



LaSalle College

Project

**WEB SERVER APPLICATIONS
DEVELOPMENT
(420-DW3-AS)**

30% of Final Grade

Teacher: Salima Hassaine

Project Objective

The main purpose of this project is to develop a dynamic web application in PHP. The project consists of two phases:

- **Phase I:** Design, implementation and validation of the database using **Object Oriented Programming** in **PHP**, **PDO class** for manipulating the database, PhpMyAdmin and MySQL (relational database management system).
- **Phase II:** Development of the application and implementation of user interfaces using PHP, HTML, CSS, Ajax, Bootstrap and JavaScript.
- **Important Note:** You can use any website template or any website design tool like: Dreamwaver, Webflow, MotoCMS 3.0, Squarespace, etc. However, **you are not allowed to use any Control Management System (CMS)** like: WordPress, Joomla, Drupal, etc. **or PHP Framework** like: CodeIgniter, Zend, CakePHP, FuelPHP, Slim, Yii, Symfony, etc.
- **Important Note:** plagiarism can occur if you work together with others on a task that is meant to be individual work. It can also occur when, contrary to instructions, you assist another student to complete a project task or when you request/accept assistance from another student such that the work you submit is not wholly your own.
- You have to develop a website of online classified recipes (like www.ricardocuisine.com)

Project Submission

The submission deadline for Database Design and GUI: **June 16th, 2019.**

The submission deadline for your Final Report and Application: **July 22nd, 2019.**

The Final Report includes a description of the screenshots of your application and the tables of your database.

Project : Online Classified Recipes

The project consists in developing a web application that manages classified recipes, like Ricardo website: www.ricardocuisine.com

Phase I: Database Design and Implementation (10 points)

The purpose of this step is to design and create a database that meets the following requirements:

- A **recipe** is described by **Name** (e.g. Quick And Easy Pizza), **recipe Date**, **Preparation Time** (e.g. 15 MIN), **Cooking Time** (e.g. 12 MIN), **Servings** (e.g. 4 people), **Ratings** (e.g. 4 stars).
- Every **recipe** belongs to **one or more categories** (e.g. Pizza, Super Bowl, Weekday recipe), and belongs to **one meal type** (Appetizer, Main Dish, Dessert).
- Each **recipe** has a list of **ingredients**. Every **ingredient** described by **name** and **quantity** (in a specific metric) **needed for the recipe** (e.g. Ingredient olive oil, the quantity can be 60 ml, or 1/4 cup for the recipe Quick and Easy Pizza).
- **Every recipe has a picture.**
- **Every category has a picture.**
- Each **recipe** has a description of all the **Preparation** steps (e.g. 1- In a bowl, combine all the ingredients. 2- Season with salt and pepper. 3- Preheat Oven to 210 °C (425 °F)...))

Any user of your application (members and not members), can search recipes **by name, or category, or meal type**.

There are two types of users for your application:

- **Visitors**, users who are not registered. They can just **search and view recipes**.
- **Members**, users who are registered. They can **search and view recipes**. They need to **login to access** to extra functionalities, like: **manage their favorite recipes**, and **rate** a recipe.

If any **user** wants to **become a member** of this web site, he must register by entering: **Username, Email, and Password**. If the Username or the Email is already used by another member in database, then you have to ask the new user to enter another one. Once registered, the member can login either by his username and password or by email and password. If the user forgot his password you have to provide him a link to reset their password.

Bonus Questions (Optional)

1. You have to implement an **advanced search** by specifying (**with or without**) **ingredient** for a category or meal type. For example, a user can search recipes of **Appetizer Category** **with** the **ingredient cheese** or can search recipes of **Dessert Meal Type** **without** the **ingredient peanut** **(15 points)**.
2. Every **recipe** has **Nutrition Facts** of 1 serving (e.g. **Calories** 635, **Total Fat** 33 g, **Saturated Fat** 10 g, **Sodium** (salt) 1005 mg, **Carbohydrate** 56 g, **Fibre** 3 g, **Protein** 28 g). **(05 points)**.
3. Members **can read and write a review** (comment) about recipes **(10 points)**.
4. The presentation of the website can be done in different languages (e.g. French, English) **(10 points)**.

Phase II: Development of the application (90 points)

II.1 / Build Classes: (40 points)

Based on object-oriented programming, create the php classes

- Every class must have: constructor, setters, getters, and methods, like: toString(), create(...), update(...), delete(...) and find (**you must use PDO to manipulate the database**) .

II.2) Design and Implementation of the user interface of the website (50 points)

The purpose of this step is to design and implement user interfaces using HTML, CSS, Javascript and integrate php classes, programs and Ajax.

1) Create Home Page:


Menu: contains the options: Home, French, English, Register, Login

Menu		
Search:		
category 1	category 2	category n ...

2) Create Category Page:

Menu		
Search:		
Recipe 1	Recipe 2	Recipe n ...

3) Create Recipe Page

Main Menu		
Search		
KALE GRILLED CHEESE  ★★★★★ PREPARATION TIME: 15 MIN COOKING TIME: 15 MIN SERVINGS: 4	INGREDIENTS <ul style="list-style-type: none"><input type="checkbox"/> 1 clove garlic, chopped<input type="checkbox"/> 2 tbsp (30 ml) olive oil<input type="checkbox"/> 2 cups (50 g) kale leaves, chopped<input type="checkbox"/> 8 slices loaf bread<input type="checkbox"/> 2 tbsp (30 g) butter<input type="checkbox"/> Salt and pepper<input type="checkbox"/> Select all <div>ADD TO MY GROCERY LIST</div> PREPARATION <ol style="list-style-type: none">1. In a non-stick skillet over medium heat, brown the garlic in the oil. cooking for about 4 minutes or until the kale is al dente.2. Brush half of the bread slices with mustard.	<div>ADD TO MY RECIPES</div> <div>NUTRITION FACTS</div> CATEGORIES <div>Sandwiches</div> <div>Vegetarian</div> <div>Weekday recipes</div> <div>30-minute recipes</div>