✅ 1. Semantic HTML Tags Revisited

Definition: Tags that clearly describe the purpose of the content they contain.

Tag	Real-Time Usage Example
<header>	Contains logo and navigation at the top of website
<nav>	Navigation bar with links (Home, About, Contact)
<main>	Wraps the central content of a web page
<section>	Groups related content (e.g., "About Us" section)
<article>	Represents independent blog posts or news stories
<aside>	Sidebars with ads, related links, or quotes
<footer>	Bottom section with copyright, contact info

Example:

```
<header>My Portfolio</header>
<nav>Home | Projects | Contact</nav>
<main>
  <section>
    <article>Project 1</article>
    <article>Project 2</article>
  </section>
  <aside>Follow me on LinkedIn</aside>
</main>
<footer>© 2025 Sudhesh</footer>
```

✅ 2. Box Model: Margin, Border, Padding, Content

Definition: Every HTML element is a box consisting of four parts.

Box Part	Real-Time Visual Example

Content	Actual text or image inside the element
Padding	Space between content and border
Border	Outline around the element
Margin	Space between this element and others

Example CSS:

```
.card {
  padding: 20px;
  border: 2px solid #000;
  margin: 30px;
}
```

Real Usage: Used in cards, buttons, input fields, containers to control spacing.

✅ 3. Width, Height, and Box-Sizing

Definition:

- width & height: Defines the size of the element.
- box-sizing: Controls how padding and border are included in the total size.

Default Problem:
Without box-sizing: border-box, the element can overflow.

Recommended Way:

```
* {
  box-sizing: border-box;
}

.card {
  width: 300px;
  height: 150px;
  padding: 20px;
  border: 2px solid #000;
}
```

Real Usage: Ensures fixed-size boxes for cards, modals, or layout sections.

✅ 4. Typography: Font Styles, Line-Height, Letter-Spacing

Definition: Styling of text to improve readability and aesthetics.

Property	Real-Time Use Example
font-family	Changes look (e.g., Roboto, Poppins, Arial)
font-weight	Defines boldness of text (400 - normal, 700 - bold)
font-size	Controls size of headings, paragraphs, etc.
line-height	Adds space between lines for readability
letter-spacing	Adds space between letters (mostly used in headings)

Example CSS:

```
h1 {
  font-family: 'Poppins', sans-serif;
  font-size: 36px;
  font-weight: 700;
  line-height: 1.4;
  letter-spacing: 1px;
}
```

Real Usage: Used in blog layouts, landing pages, article text formatting.

✅ 5. Display and Position Properties

🔹 Display Properties

Value	Real-Time Example
block	Elements stack (e.g., div, p, h1)
inline	Elements stay in line (e.g., span, a)
inline-block	Like inline but supports width/padding (e.g., button)
flex	Used to create flexible layouts (e.g., navbars, cards)
grid	Used for gallery, dashboard-style layouts

Example:

```
.navbar {
  display: flex;
  justify-content: space-between;
}
```

🔹 Position Properties

Value	Real-Time Example
static	Default flow
relative	Moves relative to its original position
absolute	Positioned inside nearest relative parent
fixed	Stays at one place on screen (e.g., floating buttons)
sticky	Sticks on scroll (e.g., sticky headers)

Example:

```
.floating-btn {
  position: fixed;
  bottom: 20px;
  right: 20px;
}
```

Real Usage: Common in toolbars, modals, sticky headers, or floating action buttons.

✅ 6. Specificity in Selectors

Definition: Determines which CSS rule wins when multiple styles apply.

Specificity Levels:

Selector Type	Weight
Inline style	1000
ID (#id)	100
Class (.class)	10
Element (p, div)	1

Example:

```
p {
  color: black;
}

.container p {
  color: green;
}

#main .container p {
  color: blue;
}
```

➡ Final color = **blue**, because ID selector has the highest specificity.

Pro Tip: Avoid !important unless absolutely necessary.

🟩 Summary Table

Topic	Real-Time Usage
Semantic Tags	Structure content for accessibility and SEO
Box Model	Controls spacing inside and around elements
Width/Height/Box-Sizing	Keeps layout consistent and avoids overflow
Typography	Enhances readability and design of text
Display Properties	Controls layout flow of elements
Position Properties	Places elements exactly where needed
Specificity	Manages which CSS rule is applied when in conflict