

HTML & JavaScript: CheckBox, RadioButton, GroupBox, and Tag Explained

1 ■■■ Checkbox

A checkbox allows users to select one or more options from a list.

```
<input type="checkbox" id="apple" value="Apple"> Apple
<input type="checkbox" id="banana" value="Banana"> Banana
<input type="checkbox" id="cherry" value="Cherry"> Cherry

<button onclick="showSelected()">Show Selected</button>

<script>
function showSelected() {
    const fruits = [];
    if (document.getElementById("apple").checked) fruits.push("Apple");
    if (document.getElementById("banana").checked) fruits.push("Banana");
    if (document.getElementById("cherry").checked) fruits.push("Cherry");
    alert("Selected: " + fruits.join(", "));
}
</script>
```

2 ■■■ RadioButton

A radio button allows users to select only one option from a group.

```
<input type="radio" name="gender" id="male" value="Male"> Male
<input type="radio" name="gender" id="female" value="Female"> Female

<button onclick="showGender()">Submit</button>

<script>
function showGender() {
    const male = document.getElementById("male");
    const female = document.getElementById("female");

    if (male.checked) alert("You selected: Male");
    else if (female.checked) alert("You selected: Female");
    else alert("Please choose one!");
}
</script>
```

3 ■■■ GroupBox (Using Fieldset + Legend)

```
<fieldset>
    <legend>Personal Information</legend>
    <label>First Name:</label>
    <input type="text" id="fname"><br><br>
    <label>Last Name:</label>
    <input type="text" id="lname"><br><br>
    <label>Email:</label>
    <input type="email" id="email">
</fieldset>
```

4 ■■■ Tag

Tags in HTML define elements and structure of a webpage.

```
<p id="message">This is a paragraph tag.</p>
<div id="box">This is a div tag.</div>
<button onclick="changeText()">Click Me</button>

<script>
function changeText() {
    document.getElementById("message").innerHTML = "Paragraph updated!";
}
```

```
        document.getElementById("box").style.background = "lightblue";
    }
</script>
```

■ Combined Example

```
<fieldset>
    <legend>User Survey</legend>
    <h3>1. Choose your gender:</h3>
    <input type="radio" name="gender" value="Male"> Male
    <input type="radio" name="gender" value="Female"> Female

    <h3>2. Select your hobbies:</h3>
    <input type="checkbox" value="Reading"> Reading
    <input type="checkbox" value="Gaming"> Gaming
    <input type="checkbox" value="Music"> Music

    <br><br>
    <button onclick="submitForm()">Submit</button>
</fieldset>

<p id="result"></p>

<script>
function submitForm() {
    const gender = document.querySelector('input[name="gender"]:checked');
    const hobbies = Array.from(document.querySelectorAll('input[type="checkbox"]:checked'))
        .map(cb => cb.value);

    const result = document.getElementById("result");
    result.innerHTML = '<b>Gender:</b> ' + (gender ? gender.value : 'Not selected') + '<br>' +
        '<b>Hobbies:</b> ' + (hobbies.length ? hobbies.join(", ") : 'None');
}
</script>
```