Submission 05
Implementing a Catalog Display Feature via a MySQL Product Database

Submission Description

Important Note re This Submission and the Next
In the previous four versions of your developing website you have been subject to relatively restrictive specifications with respect to the layout and styling and even the content of your site. We started everyone off with the same "website shell" and have been adding various features to that shell by adding new pages and activating more and more of the options on the drop-down menus. In this (5th) and the next (6th and last) versions of your website, you will continue to activate the remaining links, but from now on you will have more "freedom" as to how your displays will look, though we will still specify much of the required content and also the behavior. The remaining links to be activated are all under **e-store** on the main menu bar: **Product Catalog**, **Shopping Cart** and **Checkout**. You will active the **Product Catalog** link in this (5th) submission and the **Shopping Cart** and **Checkout** links in the next (6th) submission, which is also the final submission.

The Amazing Stuff website, versions 5 and 6, may continue to be under development, and what you see in those may or may not be helpful to you in your own development, depending on whether you wish to emulate what you see there or proceed in some different direction. Note, however, that the Nature's Source website also shows all of the features that you will have to implement, though you don't have to mimic the layout and/or styling seen there either, and your "catalog" need only have two "levels", not the three illustrated in Nature's Source. However, you do have to imitate, more or less, the functionality seen there and in the Amazing Stuff websites, and (luckily) you also have all the source code for the Nature's Source site as a reference, if you wish to use it as such.

So ... the first order of business for this submission is to design one or more tables to hold your product information in your MySQL database. Your product information will, of course, depend on the nature of your products, but at a minimum there must be a product id, a product description (and possibly other description-related fields), the product category of the given product, the product unit price, the number of the product item currently in inventory, and either the image file itself, or the path to the image file, for the product.

When your **Product Catalog** link is clicked, there must be a PHP connection made to your database and the data for your catalog display must be retrieved from the appropriate table(s) in your database. The page displaying this retrieved data must show a list of your product categories. This page can be analogous to the page that is displayed by the sample Nature's Source website when its **Product Catalog** link is clicked (under **e-store** and also under **Products+Services**), or just a much simpler list of product categories as shown in Amazing Stuff version 5. In any case, your page does not have to look exactly like either of those, and, as mentioned above, you need only a two-level catalog, not three; what must be true is that your data has been retrieved by PHP from your MySQL database and is displayed in some reasonable format.

Next, when the user clicks on any link corresponding to one of your product categories, another page must be displayed showing all of the products in that category. The information shown on this page must also, of course, come from your database, and must be analogous (in terms of content) to one of the individual product rows shown in Nature's Source or Amazing Stuff version 5. The layout of the information is up to you. But you must display at least the product image, the product name/description, the price and the number in stock. There must also be a **Add to cart** button in a suitable location, and for this submission it should be inactive and thus have the usual "Not yet active"

popup. The page must also have a a button link that takes the user back to the main catalog page of product categories.

Required File(s)

In addition to all of the directories and files from version 4 of your website, this fifth version must also have the following additions/changes:

1. New page files in your `pages` subdirectory for the product catalog (list of product categories) page, and the page of individual products within a category.

2. New PHP script files in your `scripts` subdirectory for handling database connection and product information retrieval.

3. New files which may be just MySQL script files, or MySQL script files together with a textfile containing product data, depending on how you have handled that aspect of your setup.

4. The usual `readme.txt` file, which on this occasion should contain, along with the usual content, a brief description of how, in fact, you did set up your MySQL tables (either table creation followed by a script of insert commands, or table creation followed by loading in a data file), and also whether you used a single product table, or some other arrangement (as seen in Nature's Source, for example).

File Placement for Submission

Submit the required directories and files by placing them in the `submission05` subdirectory of the `submissions` subdirectory in the `public_html` directory of your personal Linux account `u##`, where the `??` are the last two digits in your Linux account username for this course.

Be sure to develop outside the submission directory and copy your files to the submission directory when you are ready to submit, so that there is nothing in the submission directory but the file(s) required for the submission.

Additional Notes, Requirements, Specifications and/or Hints (if any)

1. If you're looking at the Nature's Source code for product display, keep in mind that it's dealing with the "three-level" product display, and thus is more complicated than your code needs to be. However, studying that code to see how it does what it does might be a useful exercise to do before you start to write your own (similar) code.

Best Practice

Develop your files and directories in the directory `submissions/05`, and when you're finished, copy the contents of this directory to `submissions/submission05`.

Submission 05 Checklist

Files and directories
1. Is there a new `readme.txt` file in the home directory?
2. Are there one or more new page files in the `pages` subdirectory for handling the catalog display?
3. Are there new PHP script files in the `scripts` subdirectory for handling the catalog display?

Home page appearance

1. There are no new home page display requirements, but you may wish to revise some aspects of your home page based on feedback.

Home page functionality: Product catalog link now active

1. Does the **Product Catalog** link under **e-store** behave properly?

Other pages: product catalog functionality

1. Does clicking on the **Product Catalog** link under **e-store** display the catalog of item categories for your business in a reasonable format (the website may have used a label different from **Product Catalog**)? At a minimum this display can just be a list of product categories, with each list item being a link that takes the user to a page showing all the items in that category.

2. Does clicking on each category link take the user to a page showing all the items in that category, and do all of those pages have a suitably uniform appearance?

3. Does each product description show an image of the product and give, at least, its name/description, price, and the number in stock (other details may be necessary and are certainly possible)?

4. Does each individual product page have an associated **Add to cart** button, which is currently inactive and thus has the usual popup to that effect?

5. Does each product category page contain a button link that returns the user to the main catalog page?

Behind the scenes

1. Is the MySQL product table setup and content (whether there is just one table, or more) consistent with the end-user view of, and experience with, the catalog display?

2. Is it clear that PHP and MySQL are communicating appropriately to retrieve and display the contents of the company catalog?

3. Are all files well formatted?

Final questions

1. Are "look and feel", responsiveness, and validation maintained across the website?

2. In addition to the above new features, are there any clearly outstanding issues from the previous version of the website that have not yet been resolved?

3. Does the `readme.txt` file adequately describe the state of the website, and did it have the extra requested description of how the product table(s) was/were set up in MySQL?