

San José State University  
Department of Computer Science

CS/SE 157B

Section 3

# Database Management Systems II

Spring 2018

Instructor: Ron Mak

## Assignment #2

**Assigned:** Tuesday, February 20

**Due:** Wednesday, February 28 at 11:59 pm

**Team assignment**, 100 points max

### PHP functions and object-relational mapping

Write a simple end-to-end web application that uses PHP to connect to a MySQL/MariaDB database. You can use the database that you designed and implemented for Assignment #1, or you can start over with a new database.

You should start to develop a database that you can use for future assignments.

### Requirements

Requirements for your application.

- Use object-oriented PHP (declare classes to retrieve data).
- Use PHP functions with type hinting.
- Use PHP Data Objects (PDO).
- Retrieve data from the database as objects.
- Use basic HTML forms that collect data from users.
- Use the form data to make one or more queries into your database.
- Use the data retrieved from the database to dynamically generate a new web page as the response which incorporates the retrieved data.

This assignment is primarily about the server side. Your client-side HTML only needs to be as functional as required to make the server-side code work and does not need to be especially fancy or pretty.

## What to turn in

There should be one submission per team:

- A dump of your database. Use phpMyAdmin's **Export** tab to create an SQL file that can recreate your database and its data.
- Your PHP code.
- Your HTML code.
- Screen shots of your HTML form and the dynamically generated response page.

Create a single zip file containing these files. Name the zip file after your team. Example: **SuperCoders.zip**. Submit to Canvas: **Assignment #2**

## Rubric

Your application will be graded according to these criteria:

Criteria	Maximum points
<b>Server-side PHP code</b> <ul style="list-style-type: none"><li>• Object-oriented with PDO and classes for data retrieval</li><li>• Functions with type hinting</li><li>• One or more queries based on form data</li><li>• Data retrieved from the database as objects</li><li>• Dynamically generated HTML response page that incorporates retrieved data</li></ul>	<b>80</b> <ul style="list-style-type: none"><li>• 20</li><li>• 10</li><li>• 20</li><li>• 10</li><li>• 20</li></ul>
<b>Database</b> <ul style="list-style-type: none"><li>• Dump of the database</li></ul>	<b>10</b> <ul style="list-style-type: none"><li>• 10</li></ul>
<b>Client-side HTML</b> <ul style="list-style-type: none"><li>• Screen shot of the HTML form</li><li>• Screen shot of the dynamically generated response page</li></ul>	<b>10</b> <ul style="list-style-type: none"><li>• 5</li><li>• 5</li></ul>