CSCI UA.0060 Spring 2024

Assignment 8 – Connect Website to Mongo Database

Deliverables

Upload your PyCharm project to GitHub.

Overall Requirements

In this assignment, you will create a series of webpages that will be used to maintain a Mongo Database that will support an online Bookstore.

The starting project can be accessed from GitHub, using this link:

<https://classroom.github.com/a/tHHvs2fN>

Specific Requirements

1. The first thing that you need to do is to create a MongoDB bookstore database that contains a book collection, which in turn contains a minimum of 6 book documents and a category collection that contains four category documents.
2. Each book document should contain a category (category name not Id), title, author, ISBN, price, image(does not have to include the extension if all images are of the same file type) and readNowFlag (either 1 or 0). If you want, you can use the same books that you used for the last assignment.
3. Each category document should have a categoryId and a categoryName.
4. Update the base.html page to include your site name, some text in the header and footer and URLs for each of the links.
5. Update the read.html page to display all the books in the database with edit and delete links.
6. Update the create.html page to include an HTML form. This page should:
   1. Allow the user to insert data for each book attribute.
   2. Support the dropdown list of categories being driven from the categories collection.
   3. Include a cancel button that links to the read page.
   4. Use the HTTP POST method when submitted.
7. Update the edit.html page to include an HTML form similar to the create page, except that it should display all the attributes for the book that is being edited, including the category in the dropdown.
8. Update the app.py program to include code for all the functions needed to support the specified activities on the HTML pages:
   1. Connect to the MongoDB database.
   2. In the read function, retrieve books from the database and pass those books to the read.html page.
   3. In the create function, retrieve all the categories and pass them to the create.html page.
   4. In the create\_post function, set up the json data structure using the information passed in using the POST method and then insert the document into the database.
   5. In the edit function, retrieve the data for the book selected by the user and retrieve all the categories. Then pass all the data to the edit.html page.
   6. In the edit\_post function, , set up the json data structure using the information passed in using the POST method and then edit the document into the database.
   7. In the delete function, send the delete command to the database for the selected book.
9. 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. However, there is no requirement to update the layout provided. Implementing the maintenance functions is the core of this assignment.

Grading Rubric

See Brightspace for Grading Rubric