ASSIGNED TASK: BUILDING A DYNAMIC SITE USING PHP

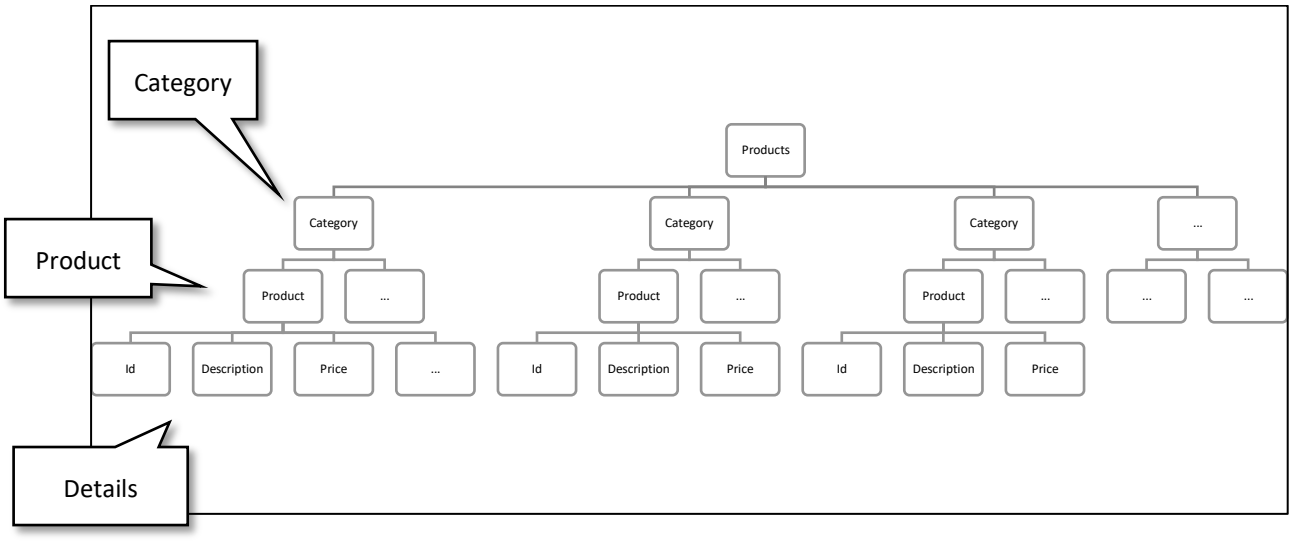
COURSE: CIS1054

DESCRIPTION OF TASK

Based on the principles discussed throughout this course as well as on knowledge gained through individual online-learning, you are asked to build a dynamic website for a business of choice. This website should provide:

a) generic information about the business (including address and opening hours),
b) information about the people running it,
c) a form to allow users to contact the business (to send a query or file a complaint),
    a) an email is to be sent to the business owner containing all the details on the form
d) a list of products sold by the business as well as a details page for individual products,
e) a search facility for products based on product names and
f) a shopping cart (so users can add products in the list to a cart) as well as a checkout page.
    a) the shopping cart facility requires the use of session management technology
    b) on checkout, users may be able to modify their cart (modify quantities/delete items)
    c) after checkout, an email with customer/cart details is to be sent out to the business owner
    d) a payment facility is not mandatory (but desirable)
g) a good user experience is expected (via proper use of CSS and/or Javascript libraries)

The products page as well as product-details pages should be dynamically generated based on a separate structured data file or a simple database containing a hierarchal representation of products sold by the business. XML, CSV as well as relational databases are all acceptable formats to represent the necessary data structure (as shown below). This strategy would allow non-technical users to modify their site content independently.



GROUP RESPONSIBILITIES

Each team is to submit a signed teamwork declaration, including:

1) An attendance log for each team member (i.e. team meetings)
2) Responsibilities taken up by each team member at any point in time
3) Detailed description of contributions made by each team member towards the project's deliverables

4) An overview of group dynamics throughout the project (i.e. overall experience, issues encountered, how these were resolved etc…).

Each team member will be asked to explain any aspect of the project during the final interview. This means that team members must be closely involved throughout the project's various activities, from design to implementation.

OTHER DETAILS

- Work is to be carried out in group (2 to 3 students per group).
- Assessment will include a 15 minute demo/interview (in group) at the end of the course (dates TBD). Please note that the assignment contributes towards 100% of the final grade.
- The write up should include the teamwork and plagiarism declaration forms as well as a technical overview of the project including the site's architecture and how it works (files/scripts used, external libraries used, data structure, site behaviour, validation and so forth). This document (accompanied with the code-base) should be submitted in the respective VLE area (which will be available closer to submission date).
- Site must be tested on at least two major browsers for appearance and behaviour.
- These (free) online courses complement concepts and principles covered in class and are highly recommended for this assignment:
    - **PHP for Dynamic Sites:** https://www.udemy.com/code-dynamic-websites/
    - **HTML and CSS w/Bootstrap:** https://www.udemy.com/build-your-first-website-in-1-week/

MARKING

1) Style – readability of the code, including comments, indentation and proper application of naming conventions.
2) Requirements coverage – the extent of your solution with regards to the given requirements (does your solution cover all of the requirements)
3) Architectural elegance – what design decisions were taken: Is the solution maintainable? Is rigorous validation implemented? Has the group adopted DRY principles? Can new functionality be added effortlessly? Is the solution efficient in terms of bandwidth consumption, client and server-side resource consumption?
4) Theoretical understanding – questions will be asked about your understanding of protocols used, performance considerations, efficiency, standards as well as best practices – as discussed in class.