

Assignment 1: Full Stack Development

Product Gallery with Filter System (Using CSS Grid + Advanced Selectors)

Task 1

Description:

1. You are required to explain the theoretical concepts of Dropdowns, Flexbox, Grid and Media Queries.

Task 2

Description:

In this assignment, you will design a **Product Gallery webpage** for an e-commerce store. The gallery should allow users to **filter products** by category using **CSS-only techniques** (checkbox/radio button hacks). You must apply **Grid, Flexbox, Media Queries, and Advanced CSS Selectors**.

Implementation Tasks:

1. Header & Navigation

- Create a navigation bar with the store name on the left and navigation links on the right.
- Include a search bar styled with CSS.

2. Filter Sidebar

- On the left side, add a sidebar with filter options (categories like "Electronics", "Clothing", "Books").
- Use radio buttons or checkboxes with `:checked` selectors to filter visible products.

3. Product Grid

- Display at least 12 product cards in a responsive CSS Grid layout (4 per row on desktop, 2 per row on tablet, 1 per row on mobile).
- Each card should have:
 - Product image

- Product title
- Price
- “Add to Cart” button

4. Filter Functionality (CSS Only)

- When a category is selected, only products of that category should remain visible.
- Use CSS selectors (:checked + label, :nth-child(), :not()) to achieve filtering without JavaScript.

5. Responsive Design

- Sidebar should appear on the left in desktop view but move to the top in mobile view.
- Product grids should adapt smoothly with media queries.

Challenge/Tricky Part: Students must implement filtering using pure CSS, which is not straightforward and requires creative use of selectors.