es2025 qualification competition task

Pre-order management

Based on the ES2018 task submitted by Mak Seng Hin

Competition time:

6 hours

## Introduction

In this project, you'll create an online pre-order website for selling t-shirts and accessories with customisable design symbols.

## Description of project and tasks

The website will have a public page accessible to everyone and an admin area for managing orders and products.

### Public page

Visitors to the website can select their preferred design symbol to be printed on their chosen products. They can choose from various colour options for t-shirts and accessories. Once customised, visitors can add these personalised products to their cart for pre-ordering.

### Header navigation

The header navigation includes the following items:

* Home
* Cart
* Design symbols
* T-shirts
* Accessories
* Admin area

The "Home" and "Cart" buttons link to their respective pages, while the other links don't need to function; they only need to be styled and arranged in the correct order, as managed by the admin area. These navigation items are fetched from the server and cannot be added or removed, but their order may vary.

### Home Page

* The home page should display a list of all available design symbols.
* After selecting a design symbol, the page will show a list of products.
* Upon selecting a product, the visitor can then choose their preferred colour. The chosen design symbol will be displayed at the centre of the product image, allowing the visitor to preview how the final product will look.
* Once the colour is selected, the visitor can add the customised combination (design symbol, product, and colour) to the cart. The cart link should display a badge showing the correct count of products added.

Design symbols and products are dynamically fetched from the server. The selection process and cart-adding functionality are implemented on the client side and communicate with the server.

For accessibility reasons, the selection of design symbols, products, and colours should be made using standard input tags.

### Layout of public page

Since most e-commerce activity now occurs on mobile devices, the page layout should be optimised for mobile-friendly design. The options, buttons, inputs, and typography should be easily read and used on small screens.

Additionally, the pre-ordering and checkout process should feature appealing styles that attract visitors and distinguish the site from competitors. Enhancing user interaction and providing a seamless experience will be a crucial differentiator in the competitive landscape.

### Checkout Process

The checkout process will be implemented using server-side PHP technology. It begins when the visitor clicks on the cart link in the navigation. The cart page will display a list of items added to the cart and the total price of all items.

Each cart item will be shown with the selected design symbol, product, and colour combination. The design symbol will be displayed at the centre of the product image as a preview of the final product, and the product image colour will match the visitor’s selection.

During checkout, visitors will be asked to provide their last name, first name, and email address for contact purposes. After clicking the "Place Pre-Order" button, the information on the cart items will be stored in the database. A unique order ID will be generated and associated with the record. Stored pre-orders can be reviewed by the admin through the admin area.

### Admin area

The admin area is secured and only accessible via login. Access is granted using a predefined username and password, ensuring only authorised users can manage the site's content and review pre-orders.

Username: **shopadmin**   
Password: **Es2025!**

There is no need to implement admin account registration or editing functions.

The navigation in the admin area should include the following functionalities:

* Logout
* design symbols management
* Pre-orders management

These options should be easily accessible, allowing the admin to manage the site effectively.

### Design Symbol Management

A logged-in admin should be able to upload a new design symbol in PNG format. The uploading process can be done in two ways: by selecting the PNG file from the file chooser or by dragging and dropping the PNG file onto the page. After successful upload, a new design symbol is created and added to the list of available symbols.

The admin should be able to create, activate, and deactivate design symbols. To ensure smooth operations, the admin can only delete deactivated design symbols. When a design symbol is deleted, the corresponding PNG file should also be removed from the server to free up storage space.

### Pre-order management

The admin can view a list of all pre-orders on the pre-order page. The list is paginated, displaying a maximum of 20 records per page to ensure efficient loading.

The admin can filter the pre-order list by selecting a date range and/or status. The date range is inclusive, meaning the start and end dates are considered in the filter.

Each order in the pre-order list will display the following details:

1. **Order ID**
2. **A horizontal image list** of the selected products, with each image showing the chosen design symbol centred on the product and the product colour matching the selection.
3. **The status** of the order can be one of the following: Open, Prepared, or Closed/Delivered.

### Order detail page

When clicking on an order in the pre-order list, the admin is taken to the pre-order detail page. This page provides comprehensive information about the order, along with a status indicator that reflects the order's current status. The three possible statuses are:

1. Open
2. Prepared
3. Closed/Delivered

In addition to the status indicator, the pre-order detail page displays the following information:

1. **Contact Information**: The customer's first name, last name, and email address.
2. **Order ID**: The unique identifier for the order.
3. **Design Symbol ID**: The identifier for the selected design symbol.
4. **Product Type**: The type of product chosen (e.g., t-shirt, accessory).
5. **Colour Option**: The colour selected for the product.
6. **Remarks**: Any additional comments or notes related to the order. Admin can switch the status to "Prepared" from Open status and switch to "Closed/Delivered" from Prepared status on the detail page.

The admin can change the order status from "Open" to "Prepared" and from "Prepared" to "Closed/Delivered" directly on this page. When changing the status, the admin can add a remark to the order. This remark is saved to the database along with the updated status during the status switch, allowing for precise tracking and communication regarding the order's progress.

### Layout and Design for Admin area

The admin area's layout is designed primarily for desktop and wide-screen usage. There is no need to create a layout optimized for small screens.

The admin area template, which is used for managing pre-orders, is already familiar to the shopkeeper. Therefore, the overall layout should remain unchanged to maintain comfort and efficiency. However, you can enhance individual elements’ visual appeal and usability within the template. This could include improving the design of buttons, inputs, status indicators, and other UI components to make the admin area more user-friendly and visually appealing while retaining the structure the shopkeeper is accustomed to.

## Instructions to the Competitor

* Ensure the checkout page's HTML is validated according to HTML5 standards.
* Verify that the page meets accessibility standards (e.g., WCAG 2.1).
* Ensure no errors in the browser console.
* Write clean, maintainable code following best practices.
* Provide a `sqldump.sql` file with the database schema.
* Design the database schema following best practices.
* Include setup instructions in `README.md`.
* Upload the source code to a GitHub repository.