



## Computer Science Department

### Web Application and Technologies (COMP 334)

Second Semester 2024/2025

#### Assignment 3: CSS

Due Date 15/06/2025

This task is a continuation of Assignment 2, which involved implementing advanced product search using the products.php script. Refer back to Assignment 2 for the full functional requirements.

#### Task Description:

You are required to enhance the visual appearance of the HTML output generated by products.php. This involves writing and applying CSS rules that match the layout and styling shown in the provided Figure 1 below.

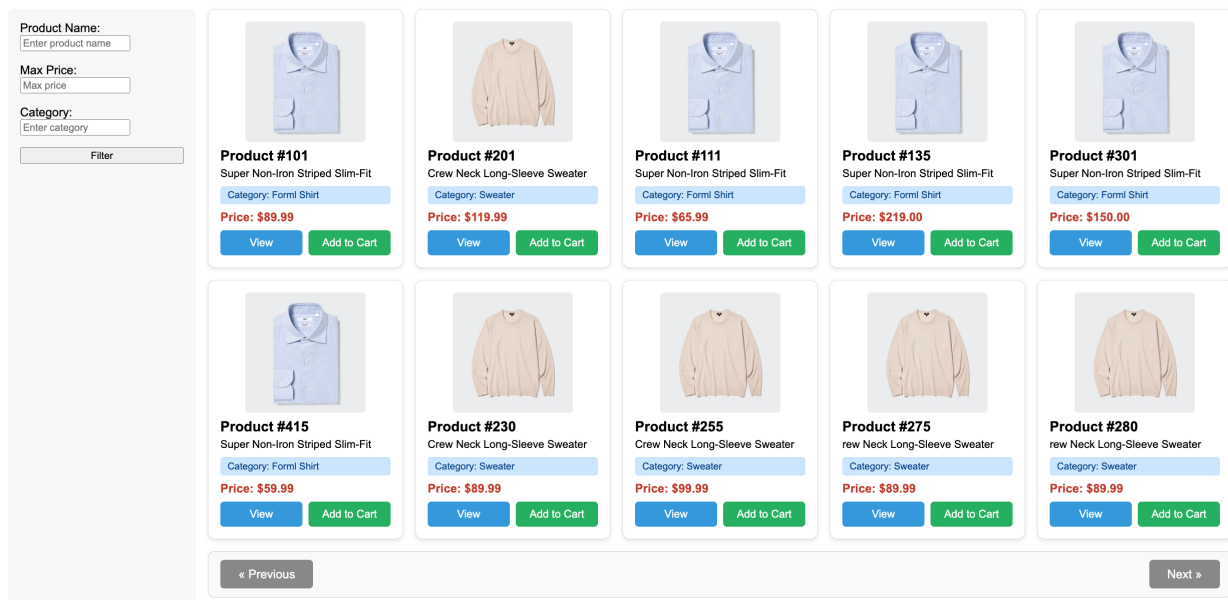


Figure 1

## Styling Requirements:

### Overall Page Layout (CSS Grid)

Use display: grid for the main layout container.

Apply a two-column structure:

- Left: Filter/Search Panel
- Right: Product Listing Grid

### *Search Form Styling (Flexbox)*

- Use aside HTML element for search panel.
- Align form elements vertically using Flexbox.
- Ensure consistent spacing and padding for:
  - Text input fields (Product Name, Max Price, Category)
  - Submit button (Filter)

### *Product Grid Display*

- Use main HTML element for product grid.
- Use Grid layout: Define the .product-grid using 3 rows:
  - Row 1 and 2: Contain product cards (up to 10 cards, 5 per row)
  - Row 3: Reserved for pagination controls, see below for details.
  - Apply consistent spacing between product cards.
- The product grid must display exactly 10 products per page, arranged in five columns and two rows. If the search results exceed 10 products, include "Previous" and "Next" navigation buttons, as illustrated in the sample layout.

### *Product Card Styling (Flexbox)*

- Each card must:
- Use Flexbox to arrange elements vertically.
- Include:
  - Product image (fixed size, centered)
  - Product ID (heading style)
  - Product Name (bold, hover/focus for tooltip), must be clickable see tooltip requirements below
  - Category badge (color-coded background)
  - Price (highlighted in red or dark color)
  - Action buttons ("View", "Add to Cart")
    - Use nav HTML element for action buttons bar.

- The "**View**" button should call the `view.php` script, as outlined in Assignment 2.
- The "**Add to Cart**" button (styled with a green background) should add the product to the shopping cart, as specified in Question 3 of the midterm exam.

### *Tooltip and Product Description Specification*

- Behavior
- A tooltip should appear below the product name when it receives focus (*not on hover*).
- To clearly indicate that the product name is **clickable**, by changing the cursor to a hand icon and change background color and shadow effects on hovering
- Focus can be triggered either by:
  - Clicking the product name with the mouse
  - Navigating to it using the keyboard (e.g., Tab key and then Enter)
  - Use a focusable element: **No JavaScript required.**
- Use the `tabindex` attribute to make the product name focusable and accessible via keyboard navigation.

### *Tooltip Content and Styling*

- The tooltip displays quantity and short product description must be retrieved from the database. (refer to `products.php` in Assignment 2).
- The tooltip must:
  - Be styled as a light popup box with:
    - Rounded borders
    - Box shadow
    - CSS properties:
    - Show tooltip on focus with details like quantity and brief info using:
      - `position, z-index, visibility, opacity, and transition`
      - Show tooltip on focus with product-description details given below.
- Tooltip Structure and product-description
  - Use a `<section>` element styled as a card using CSS Grid layout (1 column).
  - Inside the `<section>`:
  - `<h2>` element: displays quantity, with the following conditional styling:
    - If the quantity is 5 or below, it is considered low stock and should be displayed in red

- If the quantity is greater than 5, it is considered normal stock and should be displayed in green
- <p> element: displays the short product description

Figure 2 below illustrates the tooltip box that appears when the name of product number 111 is clicked with the mouse.

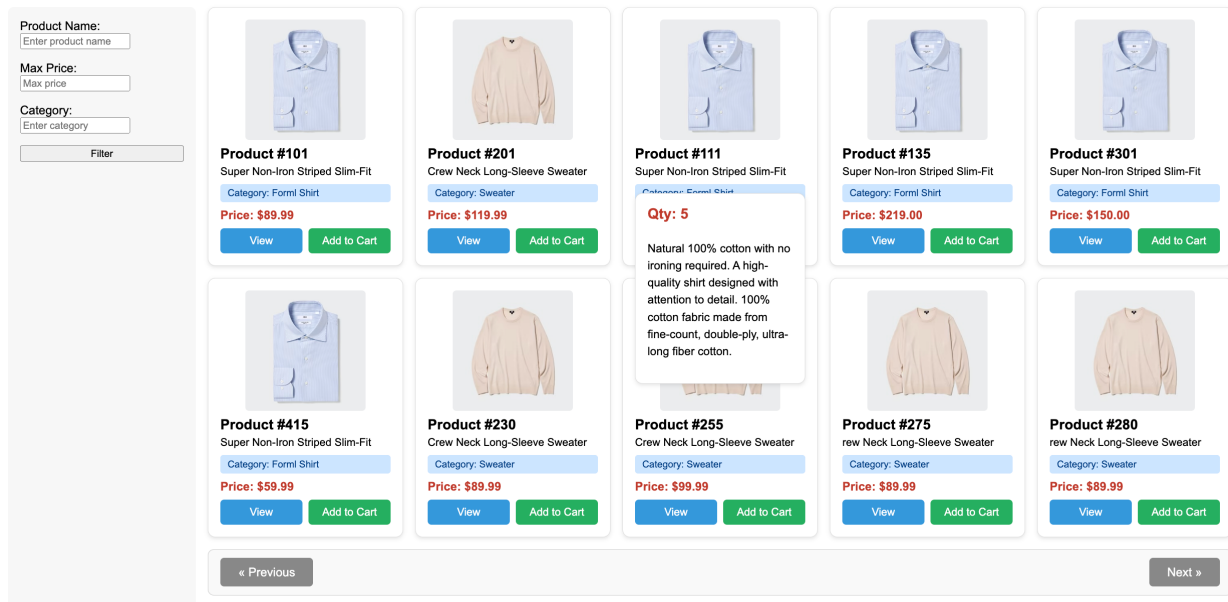


Figure 2

## Pagination Bar Specification

### Positioning and Layout

- Use nav HTML element for pagination bar
- The pagination bar must be positioned within the the product grid section at the bottom.
- It should be centered horizontally and aligned using Flexbox.
- The width of the pagination bar should match the width of the product grid.

### Content and Structure

- The bar must contain two navigation buttons:
  - "Previous" (left-aligned)
  - "Next" (right-aligned)
  - Styling Requirements

- Both buttons should include:
- Padding for clickable area
- Rounded borders (border-radius)
- Hover effects for improved interactivity
- Functionality
- The pagination must support dynamic product loading using PHP, allowing users to navigate through multiple pages of products.

## Final Submission Submission instructions

- Use only one external CSS file; NO embedded or inline CSS is allowed. You must submit the **final style rules**, and all the classes must be used within the HTML pages, so the CSS file must be cleaned from all temporary and not-in-use classes.
- Make sure you use the CSS rules given to you in the **lecture ONLY!** You are not allowed to use frameworks such as Bootstrap or others.

### Placement of Assignment Files

- You must submit your files to CS Host.
- In the “public\_html” folder, create a sub-folder called *assThree*, and then upload all the *assignments* files to it.
- You must update your home page (index.htm) file by adding a link to the assignment Three main page.
- You must create a database on the server named as “clothingStore” and load it with at least 10 records for testing. Also, the database Schema should be exported as SQL, the file name should be “students\_yourNumber.sql”.
- **You must compress (Zipped) all the assignment’s three files, including the SQL file, into a file named assThree-stID.zip and submit it to ITC before the due date.**

The Deadline for submitting this task is 15/06/2025. **At 22:00 at the CShost**, so the server will be closed on 15/06/2025 at 22:00. *In addition to your submission to the Cshost, you have to submit your project to ITC the deadline is 15/06/2025 at 22:00.*