بسم الله الرحمن الرحیم

تکنولوژی کامپیوتر

جلسه‌ی نهم

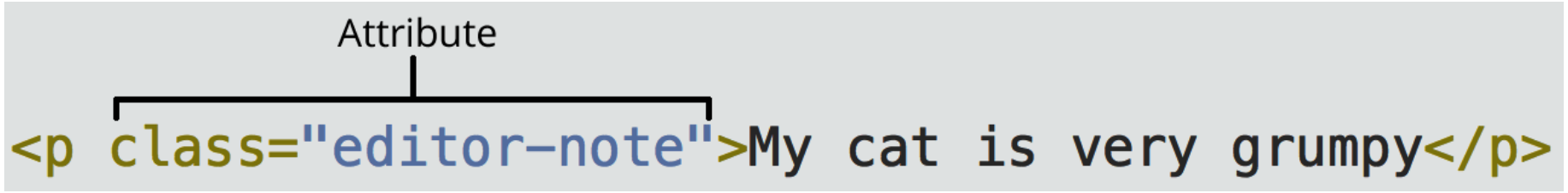
CSS بیشتر – راه‌اندازی یک وبلاگ

Original Images / Texts of this lecture: https://developer.mozilla.org/en-US/docs

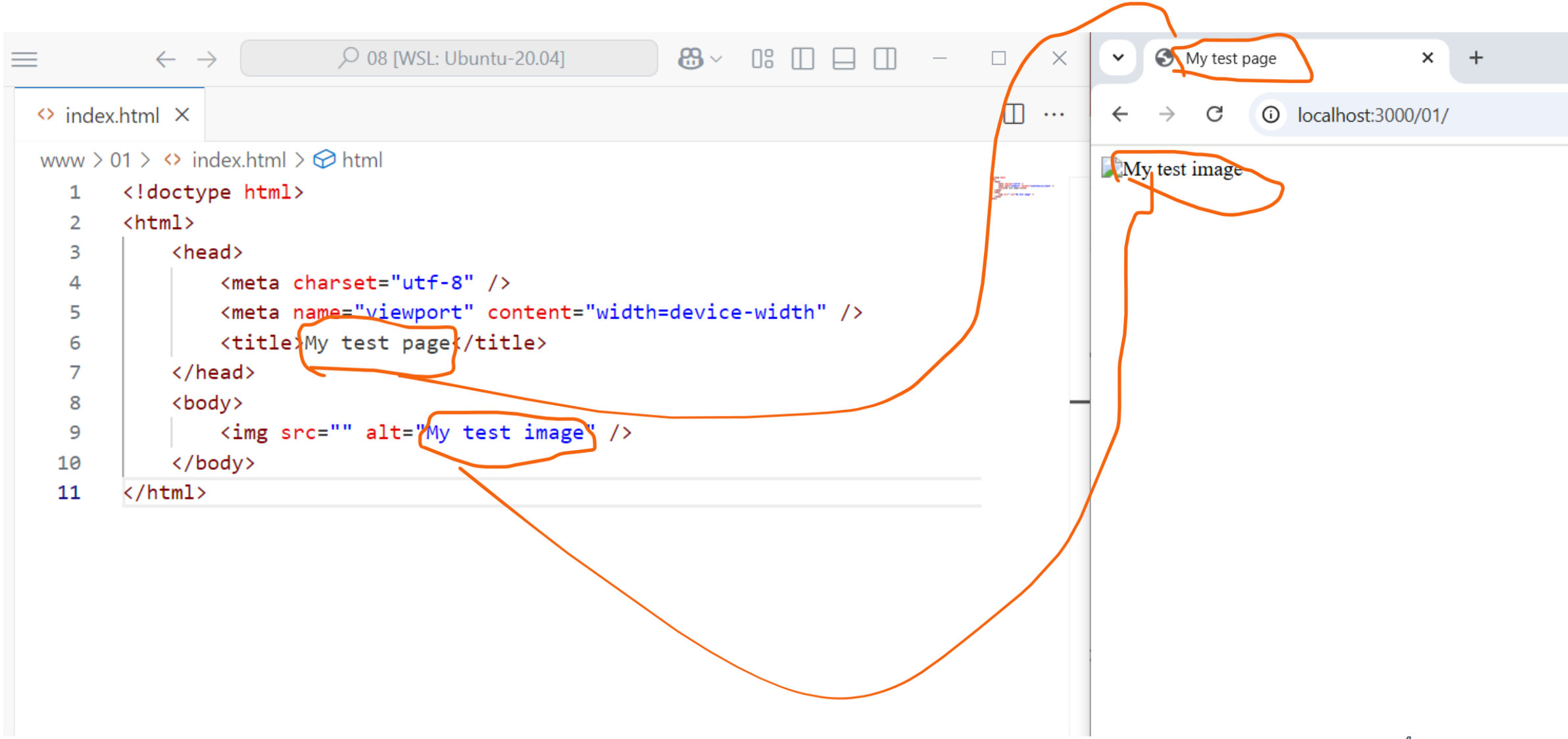
جلسه‌ی گذشته

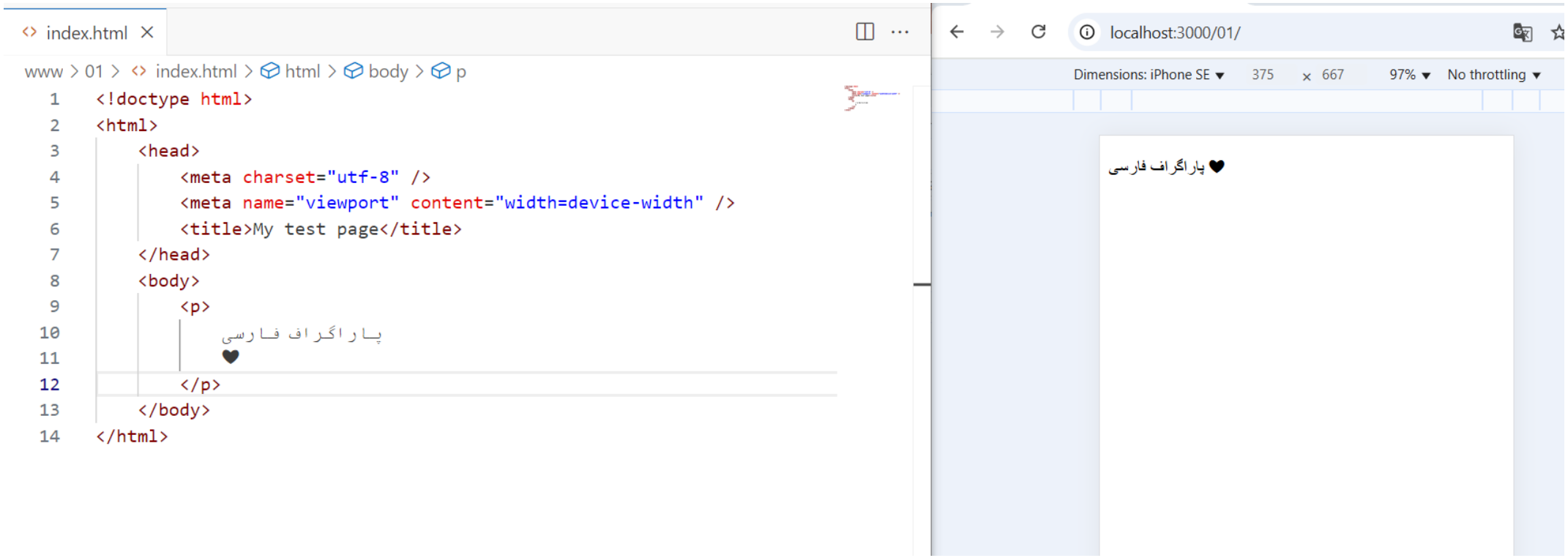
HTML و CSS

Anatomy of an HTML element



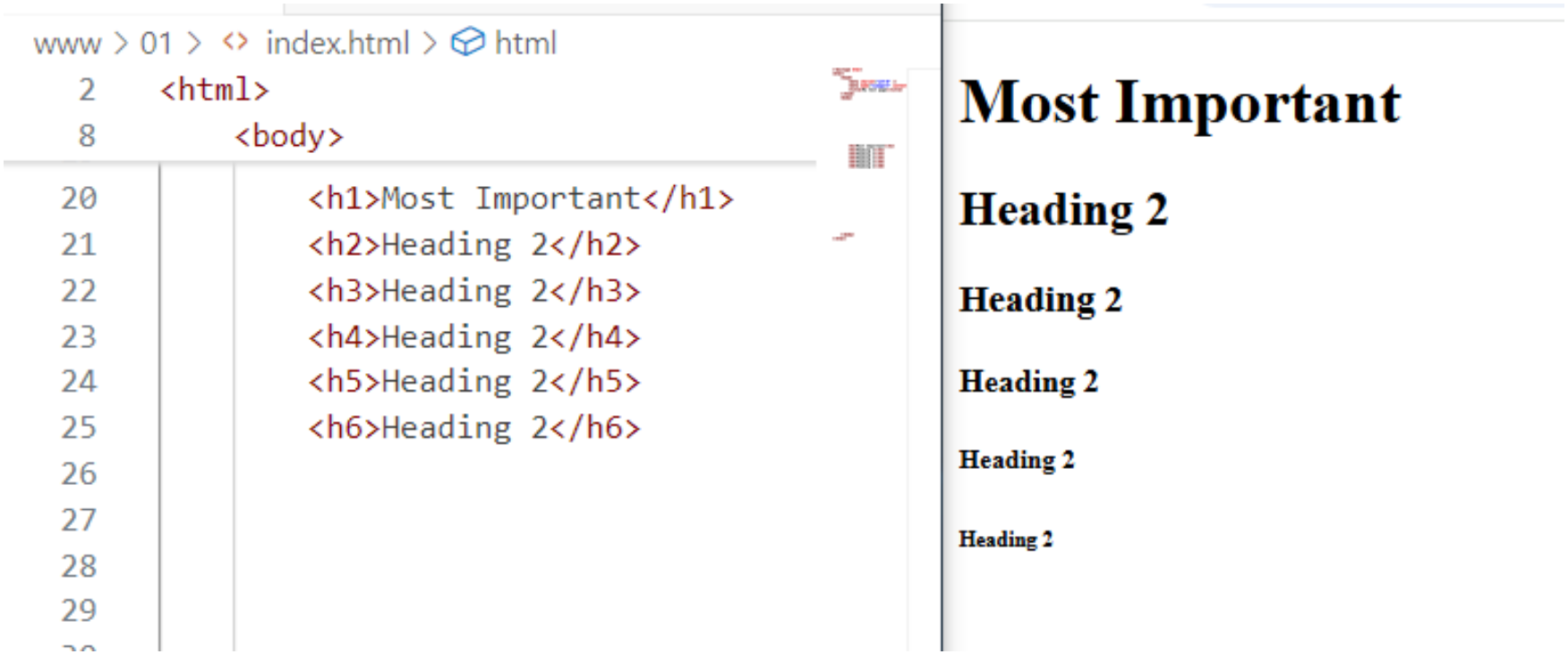
- Attributes that set a value always have:
  - *A space between it and the element name (or the previous attribute, if the element already has one or more attributes).*
  - *The attribute name followed by an equal sign.*
  - *The attribute value wrapped by opening and closing quotation marks.*


08 [WSL: Ubuntu-20.04]
index.html
www > 01 > index.html > html
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="utf-8" />
5 <meta name="viewport" content="width=device-width" />
6 <title>My test page</title>
7 </head>
8 <body>
9 <img src="" alt="My test image" />
10 </body>
11 </html>
My test page
localhost:3000/01/
My test image


index.html
www > 01 > index.html > html > body > p
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="utf-8" />
5 <meta name="viewport" content="width=device-width" />
6 <title>My test page</title>
7 </head>
8 <body>
9
10 پاراگراف فارسی
11 ♥
12
13 </body>
14 </html>
localhost:3000/01/
Dimensions: iPhone SE 375 × 667 97% No throttling
پاراگراف فارسی ♥

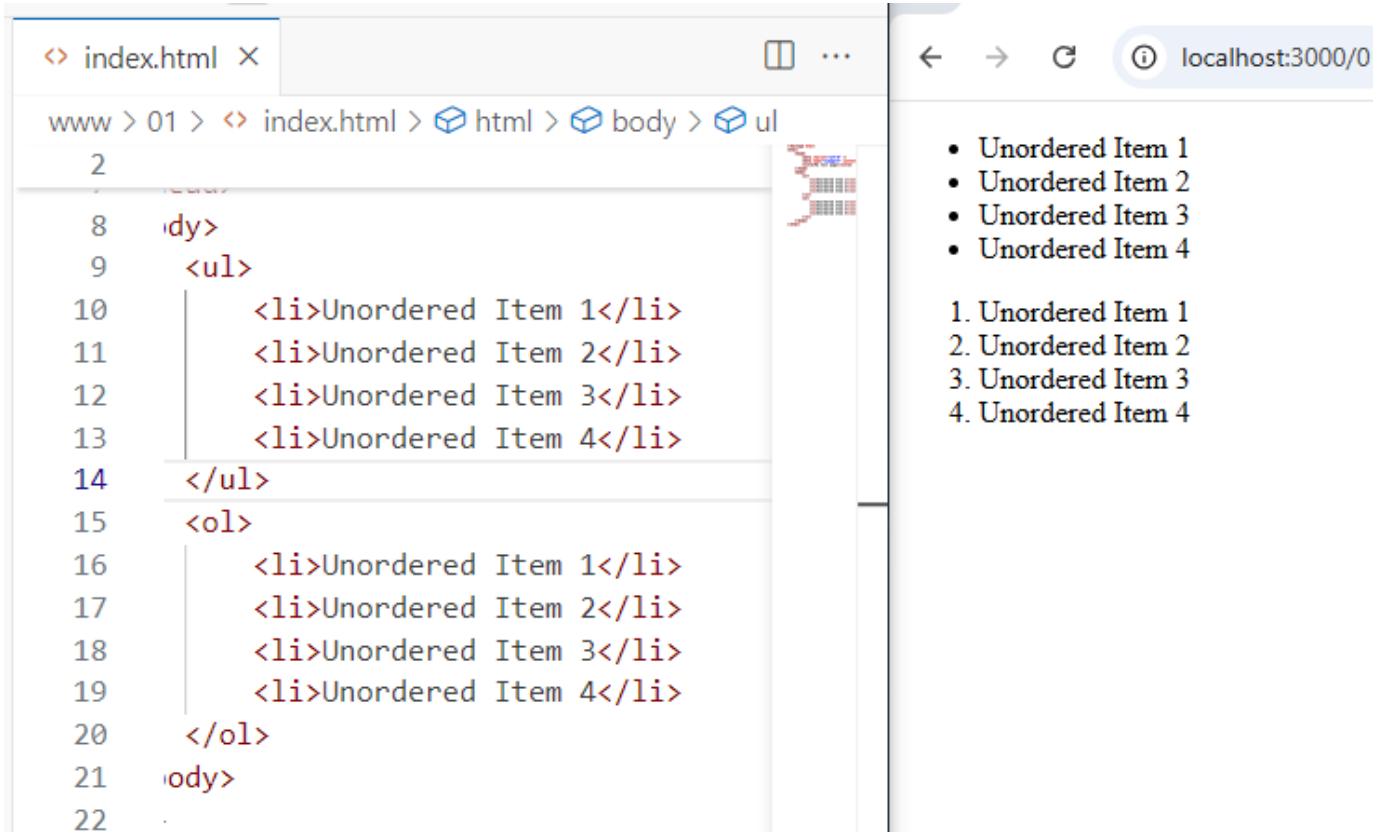
HTML Headings

- H1
- H2
- H3
- H4
- H5
- h6



Lists

- ul: unordered list
- ol: ordered list
- li:list item



Lists - nested

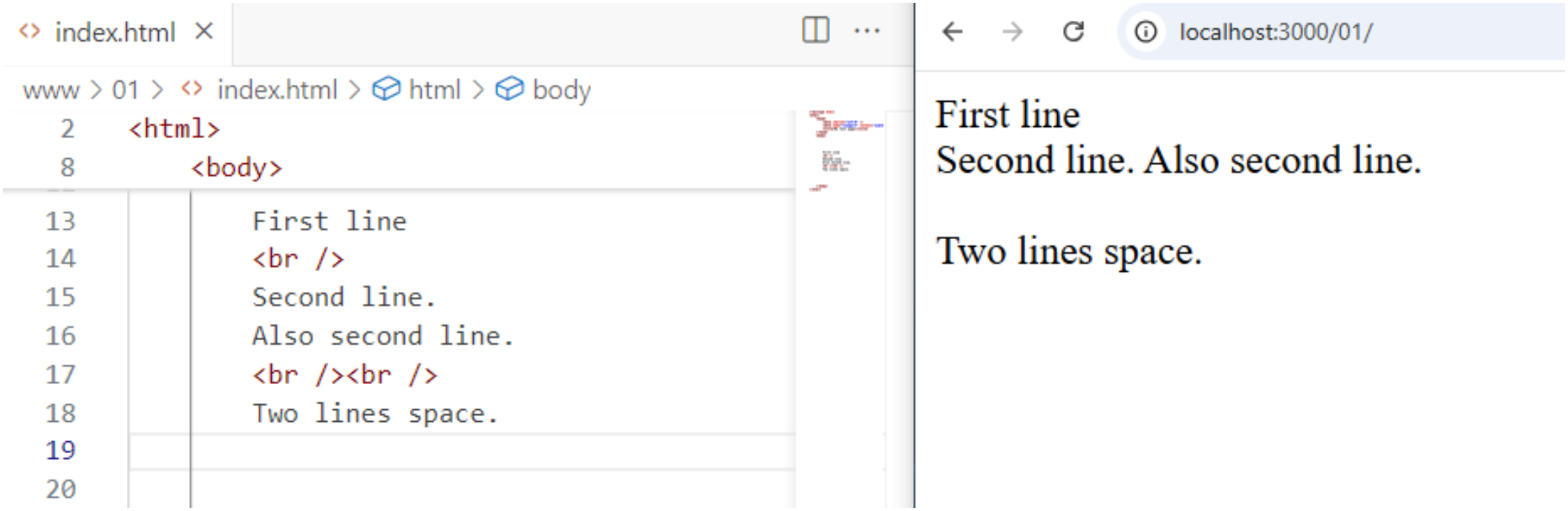
index.html

idex.html > html > body > ul > li > ul > li > ol > li

```
 2
 8   dy>
 9    <ul>
10        <li>Unordered Item 1</li>
11        <li>Unordered Item 2
12            <ul>
13                <li>Sub Item</li>
14                <li>Sub Item
15                    <ol>
16                        <li>Item 1</li>
17                        <li>Item 2</li>
18                    </ol>
19                </li>
20            </ul>
21        </li>
22        <li>Unordered Item 3</li>
23        <li>Unordered Item 4</li>
24    </ul>
25  ody>
26
```

localhost:3000/01/

- Unordered Item 1
- Unordered Item 2
  - Sub Item
  - Sub Item
    1. Item 1
    2. Item 2
- Unordered Item 3
- Unordered Item 4


index.html
www > 01 > index.html > html > body
2 <html>
8 <body>
13 First line
14
15 Second line.
16 Also second line.
17

18 Two lines space.
19
20
localhost:3000/01/
First line
Second line. Also second line.
Two lines space.

Links

- a tag
- Attributes
  - *href*
    - Relative
      - *From root*
    - Absolute
    - Email links
  - *title*
  - *target="_blank"*

Images

```
<img
  src="images/dinosaur.jpg"
  alt="The head and torso of a dinosaur skeleton;
          it has a large head with long sharp teeth"
  width="400"
  height="341"
  title="A T-Rex on display in the Manchester University Museum" />
```

CSS

Styling

- style-name: style-value
- separated with ;
- font-size:30px;color:red

Styling

- html style attribute: inline styling
- Styling with css selector

CSS Text Styling

CSS Selectors

- Type selector
- Class selector
- ID Selector
- Type and class selector
- Multiple selectors with comma
- Universal selector *

CSS Selectors

- Descendant combinator (space)
  - *The descendant combinator — typically represented by a single space (" ") character — combines two selectors such that elements matched by the second selector are selected if they have an ancestor (parent, parent's parent, parent's parent's parent, etc.) element matching the first selector. Selectors that utilize a descendant combinator are called descendant selectors.*

CSS Selectors

- Child combinator >
  - *The child combinator (>) is placed between two CSS selectors. It matches only those elements matched by the second selector that are the direct children of elements matched by the first.*

CSS Selectors

- Next-sibling combinator +
  - *The next-sibling combinator (+) separates two selectors and matches the second element only if it immediately follows the first element, and both are children of the same parent element.*
- Subsequent-sibling combinator ~
  - *The subsequent-sibling combinator (~, a tilde) separates two selectors and matches all instances of the second element that follow the first element (not necessarily immediately) and share the same parent element.*

CSS Attribute Selectors

Selector	Example	Description
`[*attr*]`	`a[title]`	Matches elements with an *attr* attribute (whose name is the value in square brackets).
`[*attr*=*value*]`	`a[href="https://example.com"]`	Matches elements with an *attr* attribute whose value is exactly *value* — the string inside the quotes.
`[*attr*~=*value*]`	`p[class~="special"]`	Matches elements with an *attr* attribute whose value is exactly *value*, or contains *value* in its (space-separated) list of values.
`[*attr*|=*value*]`	`div[lang|="zh"]`	Matches elements with an *attr* attribute whose value is exactly *value* or begins with *value* immediately followed by a hyphen.

CSS Attribute Selectors

Selector	Example	Description
`[attr^=value]`	`li[class^="box-"]`	Matches elements with an *attr* attribute, whose value begins with *value*.
`[attr$=value]`	`li[class$="-box"]`	Matches elements with an *attr* attribute whose value ends with *value*.
`[attr*=value]`	`li[class*="box"]`	Matches elements with an *attr* attribute whose value contains *value* anywhere within the string.

جلسه‌ی جدید

روش‌های اضافه‌کردن cssبه سند

- نوشتن inline با استفاده از attributeِ style
- استفاده از تگِ style
- استفاده از تگِ link برای استایل خارجی

Styling HTML elements

Styling based on Class

Styling based on Location in a document

Styling based on state

استایل دهی‌های کلی

Font-family

- The font-family property specifies a list of fonts, from highest priority to lowest. Font selection does not stop at the first font in the list that is on the user's system. Rather, font selection is done one character at a time.

```
/* A font family name and a generic family name */
font-family: "Gill Sans Extrabold", sans-serif;
font-family: "Goudy Bookletter 1911", sans-serif;

/* A generic family name only */
font-family: serif;
font-family: sans-serif;
font-family: monospace;
```

Font-size

```
/* <absolute-size> values */
font-size: xx-small;
font-size: x-small;
font-size: small;
font-size: medium;
font-size: large;
font-size: x-large;
font-size: xx-large;
font-size: xxx-large;
```

```
/* <relative-size> values */
font-size: smaller;
font-size: larger;
/* <length> values */
font-size: 12px;
font-size: 0.8em;
```

```
/* <percentage> values */
font-size: 80%;
```

Color

```
color: rebeccapurple;
color: #00a400;
color: rgb(214, 122, 127);
color: hsl(30deg 82% 43%);
color: hsla(237deg 74% 33% / 61%);
color: hwb(152deg 0% 58% / 70%);
```

Border-bottom-width, border-bottom-style, border-bottom-color

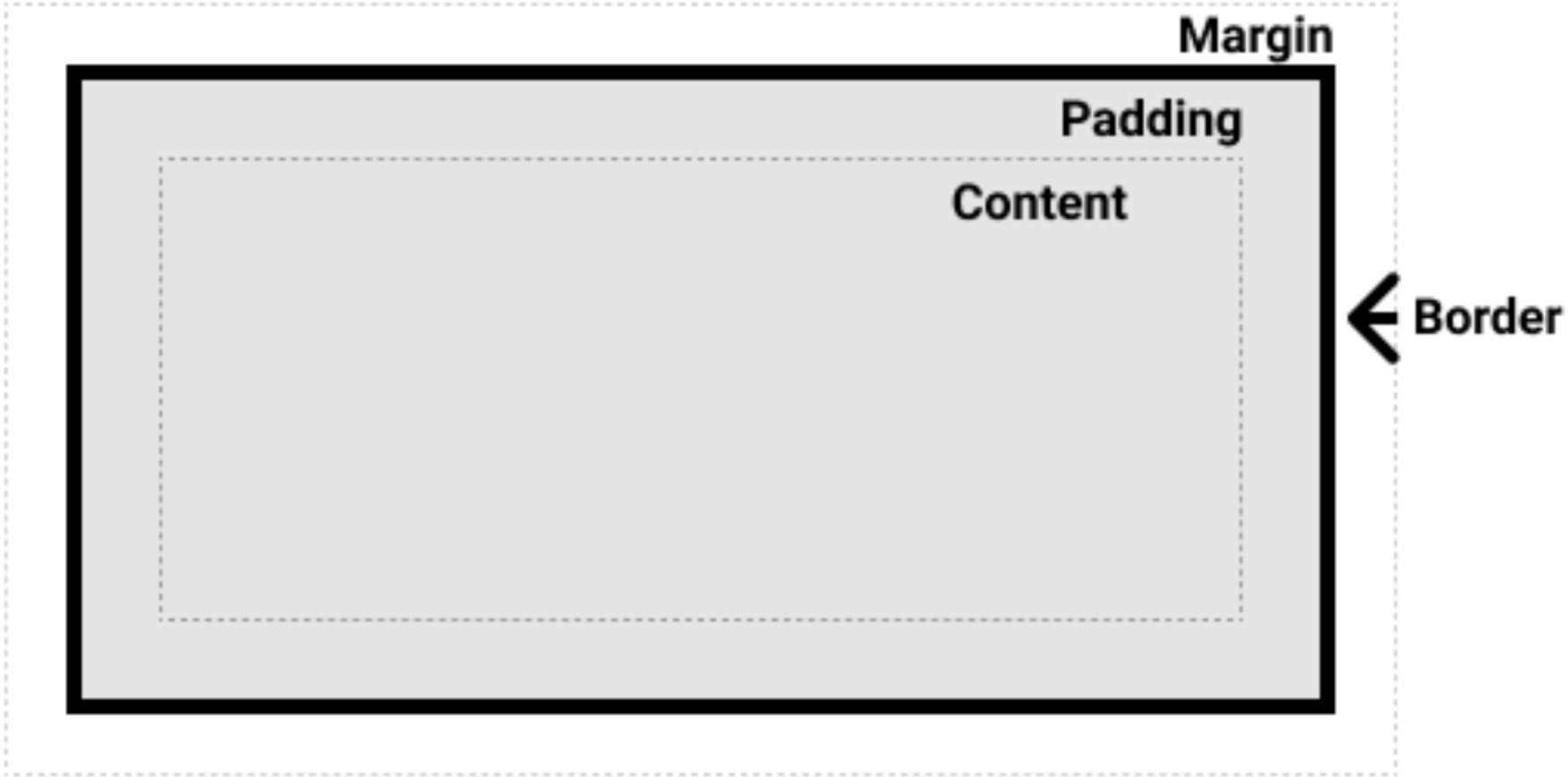
- Border-bottom shorthand
- Border shorthand

Border-radius

Background

- Background-color
- Background-image
- Background-repeat
- Background-shorthand

CSS Box Model



CSS Box Model

- Width
- height
- margin
- padding
- Border
- Box-sizing

Handling Conflicts

- More in: https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/Styling_basics/Handling_conflicts

CSS Display

- Outer displays (none, inline, inline-block, block)
- Inner displays (flex, …)

CSS Layout

- Float: https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/CSS_layout/Floats
- Position: https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/CSS_layout/Positioning
- Flexbox: https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/CSS_layout/Flexbox
- Grid layout: https://developer.mozilla.org/en-US/docs/Learn_web_development/Core/CSS_layout/Grids

Other CSS syntax features

- Functions
  - *width: calc(90% - 30px)*
  - *Transform functions:*
    - transform: rotate(0.8turn);
- @rules
- Shorthand properties

Responsive Web Design

- @rules
- Media queries:

```
html {
  font-size: 1em;
}

h1 {
  font-size: 2rem;
}

@media (min-width: 1200px) {
  h1 {
    font-size: 4rem;
  }
}
```

TEMPLATE

DATABASE