**Assignment #3. Advanced CSS ( Flexbox & Grid)**

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**Part 1. Flexbox**

**Task 0. Navigation Bar**

1. Create a header section with a logo on the left and a list of links on the right.
2. Turn the header container into a flex container.
3. Align the logo and the links horizontally.
4. Apply spacing between the links using Flexbox properties.
5. Make sure the logo and links are vertically centered.  
     
   A screenshot of a computer

   AI-generated content may be incorrect.  
     
   A screenshot of a computer program

   AI-generated content may be incorrect.  
     
   A screen shot of a computer

   AI-generated content may be incorrect.  
   A screen shot of a computer screen

   AI-generated content may be incorrect.

**Task 1. Card Row**

1. Create a container with at least three cards (each card should include an image, title, text, and button).
2. Make the container a flex container so the cards appear in a row.
3. Ensure all cards have equal height.
4. Add consistent gaps between the cards.
5. Add a simple hover effect (e.g., shadow, lift, or scale).

A screen shot of a computer code

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A screenshot of a video game

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**Part 2. Grid System**

**Task 2. Page Layout with Grid Areas**

1. Set up a layout with a header, sidebar, main content, and footer.
2. Turn the parent container into a grid container.
3. Define grid rows and columns.
4. Assign grid areas so that:
   * The header spans across the top,
   * The sidebar is placed on the left,
   * The main content is on the right,
   * The footer spans across the bottom.
5. Confirm that each section fits correctly into its grid area.

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**Task 3. Image Gallery**

1. Collect at least nine images and place them inside a gallery container.
2. Set the gallery container as a grid container.
3. Define multiple equal-width columns and rows.
4. Add consistent spacing (gaps) between images.
5. A screen shot of a computer program

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   AI-generated content may be incorrect.Add a hover effect — for example, display a caption overlay when the user hovers over an image.

A collage of images

AI-generated content may be incorrect.

**Part 3. Combining Flexbox & Grid**

**Task 4. Portfolio Page**

1. Create a page structure with: header, main section, sidebar, and footer.
2. Use **Flexbox** in the header for the navigation bar.
3. Use **CSS Grid** for the main section:
   * Projects area on the left,
   * Info or sidebar on the right.
4. Inside each project card, use Flexbox to arrange content (title, description, button).
5. Ensure the footer spans across the bottom of the page.
6. Review the page for consistency in spacing and alignment.

A screenshot of a computer program

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