

# CSS Module

## Introduction to CSS

- What is CSS and its role in web development
- CSS syntax and basic structure
- Ways to include CSS in web pages (inline, internal, external)

## Selectors and Basic Styling

- HTML element selectors
- Class and ID selectors
- Pseudo-classes and pseudo-elements
- CSS box model (margins, borders, padding)
- Fonts and text styling
- Backgrounds and colors

## Layout and Positioning

- Display property and the box model
- Positioning methods (static, relative, absolute, fixed)
- Floats and clearing floats

## Flexbox Layout

- Introduction to Flexbox
- Flex container and flex items
- Flexbox properties (flex-direction, justify-content, align-items, etc.)
- Creating flexible and responsive layouts with Flexbox

## Grid System

- Introduction to CSS Grid
- Grid container and grid items
- Grid properties (grid-template-columns, grid-template-rows, grid-gap, etc.)
- Creating complex grid layouts with CSS Grid

## Responsive Web Design

- Introduction to responsive design
- Media queries and breakpoints
- Fluid layouts and responsive units
- Mobile-first approach
- Responsive images and media

## Advanced Styling Techniques

- CSS transitions and animations
- Transformations (translate, rotate, scale, etc.)
- Multiple-column layouts
- CSS variables (custom properties)
- Using CSS preprocessors (e.g., Sass, Less)

## Project Work

- Hands-on projects to apply the concepts learned
- Building responsive layouts with Flexbox and Grid System
- Creating animated elements
- Customizing existing websites with advanced CSS techniques