CSCI UA.0060 Spring 2024

Assignment 7 – Connect Website to SQL Database

Deliverables

Upload your PyCharm project to GitHub.

Overall Requirements

In this assignment, you will update the website skeleton provided in your GitHub repository, so that the content on the Category page will be driven from data in a database.

Specific Requirements

1. Decide on the specialty of your bookstore, choose a name and find/create a logo It should be between 100-200 pixels on each side (it does not have to be square).
2. Create a database and implement the following schema:

book(**bookId**, *categoryId*, title, author, price, image, readNow)

category(**categoryId**, categoryName)

readNow should be set up as a tinyint datatype.

title, author and image should all be varchar.

1. Populate the database with at least 4 categories and 16 books (four in each category). You can choose the books and categories, but they should relate to your bookstore’s specialty. Some of the books, but not all should have the readNow flag set to 1. The others should be 0.
2. Clone the bookstore repository into PyCharm. The project currently contains:
   1. A templates folder containing four HTML pages including:
      1. Index.html – the welcome page
      2. Category.html – the page that displays books for a category
      3. Base.html - used for the header and footer for the other pages
      4. Error.html – that displays some error information
   2. A static folder containing:
      1. A css folder containing one file with rules for both pages
      2. An images folder with subfolders for books, categories and misc. The misc folder has various icons (which you are welcome to change if you wish). The other folders have a dummy image to allow them to be cloned.
   3. An app.py file that contains the overall structure for your Python program
3. You need to find images of the book covers (I recommend alibris.comm for this). The long edge of the book images must be between 150 and 200 pixels (and preferably the same for each book). You will also need images for the four categories. Each image should be the same size – no greater than 175 pixels on each side (they do not have to be square). Image files can be jpg, png or gif. It is preferred if they are all the same image type. The images should all be stored in the images folder and the image filenames should be stored in the book table records.
4. You must update the Python program and HTML files to make the site functional. The intent is that the book and category information is retrieved from the database. Which books are displayed on the category page is determined by the user’s category selection. There are notes in the skeleton program and HTML files with instructions for what needs to be done.
5. Depending upon your interest, knowledge, skill and time, you are welcome to modify the site to look how you want it to. You can change colors, fonts, text and layout. The basic requirements for this assignment are that four different books are displayed on the category page depending upon the user’s selection of at least four different categories and that those books are retrieved from the database that you have created.
6. Screenshots of the two Treble Clef bookstore pages are included in the GitHub repository, so you can use them as a frame of reference. You do not have to exactly replicate these pages.
7. When you have completed the assignment, export the database as you did in assignment 5 and copy the resultant SQL file into the bookstore project folder. Once done, submit the assignment to GitHub.

Grading Rubric

See Brightspace for Grading Rubric