

HTML Form Elements

1. <form>

Defines the form and contains all form elements.

```
<form action="/submit" method="post">  
  <!-- Form elements go here -->  
</form>
```

2. <input>

Defines an input field. The `type` attribute specifies the type of input field.

```
<!-- Text input -->  
<input type="text" name="username">  
  
<!-- Password input -->  
<input type="password" name="password">  
  
<!-- Submit button -->  
<input type="submit" value="Submit">  
  
<!-- Radio button -->  
<input type="radio" name="gender" value="male"> Male  
<input type="radio" name="gender" value="female"> Female  
  
<!-- Checkbox -->  
<input type="checkbox" name="subscribe" value="newsletter"> Subscribe to newsletter  
  
<!-- Date input -->  
<input type="date" name="birthday">  
  
<!-- Email input -->  
<input type="email" name="email">
```

3. <label>

Defines a label for an input element. The `for` attribute should match the `id` of the input element.

```
<label for="username">Username:</label>  
<input type="text" id="username" name="username">
```

4. <textarea>

Defines a multi-line text input.

```
<textarea name="message" rows="4" cols="50"></textarea>
```

5. <select>

Defines a drop-down list.

```
<select name="country">  
  <option value="usa">USA</option>  
  <option value="canada">Canada</option>  
  <option value="uk">UK</option>  
</select>
```

6. <button>

Defines a clickable button.

```
<button type="submit">Submit</button>  
<button type="button">Click Me</button>
```

7. <fieldset> and <legend>

Group related elements within a form.

```
<fieldset>  
  <legend>Personal Information</legend>  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname">  
  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname">  
</fieldset>
```

8. <datalist>

Defines a list of predefined options for an `<input>` element.

```
<label for="browser">Choose your browser:</label>  
<input list="browsers" id="browser" name="browser">  
<datalist id="browsers">  
  <option value="Chrome">  
  <option value="Firefox">  
  <option value="Safari">  
  <option value="Edge">  
</datalist>
```

9. <output>

Displays the result of a calculation.

```
<form oninput="result.value=parseInt(a.value)+parseInt(b.value)">
  <input type="range" id="a" value="50"> +
  <input type="number" id="b" value="50">
  = <output name="result" for="a b">100</output>
</form>
```

Example Form

Here's a complete example form using some of these elements:

```
<!DOCTYPE html>
<html>
<body>

<h2>Example Form</h2>

<form action="/submit" method="post">
  <fieldset>
    <legend>Personal Information</legend>

    <label for="username">Username:</label>
    <input type="text" id="username" name="username" required><br><br>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required><br><br>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email"><br><br>

    <label for="birthday">Birthday:</label>
    <input type="date" id="birthday" name="birthday"><br><br>

    <label for="gender">Gender:</label>
    <input type="radio" id="male" name="gender" value="male">
    <label for="male">Male</label>
    <input type="radio" id="female" name="gender" value="female">
    <label for="female">Female</label><br><br>

    <label for="country">Country:</label>
    <select id="country" name="country">
      <option value="usa">USA</option>
      <option value="canada">Canada</option>
      <option value="uk">UK</option>
    </select><br><br>
```

```
<label for="message">Message:</label>
<textarea id="message" name="message" rows="4" cols="50"></textarea><br><br>

<input type="checkbox" id="subscribe" name="subscribe" value="newsletter">
<label for="subscribe"> Subscribe to newsletter</label><br><br>

  <input type="submit" value="Submit">
</fieldset>
</form>

</body>
</html>
```