

Kent State University

CS 33901 Software Engineering Spring 2018

Project 1

Posted: 2/3/18

Due: 2/13/18, 11:59pm

Questions? email me at aalali1@kent.edu

A. Class Repository

Perform the following:

1. Obtain a working copy of your Subversion (SVN) subdirectory¹²³⁴⁵⁶⁷:
`https://svn.cs.kent.edu/courses/cs44106/svn/USERNAME`
2. Create a file `YOURNAME.txt` with what you prefer to be called (e.g. `Abdulkareem.txt`)
3. Add and commit `YOURNAME.txt`
4. Check that it is committed via web browser via navigating to the link in **1**.

Your directory tree should look like this at this point:

```
.  
|-- YOURNAME.txt
```

¹ [SVN Tutorial](#)

² [Thegeekstuff](#)

³ [Basic SVN Tutorial](#) [Video]

⁴ [Tutorialspoint](#)

⁵ [Maverick](#)

⁶ [Tortoisesvn](#)

⁷ [svnbook.red-bean](#) [The Book]

B. Book Rep Customer Relations Management

Vision

Demonstrate your ability to instantiate classes from text files and then display the content.

Functional Requirements

5. You are supplied with the necessary images, CSS files, JavaScript File, as well as the starting PHP files. Download the [Project Start Code](#). You have been provided with a PHP file (**book-crm.php**) that includes all the necessary markup. You have also been provided with two text files, **customers.txt** and **orders.txt**, that contain information on customers and their orders.
6. Define classes to encapsulate the data of a **Customer** and an **Order**. Each line in the file contains the following information: `customer id, name, email, university, address, city, country, sales (array)`. Each line in the orders file contains the following data: `order id, customer id, book ISBN, book title, book category`.
7. 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.
8. Each customer name must be a link back to **book-crm.php** but with the `customer id` data as a query string.
9. 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 (see figure). Be sure to display a message when there is no order information for the requested customer.
10. The sales field in the customers table is a series of 12 comma-separated numbers. You will use `sparklines.js` jQuery library to display those numbers as an inline bar chart.

11. 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.

12. 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.

The screenshot shows a CRM Admin interface with a sidebar menu on the left containing: Dashboard, Messages, Tasks, Orders, Configure, Catalog, Customers, and Analytics. The main content area is divided into three panels: Customers, Customer Details, and Order Details.

Customers Panel: A table with columns: Name, University, City, and Sales. The Sales column contains sparkline charts. Annotations include:

- "Read the text file customers.txt into an array and then display within this table." (pointing to the table header)
- "The customer name will be a link to the same page but with the customer id as a query string parameter." (pointing to a customer name link)
- "Use the sparkline.js library to display the sales data (the last field in the customer file)." (pointing to a sparkline chart)

Customer Details Panel: Displays information for a selected customer, Joao Fernandes. Annotations include:

- "Don't display details cards when there is no query string present." (pointing to the panel header)
- "Display the name, university, address, city, and country of the selected customer." (pointing to the customer details)

Order Details Panel: Displays orders for the selected customer. Annotations include:

- "Read the text file orders.txt into an array, and then display the orders for the specified customer (the second field in the order file is the customer id)." (pointing to the order list)
- "Some customers have no orders." (pointing to a message: "No orders for Isabelle Mercier")

Name	University	City	Sales
Leanne Kocher	University of Stuttgart	Stuttgart	
Gerni Hansen	University of Oslo	Oslo	
Francisco Townsend	McGill University	Montreal	
Franklin Wichtedova	Charles University	Prague	
Gabriel Gaidner	Vienna University	Vienna	
Hedwig Hubs	Charles University	Prague	
Arona Mitchell	University of Manitoba	Winnipeg	
Elio Sullivan	Aurora College	Yellowknife	
Joao Fernandes	University of Lisbon	Lisbon	
Mikolajna Szamuel	University of Porto	Porto	
Isabelle Mercier	University of Burgundy	Dijon	
Koenig Jensen	King's College	London	

Non-Functional Requirements

- 13.** That one should separate that which varies from that which stays the same; Use the least possible PHP code mixing with HTML markups, utilizes external PHP files as classes and utility files.
- 14.** You must submit valid and semantically appropriate HTML5. [Validate](#) the produced HTML5 markup. Submit zero warning and zero error pages.
- 15.** Your submitted repo directory tree structure should be as follows (exact names and structure):

```
.
|-- inclassprojects
|-- projects
|   |-- project1
|       |-- book-crm
|           |-- book-crm.php
|           |-- css
|           |-- ...
|           |-- data
|               |-- customers.txt
|               |-- orders.txt
|           |-- images
|               |-- ...
|           |-- includes
|               |-- book-crm-utilities.inc.php
|               |-- Customer.class.php
|               |-- header.inc.php
|               |-- Left-nav.inc.php
|               |-- Order.class.php
|           |-- js
|               |-- ...
|-- YOURNAME.txt
```

Grading

The grade will be broken down as follows:

Points	Mark
1, 2, 3, and 4	5/100
5, 6, 7, 8, 9, 10, 11, and 12	85/100
13, 14, and 15	10/100