

Lab 3: Flex, Grid and Media query

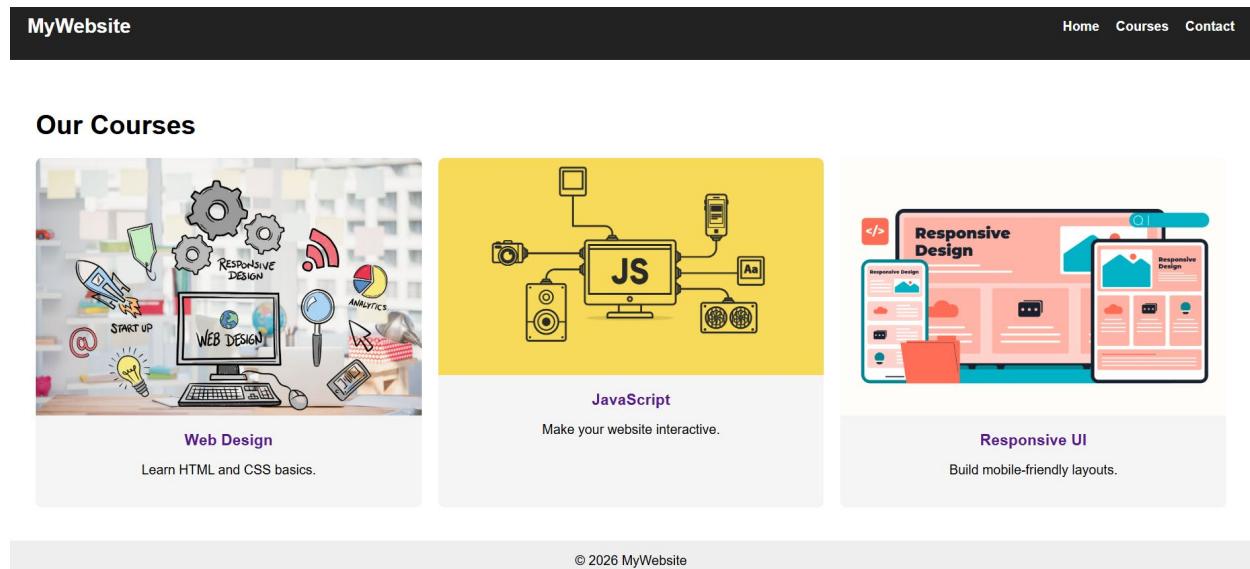
Goal: Build one complete responsive web page using **Flexbox**, **CSS Grid**, **cards with images**, and **@media queries**.

In this lab, students will design and implement a **responsive course listing web page** using modern CSS layout techniques. The lab focuses on practical use of **Flexbox** for one-dimensional layouts and **CSS Grid** for two-dimensional layouts.

Students will start from a basic HTML structure and progressively enhance the page by:

- Creating a navigation bar using Flexbox
- Designing card components with images and text
- Arranging cards using CSS Grid
- Adding interactivity with hover effects
- Making the layout responsive for desktop, tablet, and mobile screens using @media queries

 **On desktop: cards show in grid and there are 3 cards per row.**



The screenshot shows a desktop view of a website titled "MyWebsite". The header includes a logo, "MyWebsite" text, and navigation links for "Home", "Courses", and "Contact". Below the header, a section titled "Our Courses" displays three cards in a grid. The first card, "Web Design", features a collage of icons related to web development and has a "Learn HTML and CSS basics." link. The second card, "JavaScript", shows a computer monitor with "JS" on it, connected to various devices, with the text "Make your website interactive.". The third card, "Responsive UI", shows a smartphone and a laptop displaying responsive designs, with the text "Build mobile-friendly layouts.". The footer contains a copyright notice: "© 2026 MyWebsite".

💻 On iPad: cards show in grid and there are 2 cards per row.

Dimensions: iPad Air ▾ 820 × 1180 50% ▾ No throttling ▾ 'Save-Data': default

The screenshot shows a website titled "MyWebsite" with a black header bar containing "MyWebsite", "Home", "Courses", and "Contact". Below the header, the title "Our Courses" is displayed. There are three cards in a grid format:

- Web Design**: A card featuring a collage of icons related to web design, including gears, a rocket, a lightbulb, and a computer monitor labeled "WEB DESIGN". Below the icon is the text "Web Design" and the description "Learn HTML and CSS basics."
- JavaScript**: A card featuring a yellow background with a central box labeled "JS" connected to various icons like a smartphone, a speaker, and a battery. Below the icon is the text "JavaScript" and the description "Make your website interactive."
- Responsive UI**: A card featuring a collage of icons related to responsive design, including a smartphone, a laptop, and a cloud. Below the icon is the text "Responsive UI" and the description "Build mobile-friendly layouts."

At the bottom of the page is a footer bar with the copyright notice "© 2026 MyWebsite".

📱 On mobile: cards stack vertically

Dimensions: iPhone SE ▾ 375 × 667 89% ▾ No throttling ▾ 'Save-Data': default

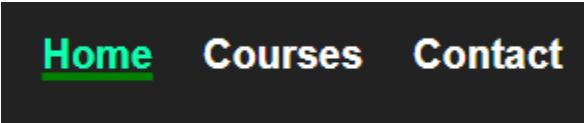
The screenshot shows the same website on a mobile phone (iPhone SE) with a black header bar containing "MyWebsite", "Home", "Courses", and "Contact". Below the header, the title "Our Courses" is displayed. There is one visible card, which is identical to the "Web Design" card shown on the iPad version:

- Web Design**: A card featuring a collage of icons related to web design, including gears, a rocket, a lightbulb, and a computer monitor labeled "WEB DESIGN". Below the icon is the text "Web Design" and the description "Learn HTML and CSS basics."

At the bottom of the page is a footer bar with the copyright notice "© 2026 MyWebsite".

Detail action:

1. When the cursor is on the menu: there will be underline and change the text color:



2. When there is **hover on card** there will be a shadow behind, and the **translateY -5px**
For shadow you can use: **box-shadow: 0 10px 20px rgba(0,0,0,0.15);**
Or generate from this website: [URL](#)

Our Courses

Web Design

Learn HTML and CSS basics.

JavaScript

Make your website interactive.