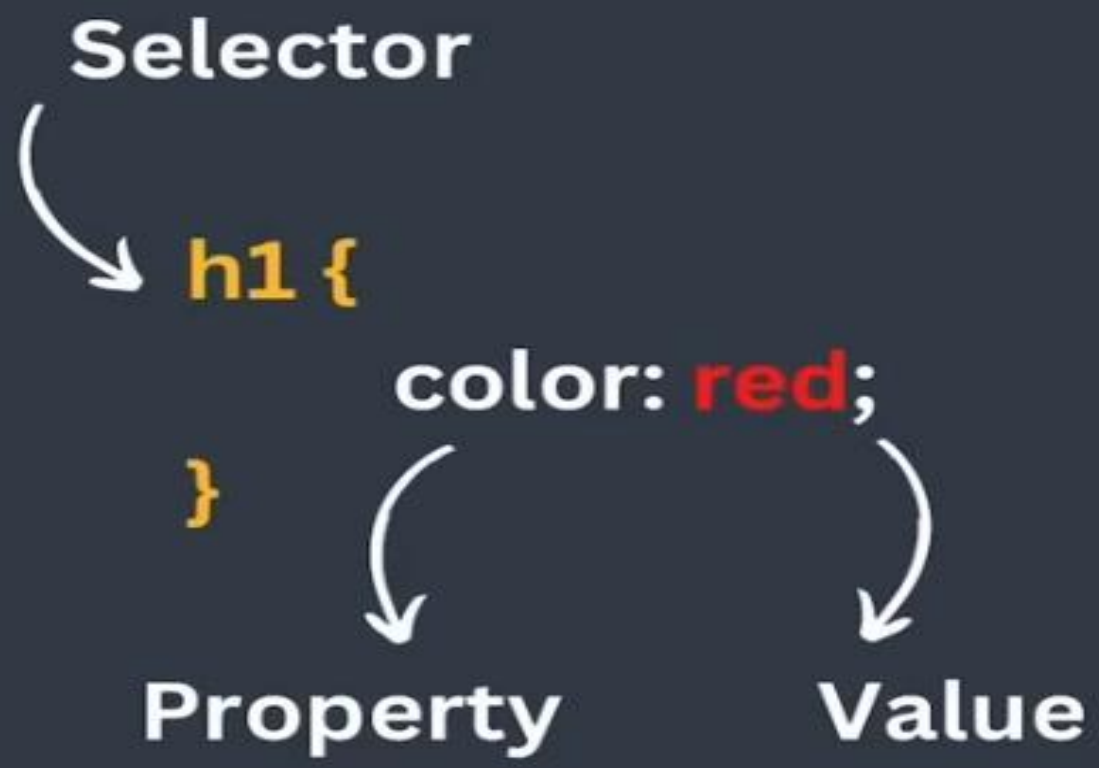
Introduction to CSS

Basics of CSS

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files

Basic Syntax:



Types of CSS

- Inline CSS
- Internal or Embedded CSS
- External CSS

Linking CSS to HTML

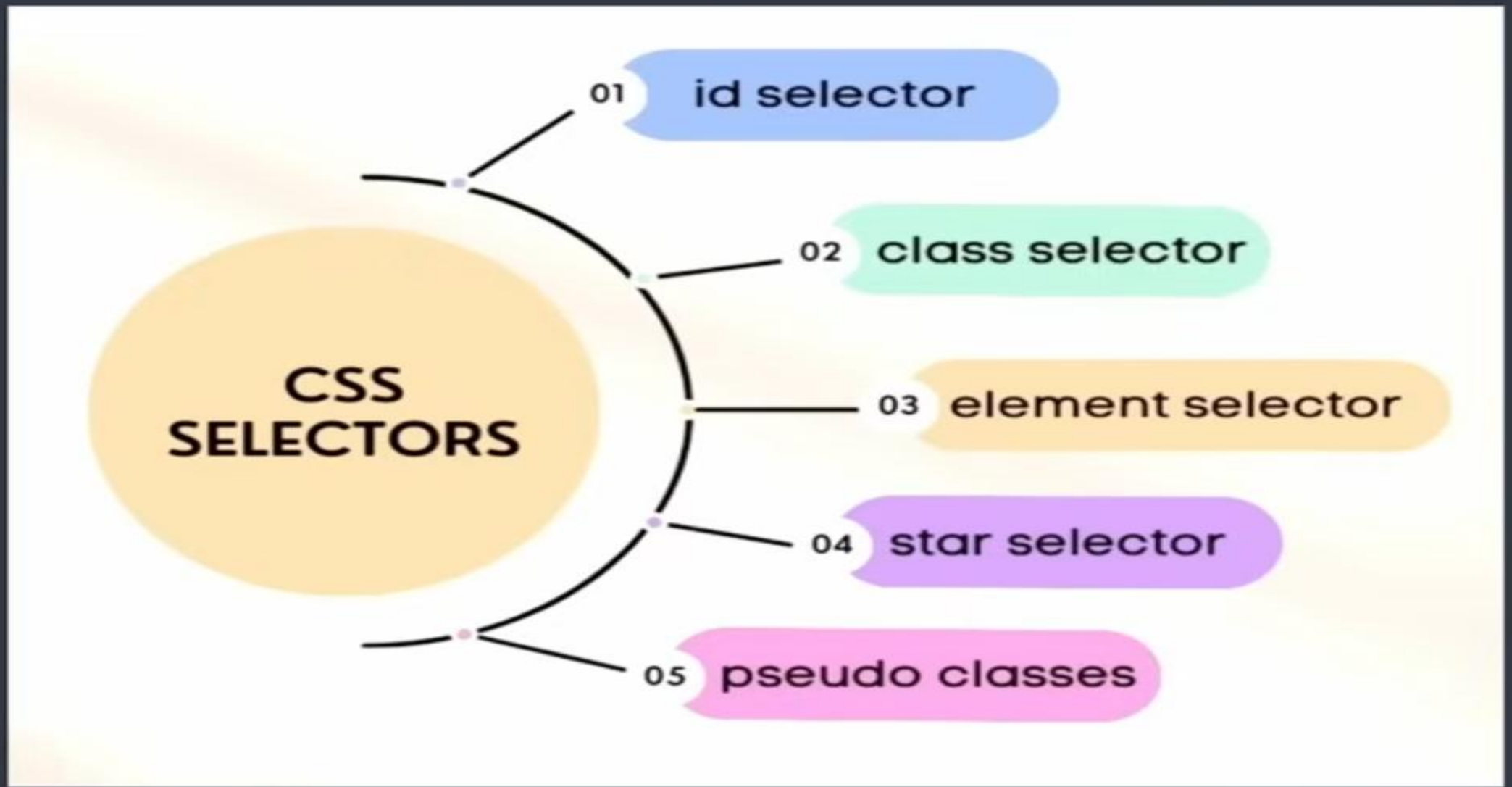
1. Linking External CSS (<link>):

Create a separate CSS file (e.g., "styles.css") and define your styles within it.

Steps:

1. Create a CSS File
2. Create an HTML Document
3. Link the CSS File
4. Place HTML Content
5. Save and Open

CSS Selectors



CSS Selectors

- CSS selectors are patterns used to select and style HTML elements on a web page.
- They determine which elements in the HTML document will be affected by the defined styles.

1. **Element**
2. **Class**
3. **ID**
4. **Star Selector**

Element Selector

An element selector in CSS is used to target and style all HTML elements of a specific type. It selects elements based on their HTML tag name.

```
p {
    color: blue;
}
```

Class Selector

A class selector in CSS is used to target and style HTML elements that have a specific class attribute. It allows you to apply styles to one or more elements on a page that share the same class.

```
.highlight {
    background-color: yellow;
}
```

ID Selector

An ID selector in CSS is used to target and style a single HTML element that has a specific ID attribute. It allows you to apply styles to a unique element on a page.

```
#header {
    font-size: 24px;
}
```

Star(*) Selector

An element selector in CSS is used to target and style all HTML elements of a specific type. It selects elements based on their HTML tag name.

Styling Text, Colors, and Backgrounds

Text Properties

- Text-align
- Text-decoration
- Font-weight
- Font-family
- Line-height
- Text-transform

Text-align

- text-align : left / right / center

```
.center-text {
    text-align: center;
}
```

```
.center-text {
    text-align: right;
}
```

```
.center-text {
    text-align: left;
}
```

text-align: center;

text-align: right;

text-align: left;

Text-decoration

- text-decoration : underline / overline / line-through

This text is underlined

This text has an overline

~~This text has a line-through~~

This text blinks

```
a:hover {
    text-decoration: underline;
}
```

Font-weight

- font-weight : normal / bold / bolder / lighter
- font-weight : 100-900

normal

bold

bolder.

lighter.

```
strong {
    font-weight: bold;
}
```

Font-family

- font-family : arial
- font-family : arial, roboto

serif
sans-serif
cursive
fantasy
monospace

```
body {
    font-family: Arial, sans-serif;
}
```

Background Properties

- Background color property
- Background Image Property
- Background- Repeat Property
- Background size property
- Background position property
- Background shorthand property

Background position property

- background-position: left/top/center/bottom/right;

Background shorthand property

```
background: [background-color] [background-image] [background-repeat]
                               [background-attachment] [background-position];
```

- background: #00AABB url('background-image.jpg') no-repeat center center;

Units, Position & Display properties

Units in CSS

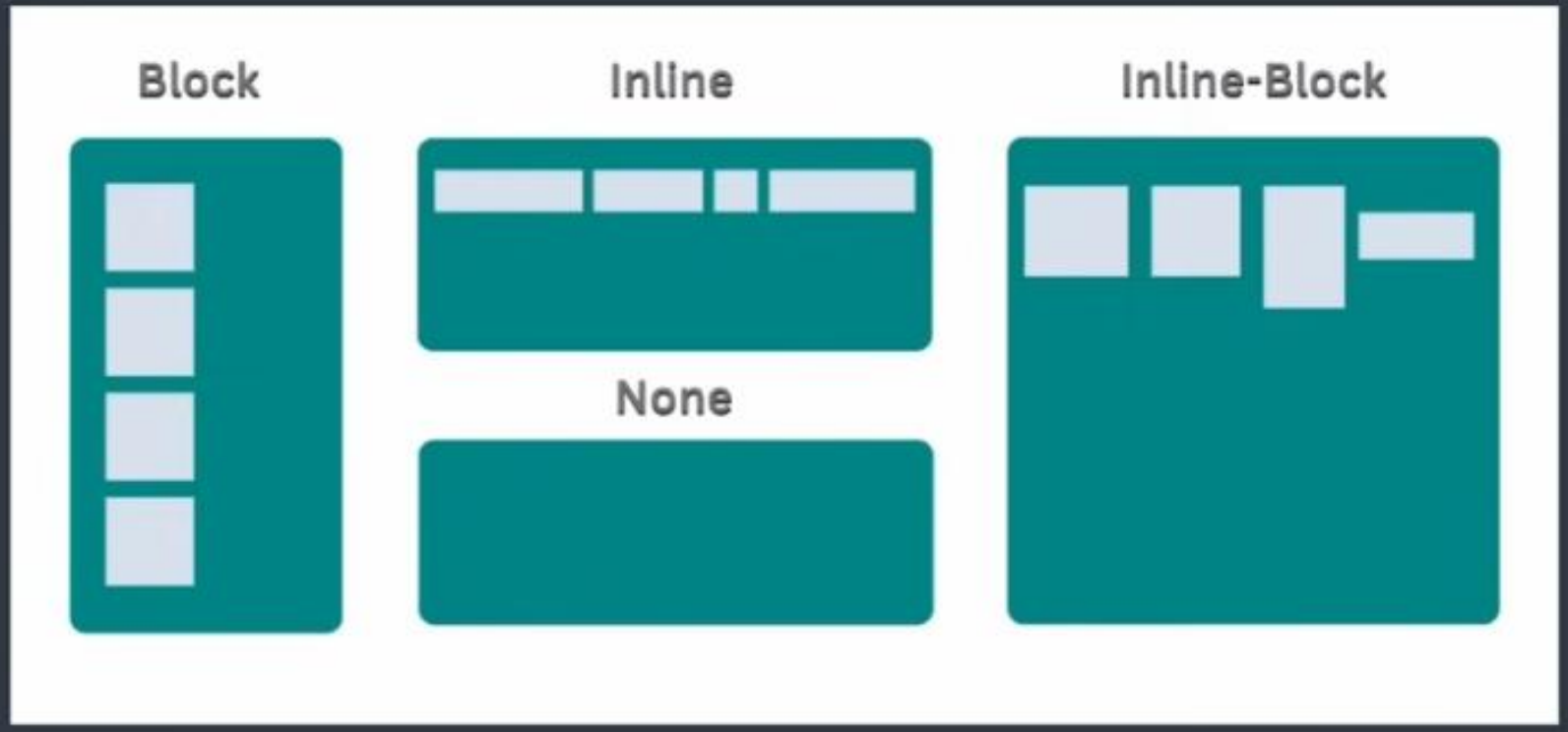
- CSS has several different units for expressing a length.
- Many CSS properties take "length" values, such as width, margin, padding, font-size, etc.
- Length is a number followed by a length unit, such as 10px, 2em, etc.

6️⃣ CSS Units

Unit	Meaning
px	Fixed size
%	Relative
em	Parent based
rem	Root based
vh	Viewport height
vw	Viewport width

CSS Display Property

- The display property specifies the display behavior (the type of rendering box) of an element.



CSS Display Property

display: inline / block / inline-block / none

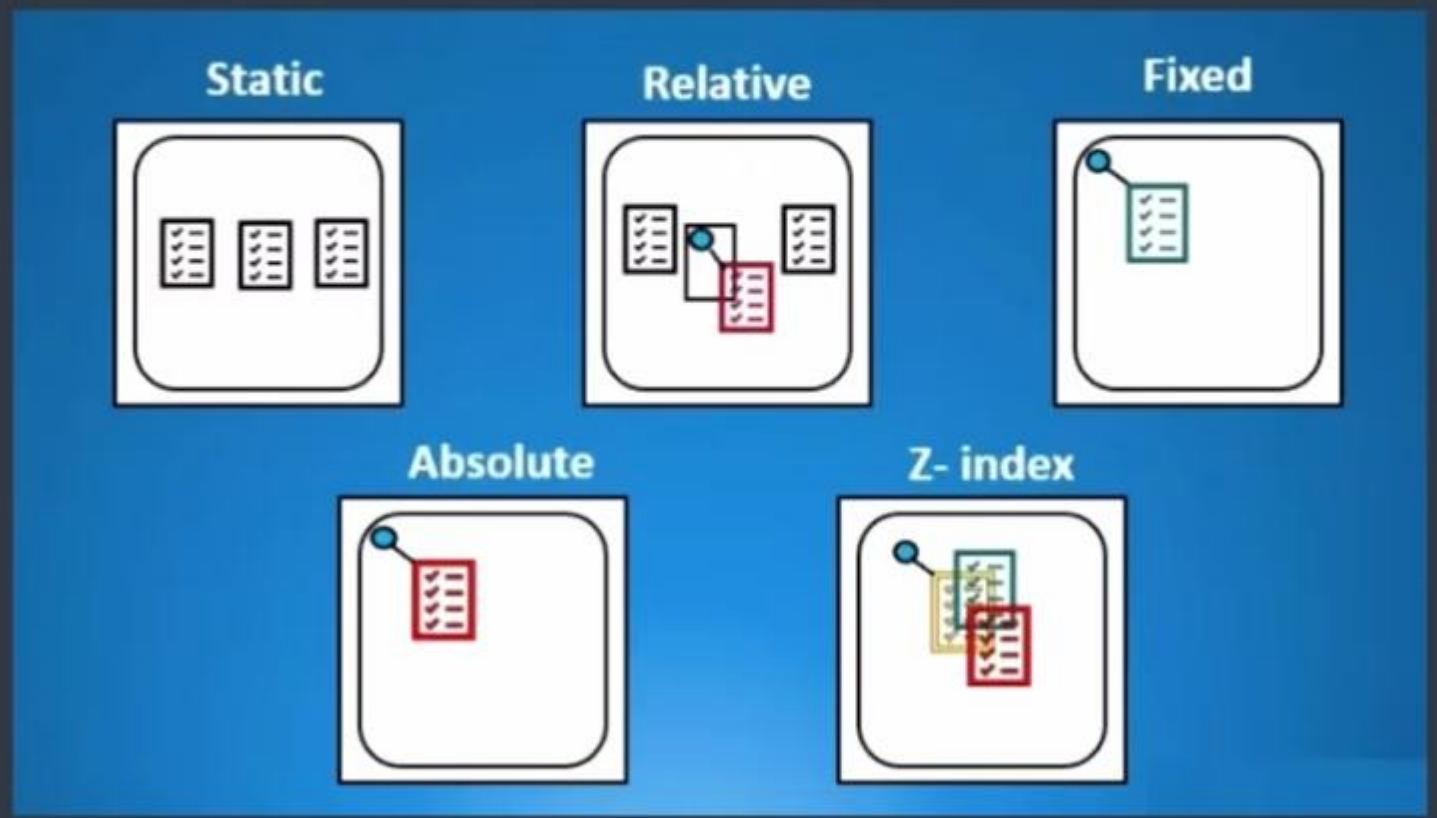
- inline - Takes only the space required by the element. (no margin/ padding)
- block - Takes full space available in width.
- inline-block - Similar to inline but we can set margin & padding.
- none - To remove element from document flow.

CSS Position Property

- The position CSS property sets how an element is positioned in a document.

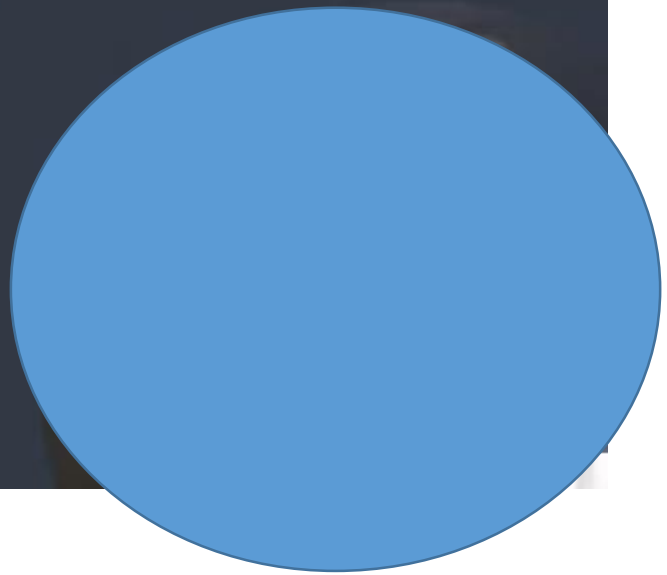
position : static / relative / absolute / fixed

CSS Position Property



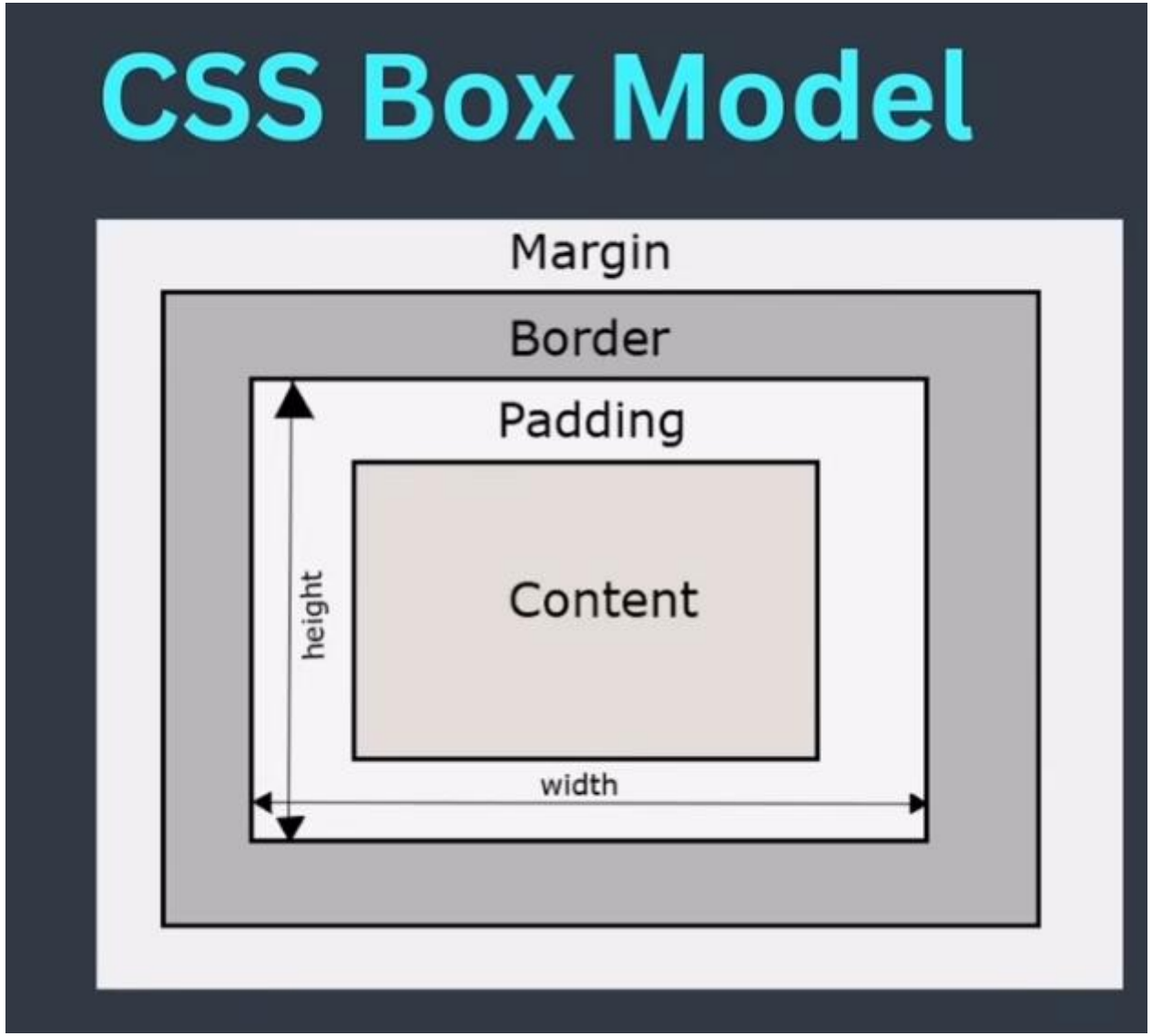
Position

- static - default position (The top, right, bottom, left, and z-index properties have no effect)
- relative - element is relative to itself. (The top, right, bottom, left, and z-index will work)
- absolute - positioned relative to its closest positioned ancestor. (removed from the flow)
- fixed - positioned relative to browser. (removed from flow)
- sticky - positioned based on user's scroll position



CSS Box Model

- Height
- Width
- Border
- Padding
- Margin
- Content


CSS Box Model
Margin
Border
Padding
Content
height
width

CSS Box Model

input

```css
div {
  height: 100px;
  width: 320px;
  padding: 10px;
  border: 5px solid gray;
  margin: 0;
}
```

output

You are now seeing this box of heiht 100px, width 320px, padding of 10x, border of 5px, margin as 0