Box modeling

Dilshod Rahmatov

<main>

The **<main>** tag specifies the main content of a document.

The content inside the **<main>** element should be unique to the document. It should not contain any content that is repeated across documents such as **sidebars**, **navigation links**, **copyright information**, **site logos**, and **search forms**.

There must not be more than one **<main>** element in a document.

<main class="container"> - "container" is a commonly used class name signifying that it is containing the main content of the page

<header>

The **<header>** element represents a container for introductory content or a set of navigational links.

You can have several **<header>** elements in one HTML document. However, **<header>** cannot be placed within a **<footer>**, **<address>** or another **<header>** element.

\<section\>

The **\<section\>** tag defines a section in a document.

The section element

WWF History

The World Wide Fund for Nature (WWF) is an international organization working on issues regarding the conservation, research and restoration of the environment, formerly named the World Wildlife Fund. WWF was founded in 1961.

WWF's Symbol

The Panda has become the symbol of WWF. The well-known panda logo of WWF originated from a panda named Chi Chi that was transferred from the Beijing Zoo to the London Zoo in the same year of the establishment of WWF.

<article>

The **<article>** tag specifies independent, self-contained content.

An **article** should make sense on its own and it should be possible to distribute it independently from the rest of the site.

Potential sources for the **<article>** element:
- Forum post
- Blog post
- News story

The article element - Styled with CSS

Most Popular Browsers

Google Chrome
Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!

Mozilla Firefox
Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox has been the second most popular web browser since January, 2018.

Microsoft Edge
Microsoft Edge is a web browser developed by Microsoft, released in 2015. Microsoft Edge replaced Internet Explorer.

<aside>

The **<aside>** tag defines some content aside from the content it is placed in.

The **aside** content should be indirectly related to the surrounding content.

The **<aside>** content is often placed as a sidebar in a document.

The aside element - Styled with CSS

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

My family and I visited The Epcot center this summer. The weather was nice, and Epcot was amazing! I had a great summer together with my family!

The Epcot center is a theme park at Walt Disney World Resort featuring exciting attractions, international pavilions, award-winning fireworks and seasonal special events.

<footer>

The **<footer>** tag defines a footer for a document or section.

A **<footer>** element typically contains:
- authorship information
- copyright information
- contact information
- sitemap
- back to top links
- related documents

The article and footer elements + CSS

Most Popular Browsers

Google Chrome
Google Chrome is a web browser developed by Google, released in 2008. Chrome is the world's most popular web browser today!

Mozilla Firefox
Mozilla Firefox is an open-source web browser developed by Mozilla. Firefox has been the second most popular web browser since January, 2018.

Microsoft Edge
Microsoft Edge is a web browser developed by Microsoft, released in 2015. Microsoft Edge replaced Internet Explorer.

Author: Dilshod Rahmatov
dilshod@example.com

You can have several **<footer>** elements in one document.

Styling

Reset default browser settings:

```css
* {
  padding: 0;
  margin: 0;
  box-sizing: border-box;
}
```

Box sizing

The CSS **box-sizing** property allows us to include the padding and border in an element's total width and height.

```
.div1 {
  width: 300px;
  height: 100px;
  border: 1px solid blue;
}


.div2 {
  width: 300px;
  height: 100px;
  padding: 50px;
  border: 1px solid red;
}
```

This div is smaller (width is 300px and height is 100px).

This div is bigger (width is also 300px and height is 100px).

If you set **box-sizing: border-box**; on an element, padding and border are included in the width and height:

```
.div1 {
  width: 300px;
  height: 100px;
  border: 1px solid blue;
  box-sizing: border-box;
}


.div2 {
  width: 300px;
  height: 100px;
  padding: 50px;
  border: 1px solid red;
  box-sizing: border-box;
}
```

Both divs are the same size now!

Hooray!

margin

Margins are used to create space around elements, outside of any defined borders.

CSS has properties for specifying the margin for each side of an element:
- margin-top
- margin-right
- margin-bottom
- margin-left

Margin - Shorthand Property

margin: 25px 50px 75px 100px;
- top margin is 25px
- right margin is 50px
- bottom margin is 75px
- left margin is 100px

margin: 25px 50px 75px;
- top margin is 25px
- right and left margins are 50px
- bottom margin is 75px

margin: 25px 50px;
- top and bottom margins are 25px
- right and left margins are 50px

You can set the margin property to **auto** to horizontally center the element within its container.

padding

Padding is used to create space around an element's content, inside of any defined borders.

The padding property is a shorthand property for the following individual padding properties:
- padding-top
- padding-right
- padding-bottom
- padding-left

Padding - Shorthand Property

padding: 25px 50px 75px 100px;
- ○ top padding is 25px
- ○ right padding is 50px
- ○ bottom padding is 75px
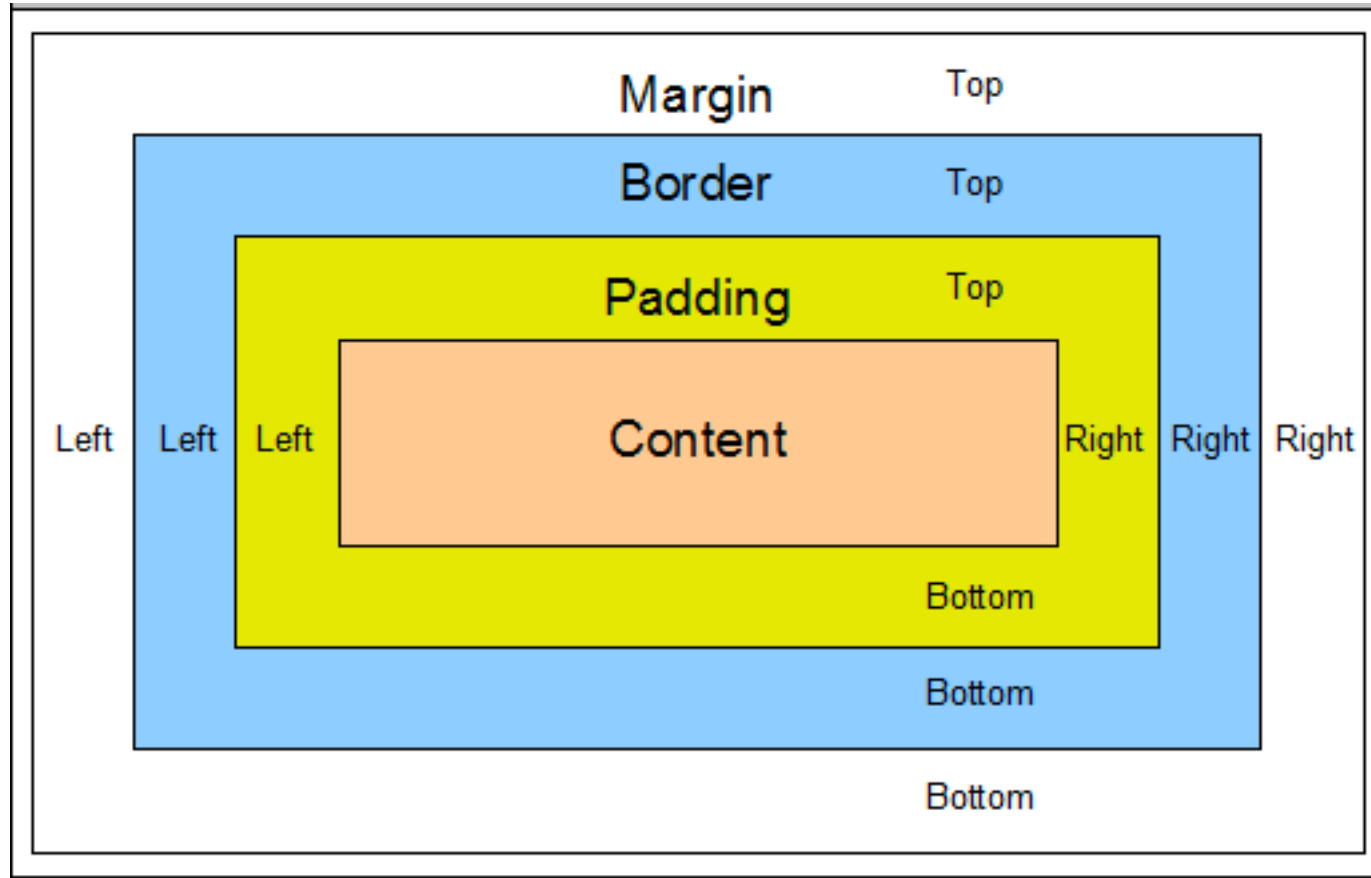- ○ left padding is 100px

padding: 25px 50px 75px;
- ○ top padding is 25px
- ○ right and left paddings are 50px
- ○ bottom padding is 75px

padding: 25px 50px;
- ○ top and bottom paddings are 25px
- ○ right and left paddings are 50px

To keep same **width**, no matter the amount of **padding**, you can use the **box-sizing** property. This causes the element to maintain its actual **width**.

margin vs. padding

display

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

inline	Displays an element as an inline element (like <span>). Any height and width properties will have no effect
block	Displays an element as a block element (like <p>). It starts on a new line, and takes up the whole width
inline-block	Displays an element as an inline-level block container. The element itself is formatted as an inline element, but you can apply height and width values
none	The element is completely removed