Assignment PHP&MySQL

Assignment

Create your own webshop with underlying MySQL database where the content of the webshop is **dynamically** adjusted with data from the database.
Create **1** or more pages that are **freely accessible** and **at least 2** pages that are only visible to **registered** users.
Make sure that new users can **register** on your site.
Also create an **administrator** section from which you can edit the data in the database.
Don't forget to provide the necessary **logout** options.

Subject:

webshop:
- non-registered user:
    - can see products
    - can change the way the products are displayed, for example by searching for specific products, refining via product groups, ... All these adjustments are done with **AJAX**.
    - can register himself (check the fields with JavaScript, doesn't allow double registrations, ...!).
    - has no access to the pages for registered users and administrators.

- registered user:
    - can log in and therefore get access to extra pages / possibilities:
    - add products to shopping cart.
    - view shopping cart.
    - place an order.
    - the order must be saved in the database.
    - payment does not really have to be done but once paid, it has to be registered in the database.
    - does not have access to the pages for administrators.

- administrators:
  - these are the owners of the webshop.
  - make multiple administrators possible.
  - can change the content of the database from within the website. This way they can:
    - Remove/add users
    - Modify the rights of users (administrator or normal user)
    - Adapt/delete/add products
  - Provide a clear interface where you can assume that the administrator himself has no knowledge of databases and / or PHP

Technical requirements

- Al HTML5 output must be **100% valid**
- Use a correct **CSS-reset**
- Use only **externe stylesheets** (reset.css, screen.css)
- Make sure you build your **database** correctly (no repetition of data in different tables, ...). Show your database structure using an **ER diagram**
- Take care of **errorhandling**.
  - Make sure that forms or user actions cannot cause a crash. Suspicious or prohibited actions by users must be caught in your code.
  - Log the errors in a log file
  - Use a toplevel error handler and a toplevel exception handler.
  - actively collect exceptions from at least 1 place via try-catch.
- Protect your site against **HTML injection** and **SQL injection!**
- To **access the database**, use the user "Webuser" with the password "Lab2021" and limit this users' rights to the database to what is absolutely necessary.
- Create **3 groups**:
  - Normal users
  - Registered users
  - Administrators
- Give each of them access to different parts of the website.
- Use **functions** whenever possible!
- Use data from your database where possible (e.g. to fill the options in a select box).
- **User friendly**

Deadline and practical agreements

This assignment counts for **100%** of your lab exam. During the exam period in **January** you will present your website. There will also be questions about your website at that time. This **explanation** will also be **quoted**.

The first version of your **ER diagram** is submitted for control via Canvas in the **assignment** for the **ER diagram**. You have to do this **before 05/11/2023** at 23:59! Failure to submit or late submission will result in a reduction of points from of your final result. You can use the feedback you get on this first version in the final version of your ER diagram that you submit together with the website at the end..

All **webshops** are submitted via **Canvas** in the **webshop assignment**. You do this **before 27/12/2023** at 23:59!! Submitting too late also results in less points!
Your website needs to be submitted as a zip file:
- **webshop**
- an **sql** file to allow me to load your database on my computer
- the final **ER diagram**

The name of your assignment is: "**lastname_firstnaam.zip**"

Good luck!