

## Assignment 4: Objects and Database

### PART 1: Book Rep CRM (Chapter 10, Project 3)

#### Overview

Demonstrate your ability to instantiate classes from text files and then display the content. This project has output identical to Chapter 9 Project 3 (given in the last assignment).

#### Instructions

1. You have been provided with a PHP file (Chapter10-project03.php) that includes all the necessary markups. You have also been provided with two text files, customers.txt and orders.txt, that contain information on customers and their orders. (These files are the same as files from Chapter 9 Project 3.)
2. Define classes to encapsulate the data of a Customer and an Order. Each line in the file contains the following information: customer id, first name, last name, email, university, address, city, state, country, zip/postal, phone. Each line in the orders file contains the following data: order id, customer id, book ISBN, book title, and book category.
3. Read the data in customers.txt and for each line in that file create a new instance of Customer in an array, and then display the customer data in a table.
4. Each customer name must be a link back to Chapter10-project03.php but with the customer id data as a query string.
5. When the user clicks on the customer name (i.e., makes a request to the same page but with the customer id passed as a query string), then read the data in orders.txt into an array of Order objects, and then display any matching order data for that customer. Be sure to display a message when there is no order information for the requested customer.

#### Test

1. Test the page in the browser. Verify the correct orders are displayed for different customers. Also note that the customer name is displayed in the panel heading for the orders.
2. Try writing a `print_r()` statement to output the structure of all Customer and Order objects and verify they match the data in the files.

## IMPORTANT NOTES:

1. The rest parts of this assignment deals with MySQL database. You are advised to use XAMPP, which has integrated Apache, MySQL, and other stuff.
2. This assignment has an attached zip file, which contains 3 SQL scripts: bookcrm.sql, travels.sql, art.sql. Create three databases - books, travels, art – in MySQL and run the SQL scripts to import data to the corresponding database. The easiest way to do this is through XAMPP Control Panel, where you can start MySQL and click on its Admin button. This will launch phpMyAdmin interface through which you can create databases and import data.
3. The default MySQL user name is “root” with no password. To make grading easier, do not change it.
4. Each project in this chapter is organized into a separate directory.

## **PART 2: Book Rep CRM (Chapter 11, Project 1)**

### Overview

Demonstrate your ability to retrieve information from a database and display it. The results will look similar to that shown in the next page.

### Instructions

1. You have been provided with a PHP page (display-customer.php) along with various include files.
2. You will need to use books database and retrieve information from three tables: customers, categories, and imprints. You will need to display every record from the categories and imprints tables within the lists that appear along the right side of the page. They can be dummy links.
3. The first name, last name, email, university, and city information from the customers table must be displayed within an HTML table.
4. The search box in the header must work. It will simply re-request the same page, but the page will only display those customers whose last name begins with the same characters entered into the search box. This will require using the SQL LIKE operator along with a wildcard.

### Test

1. Test the page. Verify the search works and that the category and imprint lists are correctly sorted.

Book Template

localhost/cs3500/chapter11/project1/display-customers.php

Book Rep CRM

HomeLogoutSearch CustomerSubmit

John Locke  
Senior Sales Rep  
SettingsLogout

My CRM  
Dashboard  
Messages  
Tasks  
Orders  
Calendar  
Knowledge  
Catalog  
Customers  
Other  
Analytics  
Options

My Customers

Name	Email	University	City
Camille Bernard	camille.bernard@yahoo.fr	University of Paris	Paris
Michelle Brooks	michelleb@aol.com	Columbia University	New York
Robert Brown	robbrown@shaw.ca	York University	Toronto
Richard Cunningham	ricunningham@hotmail.com	Texas Wesleyan University	Fort Worth
João Fernandes	jfernandes@yahoo.pt	University of Lisbon	Lisbon
Edward Francis	edfrancis@yahoo.ca	Carleton University	Ottawa
Luís Gonçalves	luisg@embraer.com.br		São José dos Campos
Tim Goyer	tgoyer@apple.com	University of California, Santa Cruz	Cupertino
Patrick Gray	patrick.gray@aol.com	University of Arizona	Tucson
Astrid Gruber	astrid.gruber@apple.at	Vienna University of Technology	Vienna
Terhi Hämäläinen	terhi.hamalainen@apple.fi	University of Helsinki	Helsinki
Bjorn Hansen	bjorn.hansen@yahoo.no	University of Oslo	Oslo
Frank Harris	fharris@google.com	University of California, Berkeley	Mountain View

Categories

Business  
Computer Science  
Economics  
Engineering  
English  
Mathematics  
Statistics  
Student Success

Imprints

Addison-Wesley  
Longman  
Pearson

Book Template

localhost/cs3500/chapter11/project1/display-customers.php?search=Gr

Book Rep CRM

HomeLogoutGrGrSubmit

John Locke  
Senior Sales Rep  
SettingsLogout

My CRM  
Dashboard  
Messages  
Tasks  
Orders  
Calendar  
Knowledge  
Catalog  
Customers  
Other  
Analytics  
Options

My Customers

Name	Email	University	City
Patrick Gray	patrick.gray@aol.com	University of Arizona	Tucson
Astrid Gruber	astrid.gruber@apple.at	Vienna University of Technology	Vienna

Categories

Business  
Computer Science  
Economics  
Engineering  
English  
Mathematics  
Statistics  
Student Success

Imprints

Addison-Wesley  
Longman  
Pearson  
Prentice Hall  
Undecided

## PART 3: Travel Photo (Chapter 11, Project 2)

### Overview

Demonstrate your ability to retrieve information from a database and display it. This will require a variety of more sophisticated SQL queries. The results will look similar to that shown in the next page.

### Instructions

1. You have been provided with a PHP page (browse-images.php) along with various include files.
2. You will need to use travels database and retrieve information from five tables: geocontinents, geocountries, geocities, travelimages, and travelimagedetails.
3. You will need to display every record from the geocontinents tables within the list that appears along the left side of the page. They can be dummy links. The popular countries list along the left side of the page will contain only those countries from the geocountries table that have a matching record in the travelimagedetails table. This will require a JOIN of the two tables.
4. There is a form that should contain two select lists: one with cities, the other with countries. These two lists should only show those cities and countries that have a matching record in the travelimagedetails table.
5. When the user clicks the Filter button, the page should display only those images whose CountryCodeISO or CityCode fields match the selected value in the select list.
6. When the user clicks a country in the popular countries list, the page should behave in the same way as selecting a country from the above form.

### Test

1. Test the page. Verify the links in the popular countries list work as well as the filter by country and city facility.



