



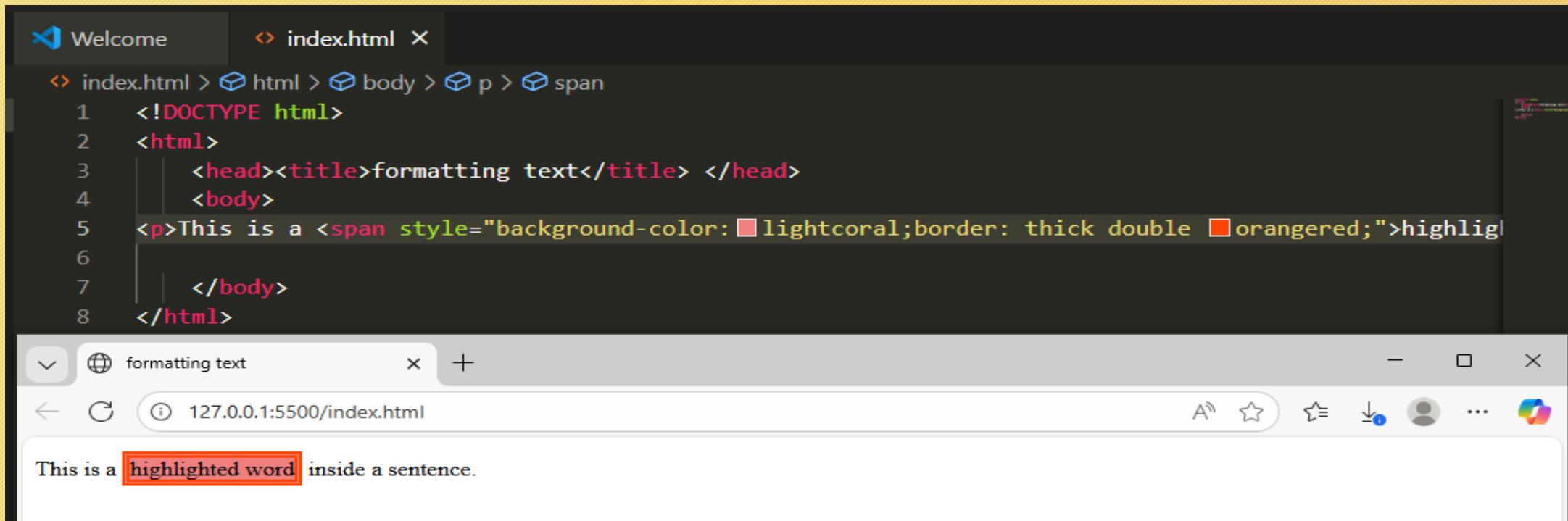
# Web programming I

Section 3

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# <span>

- The **<span>** tag is an **inline container** used to mark a **specific part of text** so you can style or manipulate it with **CSS** or **JavaScript**.

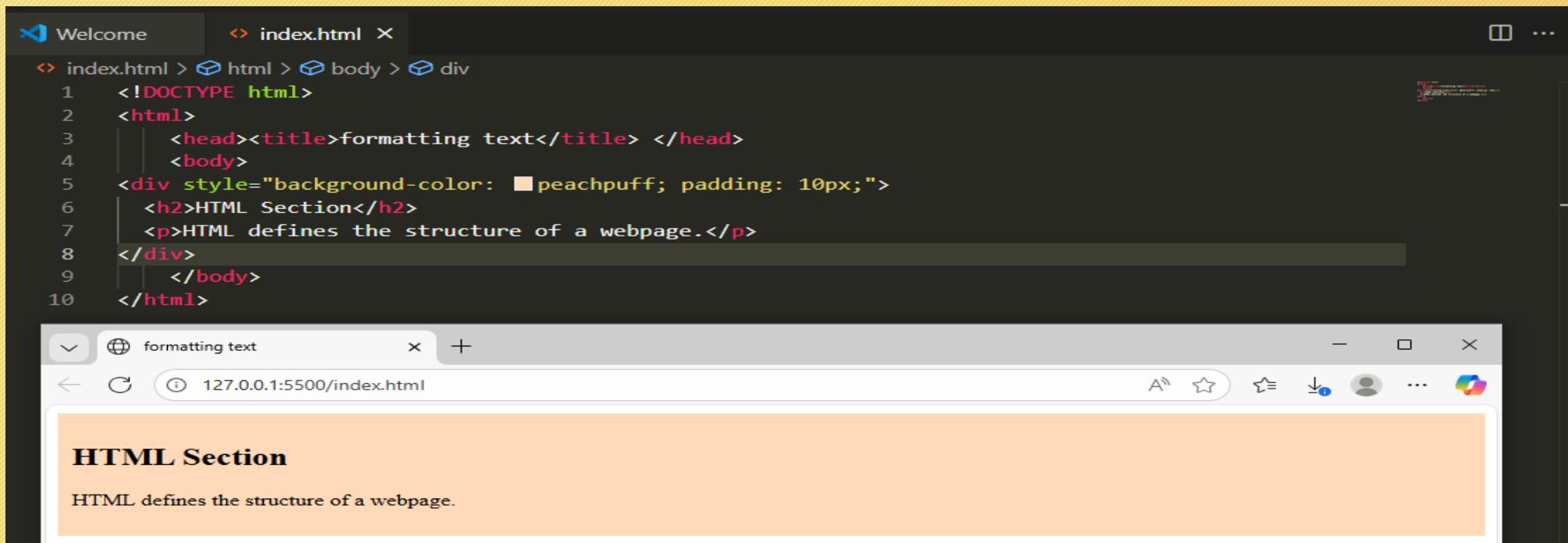


A screenshot of a web browser window showing the output of the provided HTML code. The browser's address bar shows the URL `127.0.0.1:5500/index.html`. The page content displays the text "This is a highlighted word inside a sentence." where the phrase "highlighted word" is enclosed in a red rectangular box.

```
index.html > html > body > p > span
1  <!DOCTYPE html>
2  <html>
3    <head><title>formatting text</title> </head>
4    <body>
5      <p>This is a <span style="background-color: lightcoral; border: thick double orange;">highlighted word</span> inside a sentence.</p>
6    </body>
7  </html>
```

# <div>

- The `<div>` tag in HTML stands for “division”. It’s a **block-level element** used to **group** other HTML elements together into sections.

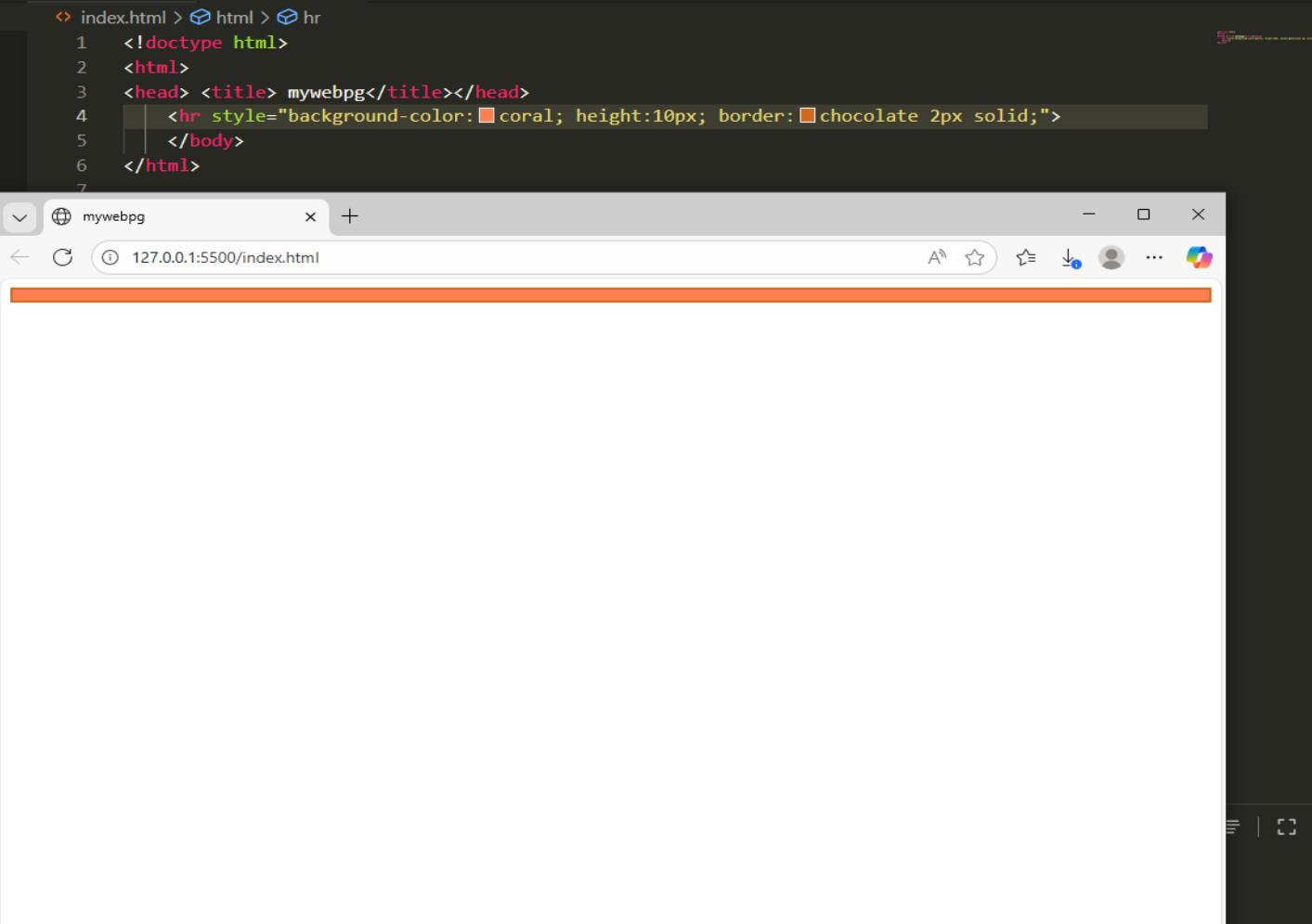


The image shows a code editor window and a web browser window side-by-side. The code editor displays the file `index.html` with the following content:

```
1  <!DOCTYPE html>
2  <html>
3  |   <head><title>formatting text</title> </head>
4  |   <body>
5  |       <div style="background-color: #peachpuff; padding: 10px;">
6  |           <h2>HTML Section</h2>
7  |           <p>HTML defines the structure of a webpage.</p>
8  |       </div>
9  |   </body>
10 </html>
```

The browser window shows the rendered HTML. The title is "formatting text". The page content includes an orange header with the text "HTML Section" and a paragraph below it stating "HTML defines the structure of a webpage."

# <hr> style



A screenshot of a web browser window titled "mywebpg". The address bar shows the URL "127.0.0.1:5500/index.html". The browser displays a single orange horizontal bar at the top of the page. Above the browser window, a code editor shows the HTML file "index.html" with the following content:

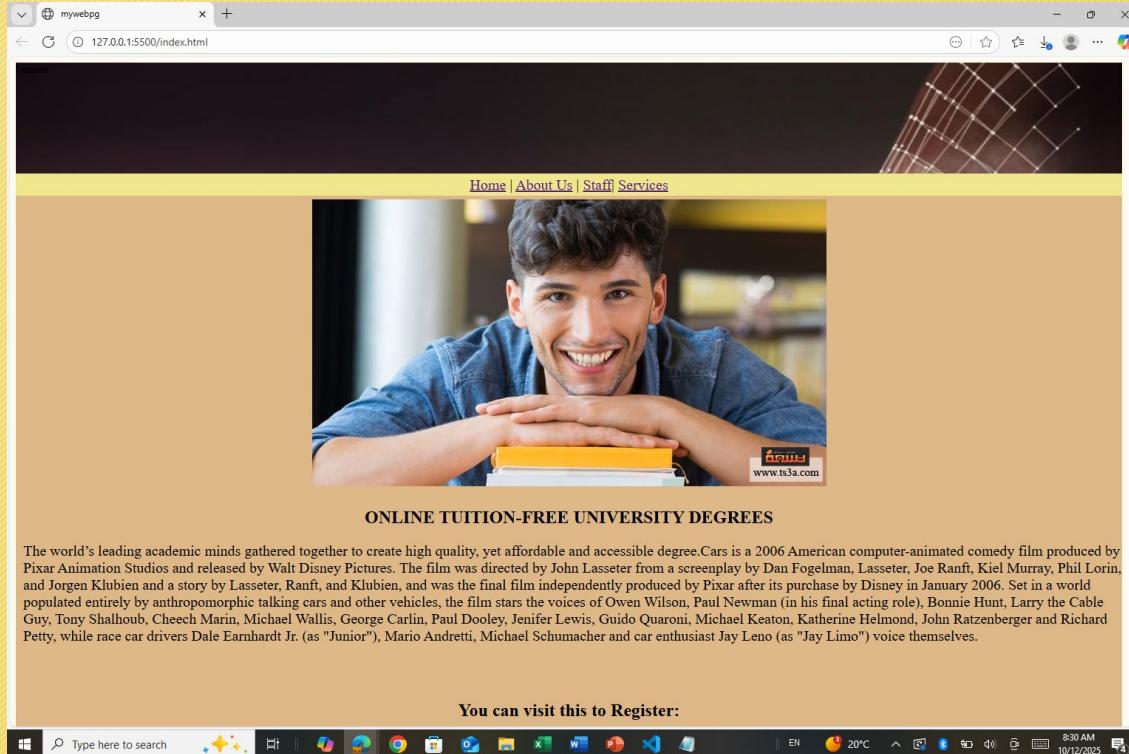
```
index.html > html > hr
1  <!doctype html>
2  <html>
3  <head> <title> mywebpg</title></head>
4  |   <hr style="background-color: coral; height:10px; border: chocolate 2px solid;">
5  |   </body>
6  </html>
7
```

The fourth line of the code defines an 

---

 element with a style attribute that sets the background color to coral, the height to 10px, and the border to a 2px solid chocolate color.

# EX



```
<> index.html > ...
1  <!doctype html>
2  <html>
3  <head> <title> mywebpg</title></head>
4  <body style="background-color: #floralwhite">
5  <div style="background-image:url(55.jpeg);background-size:100% ;width:100%;height:150px;border-
6  <div style="background-color: #khaki;background-size:100% ;width:100%;height:30px; text-align:center">
7  <nav>
8  <a href="" >Home</a> | 
9  <a href="" >About Us</a> | 
10 <a href="" >Staff</a>| 
11 <a href="" >Services</a>
12 </nav>
13 </div>
14 <div style="background-color: #burlywood;width:100%;height:900px; text-align:center" >
15 <div style="align-content:center"> </div>
16 <article >
17 <h2>ONLINE TUITION-FREE UNIVERSITY DEGREES</h2>
18 <p style="font-size: 20px;direction:ltr;text-align:left;margin-left:10px ">The world's lead
19 </article>
20 <br><br>
21 <section>
22 <h2> You can visit this to Register:</h2>
23 <a href="" style="font-size:18px " > Http://www.gioschool.com</a>
24 </section>
25 </div>
26 <div style="background-color: #brown;width:100%;height:40px; text-align:center;font-size:18px;">
27 </body>
28 </html>
```

# Forms

- used to collect user input
- They can include various types of controls like text fields, radio buttons, checkboxes, and submit buttons.
- The user input is most often sent to a server for processing

# <Form> element syntax

<input> element can be displayed in many ways depending on the type attribute

```
<form>
```

```
.
```

```
form elements
```

```
.
```

```
</form>
```

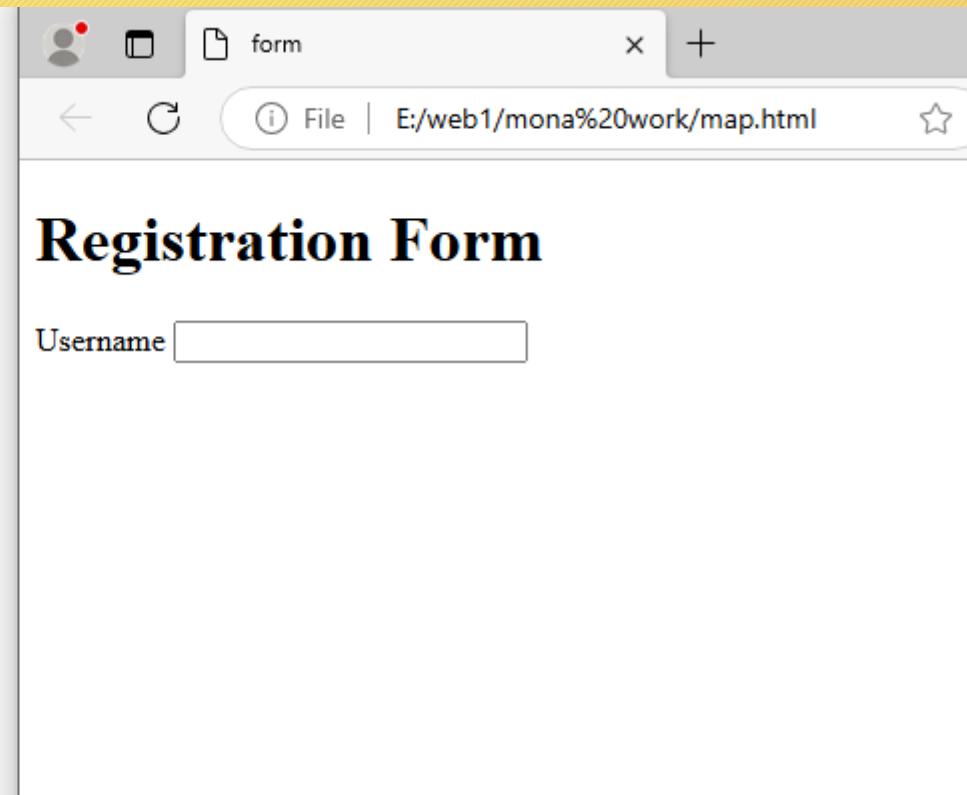
# Form Attributes

Attribute	Value	Description
<u>action</u>	<i>URL</i>	Specifies where to send the form-data when a form is submitted
<u>method</u>	<i>get</i> <i>post</i>	Specifies how to send form-data
<u>name</u>	<i>name</i>	Specifies the name for a form
<u>target</u>	<i>_blank</i> <i>_self</i> <i>_parent</i>	Deprecated. Specifies where to open the action URL

# Label

- is used to define labels for form controls.

```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5
6  <h1>Registration Form</h1>
7  <form >
8      <label>Username</label>
9      <input>
10
11 </form>
12
13 </body>
14
15
16
17 </html>
```



# HTML Input Types

<input type="button">

Button

<input type="checkbox">



<input type="color">



<input type="date">

dd-mm-yyyy 

<input type="email">

farazc60@gmail.com

<input type="file">

Choose File No file chosen

<input type="hidden">



<input type="image">

5 

<input type="number">

••••••••••

<input type="password">



<input type="radio">



<input type="range">

Reset

<input type="reset">

Submit

<input type="submit">

codewithfaraz

<input type="text">

<https://www.codewithfaraz.com>

<input type="url">

# Text Fields

- `<input type="text">` defines a single-line input field for text input.

```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <h1>Registration Form</h1>
6  <form >
7    First name:<br>
8    <input type="text" value="">
9    <br>
10   Last name:<br>
11   <input type="text" name="" value="Mouse">
12 </form>
13
14 </body>
15
16 </html>
```

The screenshot shows a web browser window titled "form". The address bar indicates the file is located at "E:/web1/mona%20work/map.htm...". The main content area displays a "Registration Form" with two text input fields. The first field is labeled "First name:" and is empty. The second field is labeled "Last name:" and contains the value "Mouse".

# For Attribute in label

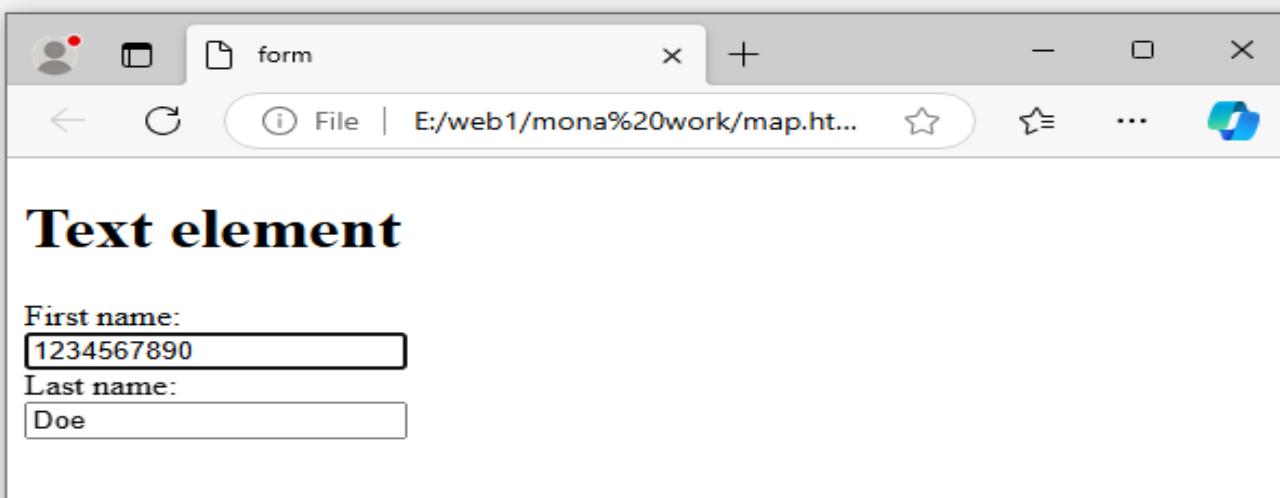
- for: Associates the label with a specific form control. The value should match the id of the input element.

## Registration Form

Username:  Email:  Password:  Register

# Text element ex 2

```
1 <!doctype html>
2 ▼ <html>
3   <head><title> form</title></head>
4 ▼   <body>
5     <h1>Text element</h1>
6     <form>
7       <label for="fname">First name:</label><br>
8       <input type="text" id="fname" placeholder="type your first name" maxlength="10"><br>
9       <label for="lname">Last name:</label><br>
10      <input type="text" id="lname" value="Doe">
11    </form>
12  </body>
13
14 </html>
```



# Submit button

- The `<input type="submit">` defines a button for submitting the form data to a form-handler.
- The form-handler is typically a file on the server with a script for processing input data.
- The form-handler is specified in the form's action attribute

# The Submit Button

```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <form>
6      <label for="fname">First name:</label><br>
7      <input type="text" id="fname"><br>
8      <label for="lname">Last name:</label><br>
9      <input type="text" id="lname"><br><br>
10     <input type="submit" value="Submit">
11 </form>
12 </body>
13 </html>
```

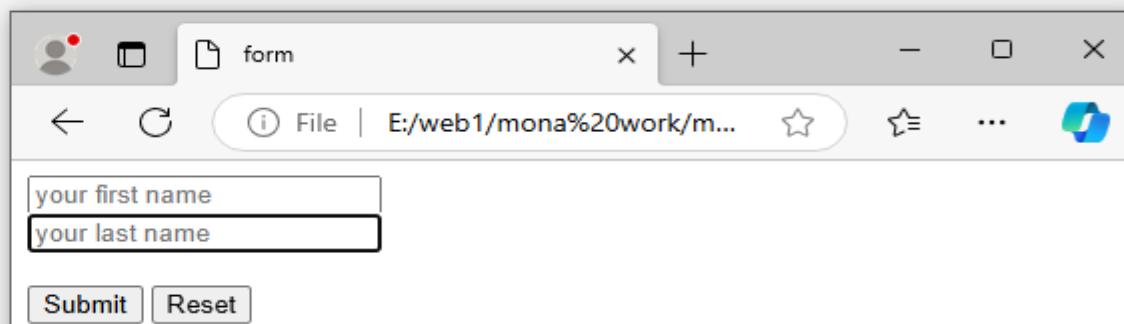
A screenshot of a web browser window titled "form". The address bar shows the URL "E:/web1/mona%20work/m...". The page contains a form with the following elements:

- A label "First name:" followed by a text input field.
- A label "Last name:" followed by a text input field.
- A "Submit" button.

# reset buttons

- <input type="reset">: defines a **reset button** that will reset all form values to their default values:

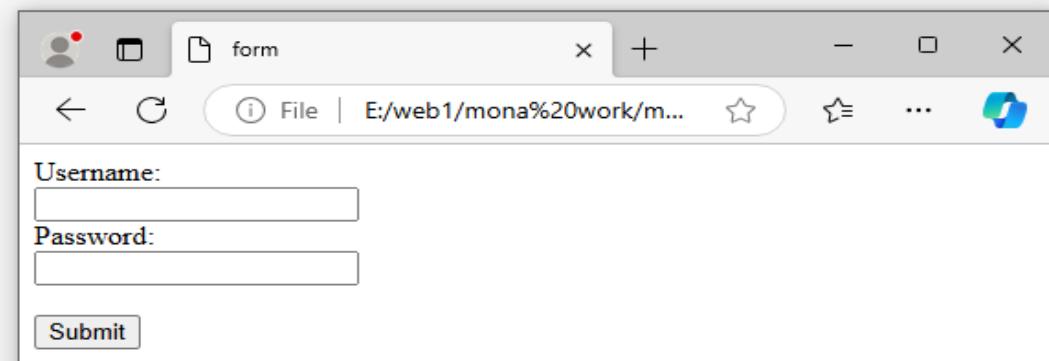
```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <form>
6      <input type="text" id="fname" name="fname" placeholder="your first name"><br>
7      <input type="text" id="lname" name="lname" placeholder="your last name"><br><br>
8      <input type="submit" value="Submit">
9      <input type="reset" value="Reset">
10 </form>
11 </body>
12 </html>
```



# Input Type Password

- `<input type="password">` defines a **password field**

```
1  <!doctype html>
2 ▼ <html>
3   <head><title> form</title></head>
4 ▼ <body>
5 ▼ <form>
6     <label for="username">Username:</label><br>
7     <input type="text" id="username" name="username"><br>
8     <label for="pwd">Password:</label><br>
9     <input type="password" id="pwd" name="pwd"><br><br>
10    <input type="submit" value="Submit">
11  </form>
12 </body>
13 </html>
```

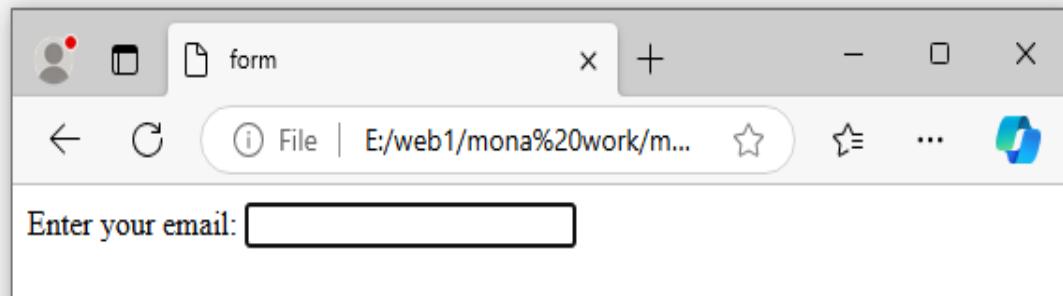


# Input Type Email

- The `<input type="email">` is used for input fields that should contain an e-mail address.
- Depending on browser support, the e-mail address can be automatically validated when submitted.
- Some smartphones recognize the email type, and add ".com" to the keyboard to match email input

# Email

```
1 <!doctype html>
2 ▼ <html>
3   <head><title> form</title></head>
4 ▼   <body>
5 ▼     <form>
6       <label for="email">Enter your email:</label>
7       <input type="email" id="email" name="email">
8     </form>
9   </body>
10  </html>
```



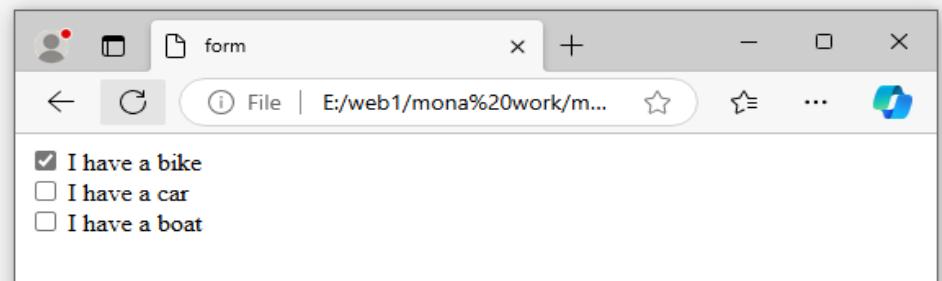
# Html code

```
1  <!doctype html>
2 ▼ <html>
3  <head><title> form</title></head>
4 ▼ <body>
5  <h1>Registration Form</h1>
6 ▼ <form action="/submit" method="POST">
7      <label for="username">Username:</label>
8      <input type="text" id="username" name="username" required>
9
10     <label for="email">Email:</label>
11     <input type="email" id="email" name="email" required>
12
13     <label for="password">Password:</label>
14     <input type="password" id="password" name="password" required>
15
16     <input type="submit" value="Register">
17 </form>
18
19 </body>
20
21 </html>
```

# Checkbox Buttons

- The `<input type="checkbox">` defines a **checkbox**.
- Checkboxes let a user select ZERO or MORE options of a limited number of choices

```
1  <!doctype html>
2 ▼ <html>
3   <head><title> form</title></head>
4 ▼ <body>
5 ▼ <form>
6   <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike" checked>
7   <label for="vehicle1"> I have a bike</label><br>
8   <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">
9   <label for="vehicle2"> I have a car</label><br>
10  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">
11  <label for="vehicle3"> I have a boat</label>
12 </form>
13 </body>
14 </html>
```



## example2

```
<!DOCTYPE html>
<html>
<body>
<p>What type of music do you listen to?</p>
<ul>
  <li><input type="checkbox" name="genre" value="punk" checked> Punk
rock</li>
  <li><input type="checkbox" name="genre" value="indie" checked> Indie
rock</li>
  <li><input type="checkbox" name="genre" value="hiphop"> Hip Hop</li>
  <li><input type="checkbox" name="genre" value="rockabilly">
Rockabilly</li>
</ul>

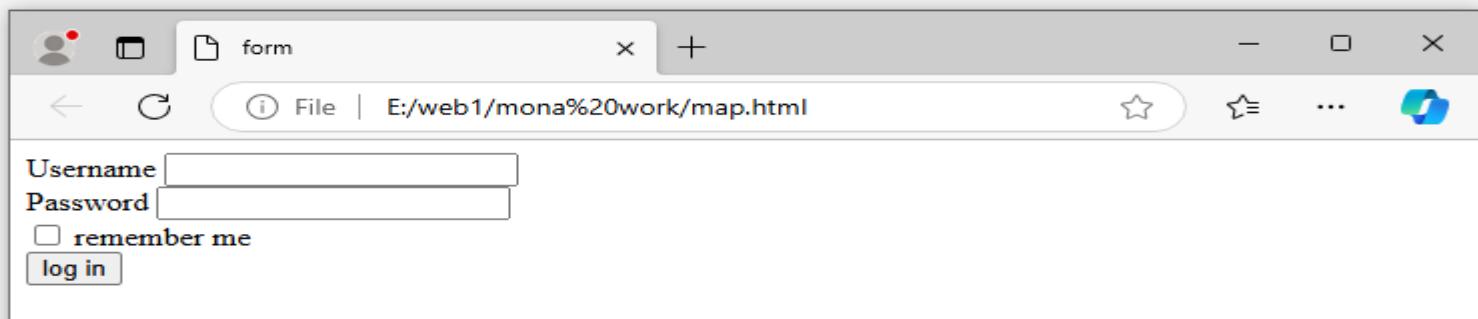
</body>
</html>
```

What type of music do you listen to?

- Punk rock
- Indie rock
- Hip Hop
- Rockabilly

# Example

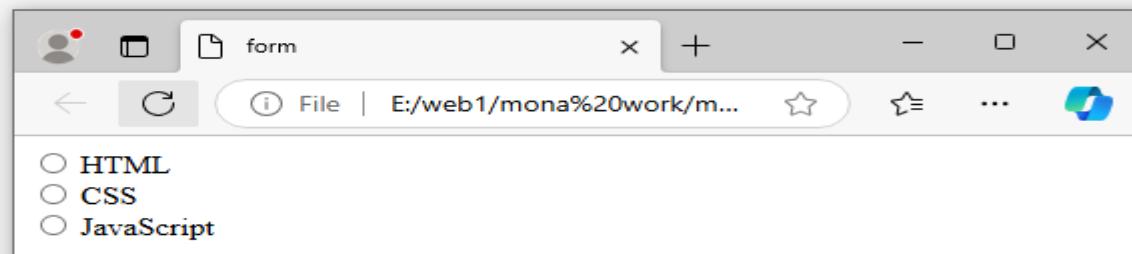
```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <form>
6      <label for="name"> Username</label>
7      <input type="text" id="name" name="name">
8
9      <br>
10     <label for="password"> Password</label>
11     <input type="password" id="password" name="password">
12
13     <br>
14     <input type="checkbox">
15     <label>remember me</label>
16     <br>
17     <input type="submit" value="log in">
18     <br>
19 </form>
20 </body>
21 </html>
```



# Radio Buttons

- The `<input type="radio">` defines a radio button.
- Radio buttons let a user select ONE of a limited number of choices

```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <form>
6      <input type="radio" id="html" name="fav_language" value="HTML">
7      <label for="html">HTML</label><br>
8      <input type="radio" id="css" name="fav_language" value="CSS">
9      <label for="css">CSS</label><br>
10     <input type="radio" id="javascript" name="fav_language" value="JavaScript">
11     <label for="javascript">JavaScript</label>
12 </form>
13 </body>
14 </html>
```



# Radio button

```
<!DOCTYPE html>
<html>
<body>
|
<h1>The form element</h1>

<p>How old are you?</p>
<ol>
  <li><input type="radio" name="age" value="under24" checked> under
24</li>
  <li><input type="radio" name="age" value="25-34"> 25 to 34</li>
  <li><input type="radio" name="age" value="35-44"> 35 to 44</li>
  <li><input type="radio" name="age" value="over45"> 45+</li>
</ol>
</body>
</html>
```

## The form element

How old are you?

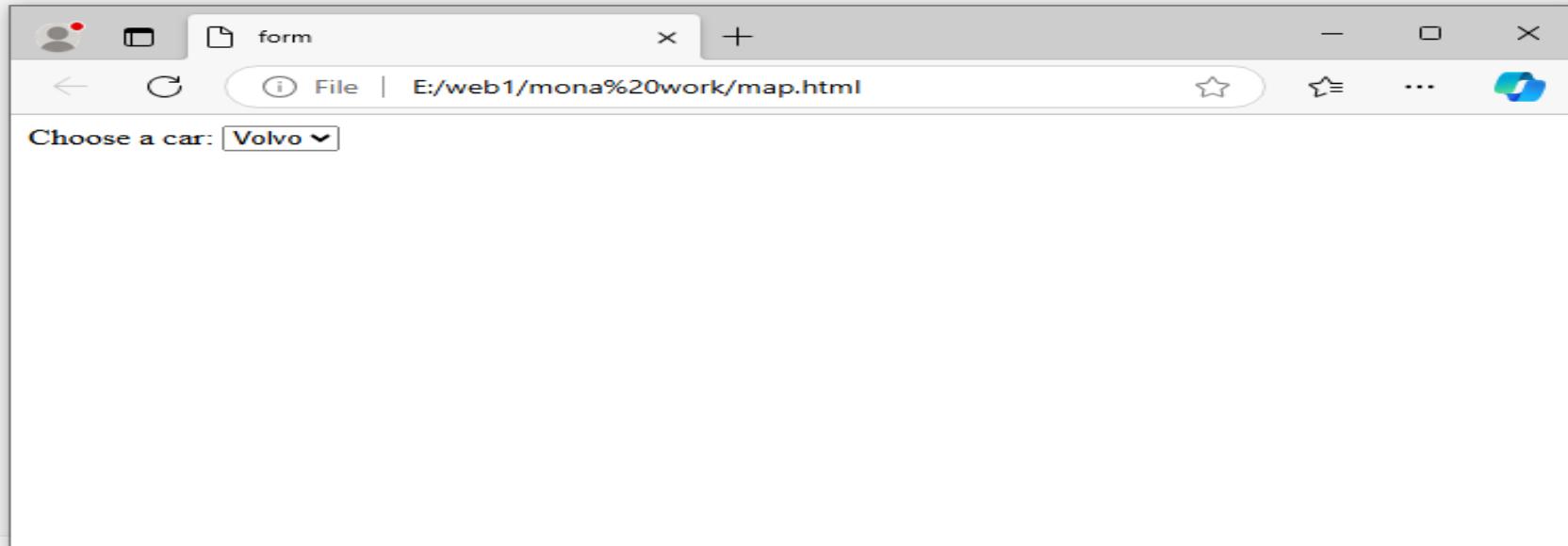
- under 24
- 25 to 34
- 35 to 44
- 45+

# The select Element(drop down menus

- The `<select>` element defines a drop-down list:
- The `<option>` element defines an option that can be selected
- Use the `size` attribute to specify the number of visible values
- Use the `multiple` attribute to allow the user to select more than one value:

# The select Element(drop down menus example)

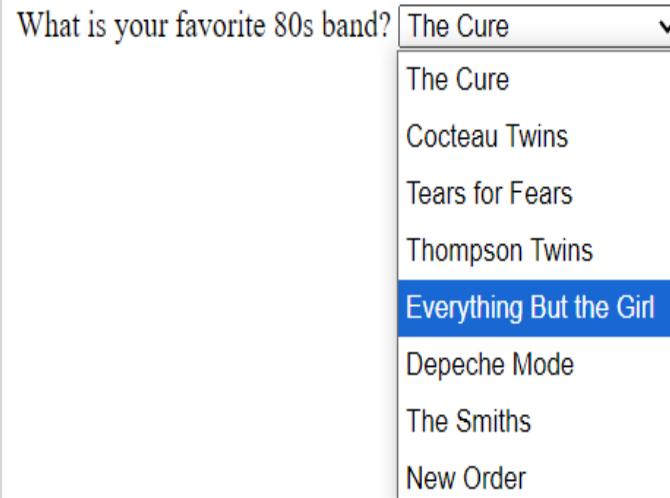
```
1  <!doctype html>
2  <html>
3  <head><title> form</title></head>
4  <body>
5  <form>
6  <label for="cars">Choose a car:</label>
7  <select id="cars" name="cars">
8  <option value="volvo">Volvo</option>
9  <option value="saab">Saab</option>
10 <option value="fiat">Fiat</option>
11 <option value="audi">Audi</option>
12 </select>
13 </form>
14 </body>
15 </html>
```



# Example2

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<p>What is your favorite 80s band?
<select name="EightiesFave">
<option>The Cure</option>
<option>Cocteau Twins</option>
<option>Tears for Fears</option>
<option>Thompson Twins</option>
<option value="EBTG">Everything But the Girl</option>
<option>Depeche Mode</option>
<option>The Smiths</option>
<option>New Order</option>
</select>
</p>

</body>
</html>
```

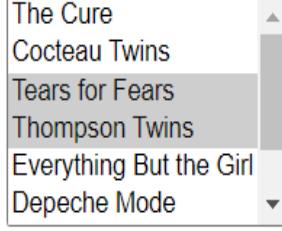


# Convert drop down menu to scroll menu

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<p>What 80s bands did you listen to?
<select name="EightiesBands" size="6" multiple>
<option>The Cure</option>
<option>Cocteau Twins</option>
<option selected>Tears for Fears</option>
<option selected>Thompson Twins</option>
<option value="EBTG">Everything But the Girl</option>
<option>Depeche Mode</option>
<option>The Smiths</option>
<option>New Order</option>
</select>
</p>

</body>
</html>
```

What 80s bands did you listen to?



The Cure  
Cocteau Twins  
Tears for Fears  
Thompson Twins  
Everything But the Girl  
Depeche Mode

# HTML SVG Graphics

## <Scalable Vector Graphics>

- What is the difference between pixel and vector?
- pixel: Composed of a grid of individual pixels, where each pixel represents a specific color. Common formats include JPEG, PNG, and GIF. When scaled up, these images can lose quality and appear blurry or pixelated.
- vector: Made up of paths defined by mathematical equations. These graphics are resolution-independent, meaning they can be scaled to any size without losing quality. Common formats include SVG, AI, and EPS.