

# **CMPE2550 – Assignment 03 – mySQL and Data Retrieval**

In this assignment, you will begin your familiarity with the mySQL RDMS and use PHP to execute retrieval queries against a mySQL database.

Be aware that most of what you have already learned while working with SQL Server is still valid if you adhere to ANSI SQL syntax, but not everything. As a reference, you will want to refer to W3Schools for general mySQL differences. As an example, there are significant differences when it comes to available data types. <https://www.w3schools.com/MySQL/>

You may also encounter some differences between storage engines or versions of mySQL. For instance, some storage engines ignore foreign key constraints and they all ignore check constraints before mySQL version 8.0.15.

## **Porting Over Publishers Database**

Your first task in this assignment will be to install the authors, titles, and titleauthor tables into a database you create in your space up on the Thor webserver. You may move more of the database over if you wish for practice and expansion of the basics of this assignment, but it is not necessary. You will have been shown in class how to manage your databases through CPanel.

A simplified version of the titles table has been included in a small file on Moodle to get you started. It will be used for learning how to import a table into the mySQL engine through phpMyAdmin (by demo), to demonstrate some of the differences you will encounter, and as a reference of how to specify the storage engine you wish to use (InnoDB). Table creation in code will be demonstrated in class.

Using this as a starting point, you will figure out how to create your own authors and titleauthor tables, populated with their original data. For the source SQL and data, the Publishers database install code for SQL Server has also been included on Moodle.

## **Data Retrieval and Display**

Now that you have a few populated database tables to work with, you shall construct the pages necessary to display author information and the titles of the books they have written. See the image at the top of the following page for an example layout of the author information (you do not need to match this exactly).

When the user browses to the page, the author data shall be immediately retrieved and displayed.

## Assignment 03 – MySQL Data Retrieval

Get Books	Author Id	Last Name	First Name	Phone
Retrieve	409-56-7008	Bennet	Abraham	415 658-9932
Retrieve	648-92-1872	Blotchet-Halls	Reginald	503 745-6402
Retrieve	238-95-7766	Carson	Cheryl	415 548-7723
Retrieve	722-51-5454	DeFrance	Michel	219 547-9982
Retrieve	712-45-1867	del Castillo	Innes	615 996-8275
Retrieve	427-17-2319	Dull	Ann	415 836-7128
Retrieve	213-46-8915	Green	Marjorie	415 986-7020
Retrieve	527-72-3246	Greene	Morningstar	615 297-2723
Retrieve	472-27-2349	Gringlesby	Burt	707 938-6445
Retrieve	846-92-7186	Hunter	Sheryl	415 836-7128
Retrieve	756-30-7391	Karsen	Livia	415 534-9219
Retrieve	486-29-1786	Locksley	Charlene	415 585-4620
Retrieve	724-80-9391	MacFeather	Stearns	415 354-7128
Retrieve	893-72-1158	McBadden	Heather	707 448-4982
Retrieve	267-41-2394	O'Leary	Michael	408 286-2428
Retrieve	807-91-6654	Panteley	Sylvia	301 946-8853
Retrieve	899-46-2035	Ringer	Anne	801 826-0752
Retrieve	998-72-3567	Ringer	Albert	801 826-0752
Retrieve	341-22-1782	Smith	Meander	913 843-0462
Retrieve	274-80-9391	Straight	Dean	415 834-2919
Retrieve	724-08-9931	Stringer	Dirk	415 843-2991
Retrieve	172-32-1176	White	Johnson	408 496-7223
Retrieve	672-71-3249	Yokomoto	Akiko	415 935-4228

Retrieved : 23 user records

Last modified: 29-Sep-2022 15:47:46.

The buttons in the “Get Books” column shall be configured such that if one of the buttons is pressed, the books for that author will be displayed in a subsequent div. See the image at the top of the following page for a sample layout (again this need not match exactly). The title records shown are for the author, Anne Ringer. Note that not all authors will have books that they have written. You should avoid displaying an empty table when this occurs, and instead just show a status message indicating no records were found.

## Assignment 03 – MySQL Data Retrieval

Get Books	Author Id	Last Name	First Name	Phone
Retrieve	409-56-7008	Bennet	Abraham	415 658-9932
Retrieve	648-92-1872	Blotchet-Halls	Reginald	503 745-6402
Retrieve	238-95-7766	Carson	Cheryl	415 548-7723
Retrieve	722-51-5454	DeFrance	Michel	219 547-9982
Retrieve	712-45-1867	del Castillo	Innes	615 996-8275
Retrieve	427-17-2319	Dull	Ann	415 836-7128
Retrieve	213-46-8915	Green	Marjorie	415 986-7020
Retrieve	527-72-3246	Greene	Morningstar	615 297-2723
Retrieve	472-27-2349	Gringlesby	Burt	707 938-6445
Retrieve	846-92-7186	Hunter	Sheryl	415 836-7128
Retrieve	756-30-7391	Karsen	Livia	415 534-9219
Retrieve	486-29-1786	Locksley	Charlene	415 585-4620
Retrieve	724-80-9391	MacFeather	Stearns	415 354-7128
Retrieve	893-72-1158	McBadden	Heather	707 448-4982
Retrieve	267-41-2394	O'Leary	Michael	408 286-2428
Retrieve	807-91-6654	Panteley	Sylvia	301 946-8853
Retrieve	899-46-2035	Ringer	Anne	801 826-0752
Retrieve	998-72-3567	Ringer	Albert	801 826-0752
Retrieve	341-22-1782	Smith	Meander	913 843-0462
Retrieve	274-80-9391	Straight	Dean	415 834-2919
Retrieve	724-08-9931	Stringer	Dirk	415 843-2991
Retrieve	172-32-1176	White	Johnson	408 496-7223
Retrieve	672-71-3249	Yokomoto	Akiko	415 935-4228

Retrieved : 23 author records

Title Id	Title	Type	Price
MC3021	The Gourmet Microwave	mod_cook	19.99
PS2091	Is Anger the Enemy?	psychology	19.99

Retrieved : 2 title records

Last modified: 29-Sep-2022 16:34:47.