

# CODEHUBEDUTECH

---

## WEBDEVELOPMENT

### HTML CONTENTS

#### HTML INTRODUCTION

#### HTML ELEMENTS

- Nested html elements
- Empty html elements
- Block-level elements
- Inline elements
- Forms elements
- Multimedia elements
- Metadata elements
- Interactive elements
- Text formatting elements

#### HTML ATTRIBUTES

- Core attributes
- Title attributes
- Class attributes
- Style attributes
- Internationalization attribute
- Generic attributes

#### HTML HEADINGS,PARAGRAPH

#### HTML STYLES,FORMATTING,QUOTATIONS

#### HTML COMMENTS

- Inline
- Multiline
- Single line

#### HTML COLORS

- Rgb
- Hex
- Named colors
- Rgba colors
- Hsla colors

#### HTML LINKS

- Internal Links
- External Links
- Email Links
- Telephone Links
- File Download Links
- unvisited link
- visited link
- active link
- Link Buttons

### **HTML IMAGES**

- Inline Images
- Background Images
- Responsive Images
- SVG Images
- Image Maps
- HTML picture

### **HTML Favicon**

- ICO Format
- PNG Format
- SVG Format
- JPG/JPEG Format
- Apple Touch Icon
- Android Chrome Icon
- Microsoft Tile Icon

### **HTML Page Title**

- Static Page Titles
- Dynamic Page Titles
- SEO Optimized Titles
- Branding Titles
- Descriptive Titles
- Personalized Titles
- Internationalized Titles

### **HTML Tables**

- Basic Table
- Nested Table
- Responsive Table
- Striped Table
- Borderless Table
- Collapsible Table
- Data Table

- Calendar Table
- Comparison Table
- Table Borders
- Collapsed Table Borders
- Style Table Borders
- Round Table Borders
- Table Sizes
- Table Headers
- Table Padding & Spacing
- Table Colspan & Rowspan
- Table Styling
- HTML Table Colgroup

### **HTML Lists**

- Ordered List
- Unordered List
- Definition List

### **HTML Forms**

- Text Inputs
- Buttons
- Choice Inputs
- File Inputs
- Dropdowns and Selects
- Date and Time Inputs
- . Number Inputs
- Color Inputs
- Hidden Inputs
- Email and URL Inputs
- Telephone Input
- Search Input
- Form Attributes

### **HTML Media**

- HTML Media
- HTML Video
- HTML Audio

### **HTML TAGS**

## **CSS CONTENTS**

### **CSS INTRODUCTION**

### **CSS SYNTAX**

### **HOW AND WHERE TO ADD CSS**

- Inline
- Internal line
- External line
- CSS Comments
- Single-line Comments
- Multi-line Comments

### **Css colors**

- Named Colors
- Hexadecimal Colors (Hex)
- RGB Colors
- HSL Colors
- CurrentColorTransparent

### **CSS Backgrounds**

- Background Color
- Background Image
- Background Repeat
- Background Position
- Background Size
- Background Attachment
- Background Clip
- Background Origin
- Background Blend ModeMultiple
- BackgroundsBackground Gradient

### **CSS Borders**

- None
- Solid
- Dotted
- Dashed
- Double
- Groove
- Ridge
- Inset
- Outset
- Hidden

### **CSS Margins**

- Margin Shorthand
- Individual Margins
- Auto Margin
- Percentage Margin
- Em/Rem Margin
- Viewport Units

#### **CSS Padding**

- Padding Shorthand
- Individual Padding
- Percentage Padding
- Em/Rem Padding
- Viewport Units
- Auto Padding

### **CSS Height, Width and Max-width**

#### **CSS Borders**

- Content
- Padding
- Border
- Margin
- Box Sizing

#### **CSS OUTLINE**

- None
- Solid
- Dotted
- Dashed
- Double
- Groove
- Ridge
- Inset
- Outset
- Outline Width
- Outline Color
- Outline Offset

#### **CSS Text**

- Text Color
- Text Alignment
- Text Decoration
- Text Transform
- Text Overflow
- White Space
- Line Height

- Letter Spacing
- Word Spacing
- Text Indent
- Text Shadow
- Font Family
- Font Size
- Font Weight
- Font Style
- Font Variant

### **CSS Fonts**

- Serif Fonts
- Sans-Serif Fonts
- Monospace Fonts
- Cursive Fonts
- Fantasy Fonts
- System Fonts
- Web-Safe Fonts
- Web Fonts (e.g., Google Fonts)
- Variable Fonts
- Generic Font Families

### **CSS Icons**

- Font Icons
- SVG Icons (Scalable Vector Graphics)
- Image Icons (PNG, GIF, JPEG)
- CSS-Only Icons (Pure CSS)
- Icon Libraries
- Emoji Icons

### **Css links**

- Unvisited Link (:link)
- Visited Link (:visited)
- Hover Link (:hover)
- Active Link (:active)
- Focus Link (:focus)

### **CSS Lists**

- Unordered List (<ul>)
- Ordered List (<ol>)
- Definition List (<dl>)
- List Style Type (list-style-type)
- List Style Image (list-style-image)
- List Style Position (list-style-position)
- List Style Shorthand (list-style)

### **CSS Tables**

- Table Layout (table-layout)
- Border Collapse (border-collapse)

- Caption Side (caption-side)
- Empty Cells (empty-cells)
- Table Borders (border-spacing)
- Table Width and Height
- Text Alignment in Table (text-align, vertical-align)
- Padding in Table Cells (padding)
- Table Row and Column Styling

### **CSS display**

- Block (display: block)
- Inline (display: inline)
- Inline-Block (display: inline-block)
- Flex (display: flex)
- Grid (display: grid)
- None (display: none)
- Table (display: table)
- Inline-Table (display: inline-table)
- List-Item (display: list-item)
- Run-In (display: run-in)
- Contents (display: contents)
- Inline-Flex (display: inline-flex)
- Inline-Grid (display: inline-grid)

### **CSS width and max-width**

- Width (width)
- Max-Width (max-width)
- Percentage Width
- Auto Width
- Viewport Width (vw)
- Min-Width (min-width)

### **CSS Layout - The position Property**

- Static (position: static)
- Relative (position: relative)
- Absolute (position: absolute)
- Fixed (position: fixed)
- Sticky (position: sticky)

### **CSS z-index**

1. Auto
2. Positive Integer
3. Negative Integer

### **CSS Overflow**

- Visible (overflow: visible)
  - Hidden (overflow: hidden)
  - Scroll (overflow: scroll)
  - Auto (overflow: auto)
- CSS float and clear

## **Float**

1. Left (float: left)
2. Right (float: right)
3. None (float: none)

## **Clear**

1. Left (clear: left)
2. Right (clear: right)
3. Both (clear: both)
4. None (clear: none)

CSS inline-block

- Width and Height
- Margin and Padding
- Vertical Alignment
- Text Alignment

## **CSS inline-block**

- Text Align (text-align)
- Vertical Align (vertical-align)
- Align Items (align-items)
- Align Self (align-self)
- Align Content (align-content)
- Align Justify (justify-content)

## **CSS Opacity**

- Opacity (opacity)
- Opacity with RGBA (background-color: rgba())
- Opacity with HSLA (color: hsla())

## **CSS Navigation Bar**

- Horizontal Navigation Bar
- Vertical Navigation Bar
- Dropdown Navigation Bar
- Sidebar Navigation Bar
- Sticky Navigation Bar
- Responsive Navigation Bar

## **CSS Dropdowns**

- Horizontal Navigation Bar
- Vertical Navigation Bar
- Dropdown Navigation Bar
- Sidebar Navigation Bar
- Sticky Navigation Bar
- Responsive Navigation Bar

## **CSS Image Gallery**

- Grid Gallery
- Masonry Gallery



- Carousel Gallery
- Thumbnail Gallery
- Lightbox Gallery
- Tile Gallery

### **CSS Image Sprites**

- Single Image Sprite
- Multiple Image Sprites
- Icon Sprite
- Animation Sprite
- CSS Sprite Sheets

### **CSS Forms**

- Form Layout
- Form Controls
- Input Fields
- Textareas
- Checkboxes
- Radio Buttons
- Select Menus
- Buttons
- Fieldsets and Legends
- Labels
- Validation Styles
- CSS Counters
- Counter Reset (counter-reset)
- Counter Increment (counter-increment)
- Counter Style (counter-style)
- Counter Content (counter())
- Nested Counters

- **Positioning**
- **Flexbox**
- **Grid Layout**
- **Typography**
- **Animations and Transitions**
- **Transforms**
- **Media Queries**
- **Responsive Design**
- **Images and Icons**
- **Filters**
- **Gradients and Patterns**
- **Shadows**
- **Backgrounds and Overlays**
- **Z-Index and Stacking Context**

# JavaScript

## Introduction

- **JS Introduction**
  - What is JavaScript?
  - History of JavaScript
  - Key Features
  - JavaScript vs Java

## Basics

- **JS Syntax**
  - Syntax Rules
  - Statements and Semicolons
  - Code Blocks
- **JS Comments**
  - Single-Line Comments
  - Multi-Line Comments
- **JS Variables**
  - var, let, and const
  - Variable Scope
  - Hoisting
  
- **JS Data Types**
  - Primitive Data Types
  - Non-Primitive Data Types
  - Type Conversion
- **JS Numbers**
  - Number Types
  - Mathematical Operations
  - Number Methods
- **JS Casting**
  - Implicit Type Conversion
  - Explicit Type Conversion
- **JS Strings**
  - String Creation
  - String Methods
  - String Interpolation
- **JS Booleans**
  - Boolean Values
  - Logical Operators
- **JS Operators**
  - Arithmetic Operators

- Comparison Operators
- Logical Operators
- Assignment Operators
- Conditional (Ternary) Operator

## **Control Flow**

- **JS If...Else**
  - Simple If Statement
  - If-Else Statement
  - Else-If Ladder
- **JS Switch**
  - Switch Statement Syntax
  - Case and Default
  - Using Break and Continue
- **JS Loops**
  - For Loop
  - While Loop
  - Do-While Loop
  - Loop Control (break, continue)
  - For...In and For...Of Loops

## **Functions**

- **JS Functions**
  - Function Declaration
  - Function Expression
  - Arrow Functions
  - Function Parameters and Arguments
  - Returning Values
- **JS Lambda**
  - Lambda Expressions
  - Arrow Functions vs Regular Functions

## **Objects and Arrays**

- **JS Objects**
  - Object Creation
  - Object Properties and Methods

- Object Destructuring
- **JS Arrays**
  - Array Creation
  - Array Methods (push, pop, shift, unshift, etc.)
  - Array Destructuring
  - Array Iteration (forEach, map, filter, etc.)

## Advanced Topics

- **JS JSON**
  - JSON Syntax
  - Parsing JSON
  - Stringifying JSON
- **JS RegEx**
  - Regular Expressions Syntax
  - RegEx Methods (test, exec)
  - Common RegEx Patterns
- **JS PIP**
  - Introduction to pip (if applicable)
- **JS Try...Catch**
  - Error Handling
  - Try...Catch Syntax
  - Finally and Throw
- **JS User Input**
  - Prompt Dialog
  - Handling User Input
  - Validating Input

## DOM Manipulation

- **JS Document Object Model (DOM)**
  - Understanding the DOM
  - Selecting Elements (getElementById, querySelector)
  - Manipulating Elements (innerHTML, textContent, style)
  - Event Handling (addEventListener, removeEventListener)
- **JS Events**
  - Event Types
  - Event Bubbling and Delegation
  - Event Properties (target, currentTarget)

## Object-Oriented Programming

- **JS Classes**
  - Class Declaration
  - Constructor
  - Methods and Properties
  - Inheritance
  - Getters and Setters
  - Static Methods
  - Abstract Classes

## ES6+ Features

- **JS ES6**
  - let and const
  - Arrow Functions
  - Template Literals
  - Destructuring Assignment
  - Spread and Rest Operators
- **JS ES7**
  - Exponentiation Operator
  - Array Includes Method
- **JS ES8**
  - Async/Await
  - Object.entries and Object.values
- **JS ES9**
  - Rest/Spread Properties
  - Asynchronous Iteration
- **JS ES10**
  - Array.flat and Array.flatMap
  - Optional Catch Binding
- **JS ES11**
  - String.prototype.matchAll
  - BigInt

## Asynchronous JavaScript

- **JS Callbacks**
  - Callback Functions
  - Error-First Callbacks
- **JS Promises**
  - Creating Promises
  - Chaining Promises
  - Error Handling with Promises

- **JS Async/Await**
  - Using Async/Await
  - Error Handling with Async/Await

## **JavaScript APIs**

- **JS Web APIs**
  - Fetch API
  - DOM API
  - Geolocation API
  - Web Storage API (LocalStorage, sessionStorage)
- **JS Fetch**
  - Making HTTP Requests
  - Handling Responses
  - Error Handling

## **Modules**

- **JS Modules**
  - Module Syntax (import, export)
  - Default vs Named Exports
  - Dynamic Imports

