CSCI UA.0060 Spring 2025

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 to reflect your own bookstore. The content on the Category page will be driven from data in a database.

Specific Requirements

1. Choose your specialty for the bookstore, then pick 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. Choose four categories of books and four books for each category. Find images of the book covers (I recommend alibris.com 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 better if they are all the same image type, because then you don’t need to store the type in the database. However, this is not mandatory. The images should all be stored in the images folder.
3. Create a database and implement the following schema:

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

category(**categoryId**, categoryName)

1. Populate the database with records that reflect the 4 categories and 16 books (four in each category. The image names should be the same as the image names in the images/book folder, e.g. music-is-my-mistress as opposed to the title which will be displayed to the user, e.g Music is my Mistress. If the extensions are all the same, they do not need to be included in the image names. Some of the books, but not all, should have the readNow flag set to 1. The others should be set to 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 books and categories folders each have one image as an example. The misc folder has various icons. You needn’t actually use them.
   3. An app.py file that contains the overall structure for your Python program
   4. Screenshots of sample index and category pages
   5. This requirements document.
3. 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.
4. Depending upon your interest, knowledge, skill and time, 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.
5. 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, commit the assignment to GitHub.

Grading Rubric

See Brightspace for Grading Rubric