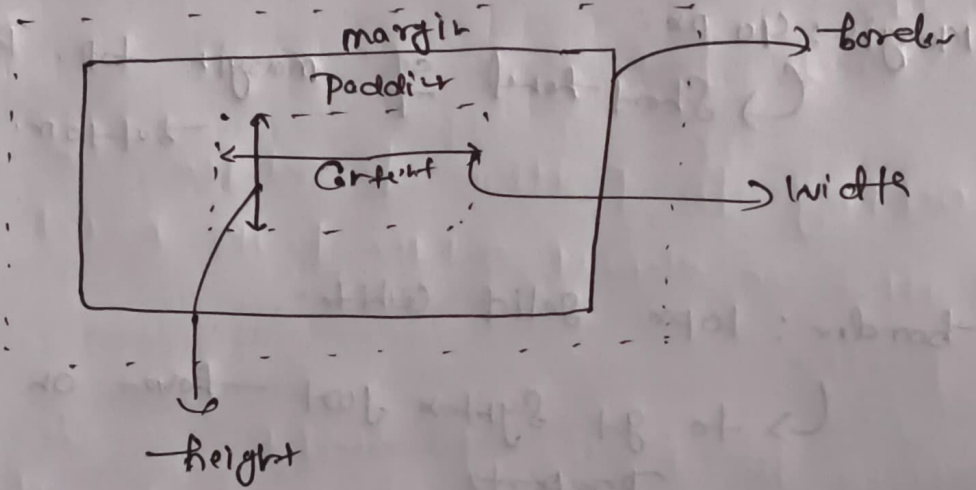
Tl : 29 Jan 2026

The Box Model

When rendering HTML document the browser put each element inside a box.

The box contain four areas : the content area, the padding area, the border area and the margin area.



Padding is the space b/w the border and the content area.

Margin is the space outside of an element and should be used to separate element for each other.

Margin Collapsing - upper and lower top and bottom margin of element are combined into a single margin. The size of margin is equal to the largest of the two margin

- Common Choice by developer, Set box-sizing property border-box using Universal Selector
- By default box-sizing - Content-box

  ↳ इसमें Content area पर width & width में, Padding / ~~margin~~ border को जुड़ा है।)
  जिससे element बड़ा हो जाता है,

Margin: 40 px:
↳ Shorthand of margin top, Right, bottom, left

border: 10px Solid white:
↳ to get Syntax just hover on property

Padding: यह is Space b/w Content and border.

padding: 20px
↳ Content के चारों तरफ Space

- Browser also give box-model
  - Just inspect the web page and go for Box-model
  - Particular selector Box-model to please select that selector

Note :- Designer को spacing कितना चाहिए कितना space होना चाहिए।

→ *, universal selector (apply to all element)

Style.css

```
*,
*::before
*::after {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}
```

Position

using the position property we can precisely position an element.

The default value of this property is static

If we change the value of this property, the element is considered positioned.

On webpage : we have three axes

i) Horizontal (x-axis)

ii) vertical (y-axis)

iii) Depth (z-axis)

z-index is used to move elements along the z-axis.

- By default, z-index : 0
- If we increase z-index element move toward us.
- If we decrease z-index element move away from us.

By setting the position to relative, we can position an element relative to its normal position.

By setting the position to absolute, we can position it relative to its positioned parent/container. That means the parent (or container) should be a positioned element.

By setting the position to fixed, we can position the element relative to the viewport

By setting the position to sticky, the element become positioned relative to the viewport once the specified condition is met

absolute → जहाँ खड़ा कर दिया वहीं खड़ा रहेगा
→ किसी दूसरे को disturb नहीं करेगा।
→ यह always need relative
↳ किसी के properties absolute position
में रहेगा ।

sticky → ये भी fix ही रहता है पर
Condition देते हैं इतने px के बाद
fixed होना।

```
position: sticky
top: 20px;
```

top से 20px होगा तो ही fixed होगा।

relative → इसको भी ये move करने के लिए रखी गई।
ये जगह इसलिए इसके अंदर के element
इसके relative move कर पाए।

```
.box {
  position: absolute;
  bottom: 50px;
  right: 20px;
}
```

absolute → 4

fixed → मैदान कितना भी बड़ा हो
wicket keeper हमेशा उसी position
पर रहता है।

```
.box {
    position: fixed;
    bottom: 100px.
}
```

↳
दुनिया इधर से उधर हो जाए तो
हिलने वाला।

Sticky ÷

```
.box {
    position: sticky;
    top: 100px
}
```

Position stick (चिपक रहना है) पर
Condition top: 100px होगा तो।

Parent {
Position: static;
top: 100px; // No effect

Note: अगर Parent relative नहीं है by default तो browser body को relative, फिर देखो।

→ अगर parent relative है तो child parent के according position होगा।

* display ही viewport है

* Pseudo-class Selector (:)

a: hover {
Color: deeppink;
}

whenever write :hover always use :focus to get same result. while navigating using tab key

:first-child → first child of article element

:first-of-type → first occur of element

Pseudo Element Selector (::)

:: To Style part of an Element

P :: first-letter

P :: first-line

:: selection to Any Selected Element

P :: before

P :: after to insert Content after

Semantic Elements

→ that Element has meaning

<aside> <time> <mark> <header> <footer>

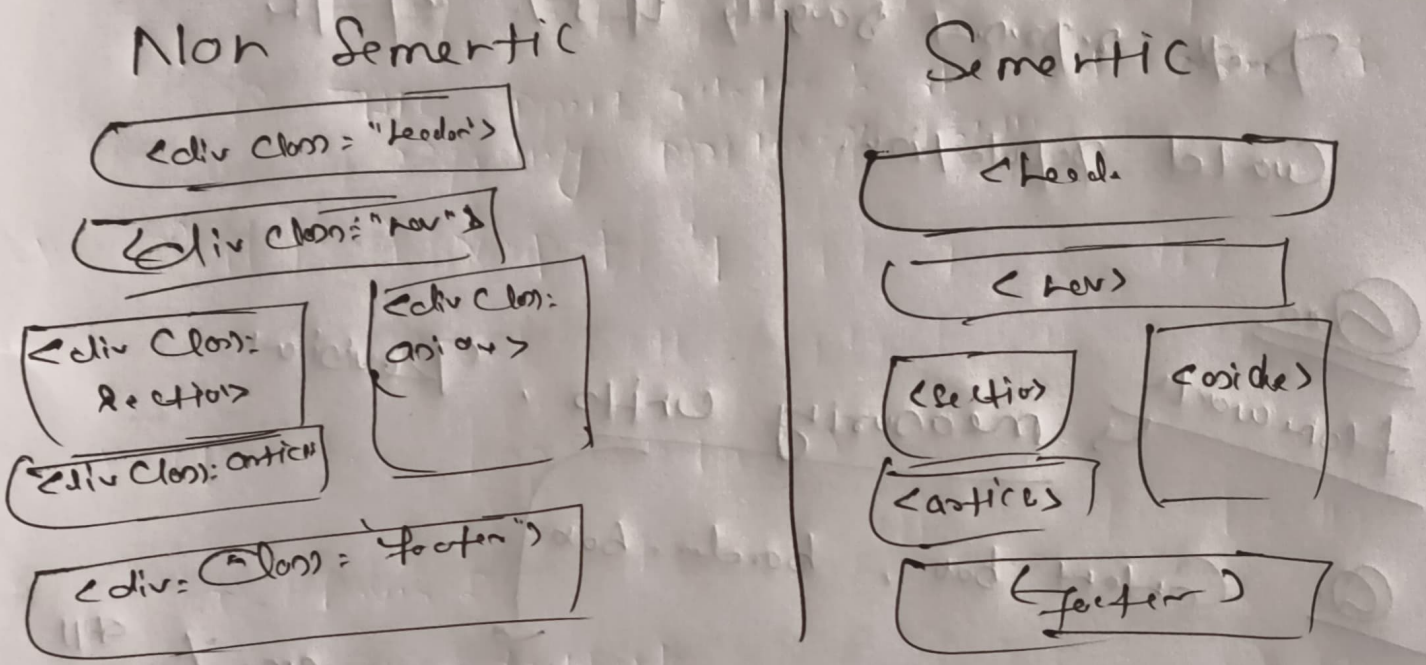
<main>

So use only and elements when no other Semantic element is appropriate

Structure of Webpage

* Use <header> to represent introductory content
* Use <main> to represent the main Content of the page. Every page can have only one <main> element
* Use main <Section> to group related content

* Use <aside> to represent Content that is directly related to the main Content.
* Use <footer> to provide more information about Content.



* Semtic use karte hi at website ki meaning aa jaata hai

This is because visual clues tell the whole story we use Color and font size to draw sighted users attention to the most useful part of the Content like the navigation menu and related link, but what about visually impaired People for example: Auto might not find Except like "Pink" and "large font" very useful?

Roughly 8% of men and 0.5% of women are Colourblind; or to put it another way, approximately 1 in every 12 men and 1 in every 200 women Blind and visually impaired People represent roughly 4-5% of the world population.

Ques

Homework → measuring units, Revision

Q) Content box, border-box

px, rem, em, % all

Note → ① Live Server ② HTML CSS Support,

③ auto rename tag

④ indent rainbow

⑤ Prettier

npm create vite@latest

or

bun create vite latest

Select a framework

> vanilla

Select a variant

JavaScript

use Rolldown-vite

→ yes

* Computer not know A.B.C.D at know number so <meta charset="UTF-8"> to map byte to character.

* vite में / से शुरू होना मतलब public directory में जाना

<meta rel="icon" type="image/svg+xml" href="/vite.svg">

<link rel="stylesheet" href="src/style.css">