CONTENT MANAGEMENT SYSTEM (CMS) PROJECT INSTRUCTIONS

In the Content Management System (CMS) Project, a complete e-commerce website and content management system will be developed for your company. Any type of company can be used that meets the project requirements and is appropriate according to the mission of Liberty University. Part 1 develops the company's website while Part 2 develops the content management system that manages the website. Therefore, it is imperative for the website in Part 1 to be designed and developed for a content management system in Part 2.

Required submission instructions:

1) **Submit all of your code in a zip file (must match your website) and including your database creation scripts**
2) **Submit your URL of your project from your web host**
    a. **Your website must be available over the internet**
3) **Submit the login credentials (e.g. admin, customer, publisher)**
4) **Submit your honesty statement, stating you wrote your code yourself, line by line, for this course only**
    a. **Only code written by you specifically and uniquely for this course is acceptable**
    b. **Start with blank pages**
    c. **Code generation tools, frameworks that write PHP code (such as codeigniter, laravel, symphony), and existing CMSs (e.g. Wordpress, Joomla) are off limits and will not be accepted**
    d. **The goal is for you to learn how to program at a level in which you can write your own CMS from scratch**

CMS Project: Part 1 is due by 11:59 p.m. (ET) on Monday of Module/Week 4.

CMS Project: Part 2 is due by 11:59 p.m. (ET) on **Friday** of Module/Week 8. No exceptions will be given for the final deadline under any circumstance.

Scroll down to see the instructions for both project phases

CMS Project: Part 1

For Part 1, develop the company website. The website needs to be developed to meet the following requirements:

1. Review the grading rubric for more details on exactly how your website will be assessed.
2. A biblical worldview must be reflected on the website. There are many creative and unique ways to do this.
3. In order to meet its online goals, the company has determined a minimum of 15 pages are necessary.
4. The website should clearly describe the vision, goals, and objectives of the company. Examples of pages could be “about us,” “mission,” “facts,” and/or “biographies.”
5. Strict W3C XHTML and CSS are expected. Every page should exhibit the links to check compliance from http://www.w3.org.
6. Web usability should be considered on every aspect of the design and implementation. The website should be centrally managed and use a single CSS style sheet to modify headings, paragraphs, font, and other styles. Navigation should be simple and follow an F-design or similar optimal navigation scheme.
7. The website should use the PHP “include” and/or “require” function to allow easy management.
    a. Header.php containing the initial header development
    b. Menu.php containing the navigation for the website
    c. Footer.php containing W3C validation icons for XHTML/CSS and a timestamp of the last time the PHP file was modified
8. It is necessary to describe the product, service offerings, and market these products and/or services. Search engines should be able to crawl the site and be able to find the marketed products and services. The website should advertise through multiple channels. This may include advertising through company partnerships, using video demonstrations, and/or facilitating publicity through platforms like social networking.
    a. Adding social networking icons will suffice as one channel
    b. Meta tags is a second channel
    c. These are merely examples but whatever is chosen should be effective
9. The website should incorporate an e-commerce solution that allows users to purchase products or services online. A minimum of 10 items should be listed for sale. Items should have an accurate picture, description, price, and quantity.
10. The e-commerce solution must include a checkout process, where the user can add, update, and remove contents from the store shopping cart
    a. The shopping cart process should be simple and easy to follow
    b. Users should get the total price before checking out including calculated taxes

11. An account management solution and/or login page is required. The login account will facilitate customers, publishers, and administrators. Access levels for each should be stored in a session.
    a. The username and password should match this exactly:
        i. Username = “admin” Password = “admin” (without the parentheses I should be able to login with admin admin)
        ii. “publisher” “publisher” for the publisher account
        iii. “customer” “customer” for the customer account
12. A minimum of two dynamic PHP forms should exist that have proper form validation (e.g. numbers only in a numeric field or a “@” symbol required in an email address).
    a. Examples could be user signup, contact, or application forms.
    b. The forms should meet specific business functions that parallel the website’s theme.
    c. At least two types of number conversions and one type of currency should exist within these forms.
13. A minimum of two control structures and two arrays should be developed within the final solution that assists the overall objectives. These can be used to support forms, account management, and/or e-commerce.
14. Each page of the website should use a proper PHP function to show the date of last modification and include the W3C validation icons for XHTML and CSS.

CMS Project: Part 2

Phase II builds upon phase I of the project. Phase I is now database driven and should allow new content to be created, modified, and removed from your website via a database. Thus, develop a content management system (CMS) to manage the company website developed in Part 1. The CMS should store most of the website's content in a database. Primary content on each page should be able to be added, updated, and removed from the CMS management interface. The CMS must meet the following requirements:

1. Review the grading rubric for more details on exactly how your website will be assessed.
2. A biblical worldview must be reflected on the website. There are many creative and unique ways to do this.
3. In order to meet its online goals, the company has determined a minimum of 15 pages are necessary. Some of the original pages from Part 1 may exist; however, content on many of these pages will now be database driven.
4. The website should clearly describe the vision, goals, and objectives of the company. Examples of pages could be "about us," "mission," "facts," and/or "biographies."
5. The website should use the PHP "include" and/or "require" function to allow easy management.
    a. Header.php containing the initial header development
    b. Menu.php containing the navigation for the website
    c. Footer.php containing W3C validation icons for XHTML & CSS and a timestamp of the last time the PHP file was modified
        i. Strict W3C XHTML and CSS are expected. Every page should exhibit the links to check compliance from http://www.w3.org.
        ii. Each page of the website should use a proper PHP function to show the date of last modification.
6. Web usability should be considered on every aspect of the design and implementation. The website should be centrally managed and use a single CSS style sheet to modify headings, paragraphs, font, and other styles. Navigation should be simple and follow an F-design or similar optimal navigation scheme.
7. A MySQL or MariaDB and/or SQL database should be created and named after the company. The database should store the website's primary content.
    a. Do not forget to include the database script in your zip file for grading!
8. Create separate database tables to store the data for each individual project requirement.
    a. For example, a user's table should store first name, last name, username, and email address for the login functionality to work.
    b. In addition, a login timestamp should exist. Each table should be designed to store sufficient information for the business strategy to be successful.

   c. Every table requires a unique ID. Make this unique ID auto_incremement in phpmyadmin. This will disallow you from having to determine the next ID for the next row that needs to be inserted into your table.

9. Account management must be developed to give at least three levels of access 1) customer, 2) publisher, and 3) administrator. The original login functionality can be used from Part 1, but it must now be database driven. All account information should be stored in a user's table.
   a. Customers can add, update, or remove products/services in their shopping cart
   b. Publishers can add and modify text on the website
   c. Administrators can add, modify, and delete text on the website
   d. The username and password should match this exactly:
      i. Username = "admin" Password = "admin" (without the parentheses I should be able to login with admin admin)
      ii. "publisher" "publisher" for the publisher account
      iii. "customer" "customer" for the customer account
10. Create a fully functional checkout process and/or shopping cart solution similar to what exists on Amazon.com or Walmart.com where users can add, update, and delete products or services for purchase.
   a. Users should get the total price before checking out including calculated taxes
   b. Customers should be allowed to add, update, and remove items from the shopping cart.
   c. A table should be created that stores the products/services and a table should be created that stores the items in the user shopping cart.
   d. The shopping cart should be professional and navigation should be easy throughout.
11. Publishers should be allowed to <u>add and modify</u> content for at least two sections of the website such as the store / e-commerce solution, home page, blog, forum, and/or other justifiable service.
12. Administrators should be allowed to <u>add, modify, and delete</u> content for at least two sections of the website such as the store / e-commerce solution, home page, blog, forum, and/or other justifiable service. In addition, they should be able to add and remove users for the account management solution.