

## ASSIGNMENT 2

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The purpose of this assignment is for the student to practice topics discussed in class on PHP, MySQL, Apache Web Server and Cloud Computing. Class auditors are not expected to turn in a solution to the problem set.

### Description:

Build a web-based application that enables users to store coherent information in a relational database. The information can be related to any need, scenario or group of people (e.g.: fashion, health, arts, social area...).

### Tasks

1. An interface that allows users to see the results of the interaction with the server. (20%)
  - a. Proper validation of input elements (e.g.: required fields, proper text formats)
  - b. Proper display of the information
2. The architecture of the application is MVC. (10%)
  - a. Model: Relational Database. MySQL.
    - i. A logical model to fulfill the objective of the application
    - ii. At least three tables.
    - iii. No tables to login
  - b. View: HTML
  - c. Controller PHP
    - i. Use object oriented concepts
3. The application should fully support CRUD operations (30%)
  - a. The user should be able to create new information, read/view existing information, update existing information, and delete information
  - b. Perform all CRUD operations at least in two of the three tables
  - c. All the CRUD operations have to work coherently to affect all the tables involved in the operation
  - d. Read operation has to be performed in all tables
4. Deploy your web application in AWS (25%)
  - a. Amazon Elastic Compute Cloud (EC2)
  - b. Use Ubuntu as the operating system.
  - c. You will have to install the tools you need (e.g.: web server, database, programming language separately or xampp tool, and other services that could be needed)
5. Proper documentation (15%)

## **Deliverable Resources**

1. The project: LastName\_FirstName\_code.zip
2. Include a folder: LastName\_FirstName\_doc.zip
  - a. Database script
  - b. Document
    - a. The objective of your application.
    - b. An explanation of your database model
    - c. The steps you did to deploy your application in the cloud
    - d. Include the URL of your application

## **Bonus Mark**

1. Associate a Domain Name with your web site (5%)

You are allowed to work with a partner

- Include five tables in your database
- Perform CRUD operations at least in four of them
- Read operation has to be performed in all tables

You will have to create an Amazon Web Services (AWS) account

- a. Register your account as a student <https://aws.amazon.com/education/awseducate/>