

Lab 10 – Book O Rama PDO Remix with REST

Getting Started

Visual Studio Code

1. Download the lab template from Blackboard
2. Extract it
3. Fill in the relevant code to create the solution and meet the requirements

Solution

Based on the Demo Code and the bookorama database. Create a Web application that allows you to add, edit and delete Customers using a web service.

You may use the REST demo code as reference to this part of the Lab, create the application so the following list of customers is presented and the Delete link works for each Customer. The add form should always be present unless you are editing, in which case the edit form should always be present, and the message should come up as to which customer was added.

Requirements

1. You must use a database called "Lab10", your username should be 'root' and your password should be " just like the lab computers.
2. You must populate the 'Lab10' database with the included sql files (sql/bookorama.sql and sql/books-insert.sql)
3. You must use the PDO class we created based on the template provided.
4. You must use classes you should not alter the PDO class we have created.
5. You must list all the customers in the database and provide the provisions to add and delete Customers
6. By default the Add form should be displayed, if the user clicks on the "Edit" action or link you must allow them to edit the entry they clicked on.
7. You may only use one controller file.
8. Your controller file may only call your RestClient. You may not talk directly to the database from your page controller or from your RestClient.
9. You must configure your lab so the included location of the REST API (<http://localhost/3280/Lab%2010/RestAPI.php>) is valid. You may not modify API_URL in config.inc.php.
10. You must employ a static "DAO" class to support your CRUD operations. Your Mapper class must use the Customer Class. You may not use any array elements that are not objects.
11. As you are using a previous template you must pull any irrelevant code out.

Structure

According to the structure this means that your folder should be called "Lab 10".

```
Lab 10/  
|   Lab10-shi-89.php           # Main controller file
```

```

| RestAPI.php                # Rest API
|---css                      # Included Skeleton files
|    normalize.css
|    skeleton.css
|---images
|    favicon.png
|---inc
|    | config.inc.php        # You dont need to modify this!
|    |---Entities
|    |    Customer.class.php # Customer Object File
|    |---Utilities
|    |    CustomerConverter.class.php # Class for converting to and from
stdClass
|    | CustomerDAO.class.php # Customer DAO
|    | Page.class.php       # Page Class
|    | PDOAgent.class.php   # PDO Service Class
|    | RestClient.class.php # Rest Client
|---sql
|    bookorama.sql          # Included SQL files... DDL
|    book_insert.sql        # Included SQL Files .. DML

```

Hints:

- Use the hidden input type to post hidden data such as the id.
- Use the hidden input type to specify which action you are doing.
- There are alot of moving parts in this assignment USE XDEBUG it will save you time!
- If you do the lab properly you should really only need to modify the Controller file for the page and the class for the Customer, the rest should work without any modification. Appendix:
- Included below are the screenshots from Lab08 because the Lab should be functionally the same Please change the title

Appendix

The Add form and Edit form must not show up at the same time on the one page, you must dynamically route so that only the appropriate form shows up, in others words, you cannot display both forms at the same time and you cannot use more than one view.

1. List of Customers

Lab 10 - Sam Hill - 123456789

Name	City	Address	Delete	Edit
Julie Smith	25 Oak Street	Airport West	Delete	Edit
Alan Wong	1/47 Haines Avenue	Box Hill	Delete	Edit
Michelle Arthur	357 North Road	Yarraville	Delete	Edit

2. Add Form

Add Customer

name

address

City

3. Edit Form

Edit Customer - 2

name

Alan Wong

address

1/47 Haines Avenue

City

Box Hill

SUBMIT

STOP! - This is a pre-assignment submission checklist!

- ☐ Did you remove any debug output such as var_dump
 - ☐ Is your submission clear of any ORANGE output from XDebug (Warnings, Info or Errors)?
 - ☐ Did you follow the naming convention for your files?!
 - ☐ Did you follow the naming convention for your folder?!
 - ☐ Does your submission work on a lab computer?!
 - ☐ Double check before submitting
-

Copyright (c)2020 Rahim Virani and others. NOT FOR REDISTRIBUTION.
STUDENTS FOUND REDISTRIBUTING COURSE MATERIAL WILL BE IN VIOLATION OF ACADEMIC
INTEGRITY POLICIES AND WILL FACE DISCIPLINARY ACTION BY COLLEGE ADMINISTRATION.
