Group Project Assignment

Design and implement a **Student Management/Inventory Management**/**Shopping cart/CMS/RPG Game/Conference Scheduler** **using PHP (Symfony) and HTML / CSS / JavaScript**. Your project must be approved by Lecturer and meet all the requirements listed below.

The project will be implemented by a team with 3 members maximum.

# General Requirements

* **Use PHP** – the major part of your work should be PHP written
  + You **must use Symfony Framework** 
    - The application must have at least **10 web pages (views**)
    - The application must have at least **4 independent entity models**
    - The application must have at least **4 controllers**
  + You have to additionallyuse **HTML5, CSS3** to create the content and to stylize your web application
  + You may optionally use **JavaScript, jQuery, Bootstrap**
  + Use **PHP 7**

# Forbidden Techniques and Tools

* Using **CMS / blog systems** (like WordPress, Drupal and Joomla) is forbidden.
* Using **Shopping cart systems** (like OpenCart) is forbidden.

# Source Control

Use a **source control system** by choice, e.g., **GitHub**, **BitBucket**

* Submit a link to your public source code repository
* Each student should have at least **10 meaningful commits**
* Each student should have **commits** in at least **3 DIFFERENT** days

# Group Report

Each group will be required to deliver a Group Report, which have following items:

* Produce a set of Users’ requirements by using User Story template
* Site map of the project
* Entity Relationship Diagram (ERD)
* Final Result of the project with evidences
  + GitHub repository evidences
  + Sample Source code with brief explanation
  + Images of final application
* Conclusion and Lessons Learned

The Document should be less than 20 pages

## Group Report Structure

### Chapter 1 – Users’ requirements

### Chapter 2 – System Design

#### 2.1 Site map

#### 2.2 Entity Relationship Diagram

### Chapter 3 – Implementation

#### 3.1 Sample Source Code

#### 3.2 Images of final Application

#### 3.3 GitHub Repository evidences

### Chapter 4 – Conclusion

#### 4.1 What went well

#### 4.2 What did no go well

#### 4.3 Lessons learned and further improvements

# Public Project Defense

Each group will have to deliver a **public defense** of its work in front of the Lecturer.   
Each group will have **only 20 minutes** for the following:

* **Each student demonstrates** his/her part in the project
* **Each students shows** the source code and explain how it works
* Answer questions related to the project (and best practices in general)

Please be **strict in timing**!

Be **well prepared** for presenting maximum of your work for a minimum time. Bring your **OWN LAPTOP**. Test it preliminarily with the multimedia projector. Open the project assets beforehand to save time.

# Assessment Criteria

**Group Report – (30% of final mark)**

* Produce a set of Users’ requirements by using User Story template - **2 points**
* Site map of the project – **2 points**
* Entity Relationship Diagram (ERD) – **3 points**
* Final Result of the project with evidence – **3 points**

**Individual Assessment – (70% of final mark)**

* Functionality and Presentation – **3 points**
* Answering correctly technical questions asked by Lecturer – **3 points**
* Each student has at least 10 meaningful commits in 3 different days – **2 points**
* Implementing views and controllers correctly(controllers should do only their work, using display and editor templates) **– 2 points**

**Assessment Range**

* **Pass:** 5 – 6.5 points
  + Can perform CRUD actions
  + Tables must have relationships with each other
* **Merit:** 7 – 8.5 points
  + Everything of Pass
  + Can perform Register / Login
  + Can Perform Authorization
* **Distinction:** 9 – 10 points
  + Everything of Pass and Merit
  + Implement API and consume it with JavaScript.