

CIS 424 PHP Project – CIS Textbook Catalog (100 points)







Project Due: by 11:59 PM of Jan. 29

How to submit: In NetBeans, **export** your project into a zip file, name it as YourLastName_FirstName_PHP.zip. Submit this zip file as attachment through Blackboard email. The email subject is yourLastName_firstName_PHP. (1 point)

Project Description:

This project is an individual work. You use PHP to develop a Web application to allow students viewing CIS textbook catalog. Fig. 1 represents a sample illustration of the online book catalog.

CIS Department Book Catalog

Course #	Course Title	Book Image	Book Title	Price
<u>CIS 100</u>	Personal Cyber Wellness (2)		Computer Forensics and Cyber Crime: An Introduction	\$41.09
<u>CIS 101</u>	Introduction to Personal Computing (4)		Microsoft Excel 2010: Comprehensive	\$104.88
<u>CIS 121</u>	Web Media 1 (4)		Learning Web Design	\$26.99
<u>CIS 122</u>	Web Media 2 (4)		Learning Web Design	\$26.99
<u>CIS 231</u>	Fundamentals of Computer Information Systems (4)		Build a Website for Free	\$16.23
<u>CIS 234</u>	Object-oriented Programming with Java (4)		Murach's Java SE 6: Training & Reference	\$33.08

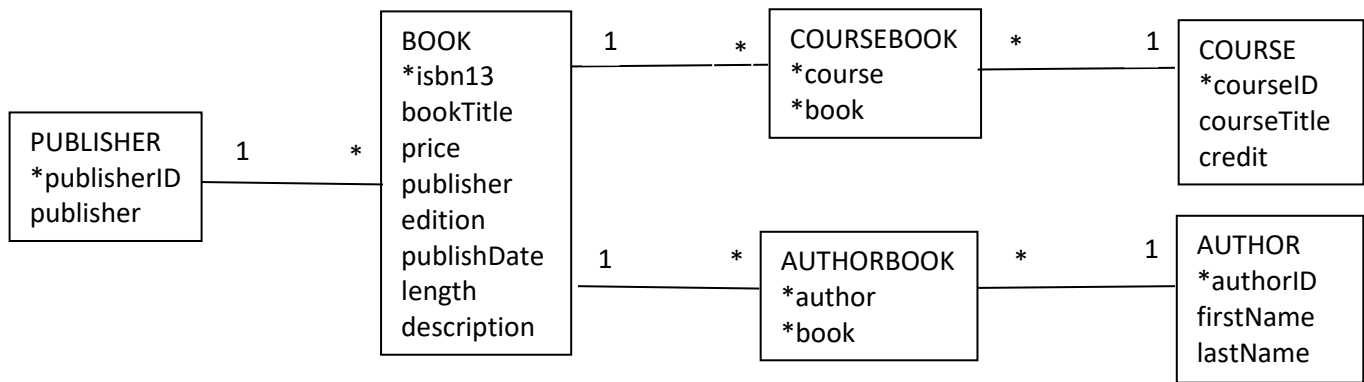
1 2 3

Fig. 1. Sample illustration of online book catalog

Preparations (20 points. You must follow the exact database & tables structure provided by the instructor!)

- 1) Using the phpadmin tool (log in to <http://localhost/phpmyadmin>) to create a database, named **BookCatalog**, choose **latin1_general_ci** as collation in MySQL.
- 2) Create a new user in this database. Both user name and password are **php**.
[How: click the Privileges tab to create a new user]. Select **Local** from Host name dropdown list. Assign SELECT, INSERT, UPDATE, DELETE, and FILE under Data in Global privileges to this user.
- 3) Run the instructor provided **SQL Statements.sql** to create tables and populate data into them.
[How: click Import tab, find the sql file and run it.]

ER diagram is show at below.



- 4) Using NetBeans to create a new PHP project named BookCatalog at `C:\xampp\htdocs\`
- 5) Download the images.rar from Blackboard and unzip it into `C:\xampp\htdocs\BookCatalog` folder. After this you should have a subfolder, *images*, under `C:\xampp\htdocs\BookCatalog\`.

Functional Requirements (79 points)

- Displaying book info and image (20 points)
The Book database table has a column, named isbn13. A value of this field represents the book's ISBN. The image file name of a book is its isbn13 and the file is in jpg format. So when coding programs, you use the isbn value retrieved from the database table to find the corresponding image file in `BookCatalog\images` folder and show the image on a Web page. **Your program shows only courses having textbooks**, as illustrated in Fig. 1. The project url must be <http://localhost/BookCatalog/>.
- Page function (20 points)
Displaying up to 6 courses on each Web page, and generating page numbers (1, 2, 3, ...) to allow users to view books in any other pages if there are more than 6 courses. The page numbers must be programmatically determined depending on the total number of courses retrieved from database. Tip: You may consider using "LIMIT" in SQL statement to retrieve a subset of results. For details refer to http://php.about.com/od/mysqlcommands/g/Limit_sql.htm.
- Sorting function (15 points)
Allowing users to sort the book records by course number or by price in ascending order when clicking the corresponding column header (Course # or Price) in the table in web page.
- Multiple books for one course (5 points)
When sorting by course number (not by price), if a course has multiple textbooks, information of its all books should be shown in the same row for the course in the table instead of repeating the course # and course title in another row on the Web page, such as the following.



<u>CIS 161</u>	Web development (4)		Build a Website for free	\$16.23
			Learning Web Design	\$18.27

Fig. 2. One course uses multiple books (when sorting by course #)

- Viewing course details (4 points)
Clicking on a course number hyperlink, the users open a new web page for <http://www.cpp.edu/~cba/computer-information-systems/curriculum/courses.shtml>.
- Viewing book details (15 points)
Clicking on a book image, the users see the detailed information (such as authors, publisher, book description, etc.) of the book. See Fig. 3 for an illustration of the book detail page.


	<p>For course: CIS 234 Introduction to Java for Business (4*)</p> <p>Book Title: Murach's Java SE 6: Training & Reference</p> <p>Price: 33.08</p> <p>Authors: Joel Murach, Andrea Steelman, Doug Lowe</p> <p>Publisher: Mike Murach & Associates Inc</p> <p>Edition: 1st. edition (2007/4/20**)</p> <p>Length: 408 pages</p> <p>ISBN-13: 9781890774424</p>
<p>Product Description:</p> <p>This book teaches how to develop Java applications at the professional level. It starts by showing how to code, test, and debug everyday business applications that won't crash. It presents object-oriented features like classes, inheritance, interfaces, and polymorphism in a way that's both understandable and useful in the real world...perspective that's often missing in Java training. It presents essential Java skills such as working with data types, control statements, arrays, collections, generics, enumerations, exceptions, threads, Swing components, applets, and text and binary files. It covers new Java SE 6 features such as new JDBC features, the StAX XML API, and the built-in Derby database. And it's all done in the distinctive Murach style that has been training professional programmers for more than 30 years. ***</p>	

Fig. 3. Sample illustration of the book detail page

- * the number of credit for the course. Don't show * in your web page.
- ** the publish date. Don't show ** in your web page.
- *** the complete book description is here. Do not show *** in your web page.