site.