**Why use Forms?**

* **Why?** To collect data from users (like login, registration, feedback).
* **What?** A form is a section that contains input controls (like text fields, checkboxes).
* **How?** Using the <form> tag and various <input> types.
* **Where?** Used in login pages, contact forms, search bars, payment forms.

**1. <form> Tag**

**Syntax:**

<form action="submit\_page.php" method="post">

<!-- form controls go here -->

</form>

**Attributes of <form>:**

| **Attribute** | **Description** |
| --- | --- |
| action | URL where form data is sent |
| method | HTTP method: get (visible in URL), post (secure) |
| target | Specifies where to open the response (\_self, \_blank, etc.) |
| autocomplete | Enables/disables auto-fill |
| enctype | Encoding type when sending files (e.g., multipart/form-data) |

**2. <input> Element**

**Basic Syntax:**

<input type="text" name="username" placeholder="Enter Username" />

**Common type values:**

| **Type** | **Purpose** |
| --- | --- |
| text | Single-line text input |
| password | Obscured password field |
| email | Email address format |
| number | Numeric input |
| checkbox | Checkbox for multiple selection |
| radio | Select one from many |
| submit | Submit the form |
| reset | Reset the form fields |
| button | Custom button |
| file | File upload |
| date | Date picker |
| tel | Telephone number |
| url | URL format |
| search | Search bar |
| range | Slider control |

**3. Common Attributes for <input>**

| **Attribute** | **Description** |
| --- | --- |
| type | Specifies the type of input |
| name | Used to identify the field |
| value | Default value of the field |
| placeholder | Hint inside the input |
| required | Makes field mandatory |
| readonly | Makes input uneditable |
| disabled | Disables the input |
| maxlength | Max number of characters |
| min / max | For numeric/date inputs |
| step | Increments for number/range |
| pattern | Regular expression validation |
| autofocus | Focus on page load |
| checked | Pre-select checkbox/radio |
| multiple | Allow multiple file selection |

**4. Other Form Elements**

**Textarea – Multi-line input**

<textarea name="message" rows="5" cols="30" placeholder="Type here..."></textarea>

**Select & Option – Dropdown**

<select name="city">

<option value="hyd">Hyderabad</option>

<option value="ban">Bangalore</option>

</select>

**Label – To label inputs**

<label for="email">Email:</label>

<input type="email" id="email" name="email" />

**5. Example Form**

<form action="/submit" method="post">

<label for="uname">Username:</label>

<input type="text" id="uname" name="uname" required /><br><br>

<label for="pwd">Password:</label>

<input type="password" id="pwd" name="pwd" required /><br><br>

<label>Gender:</label>

<input type="radio" name="gender" value="male" checked /> Male

<input type="radio" name="gender" value="female" /> Female<br><br>

<label for="hobbies">Hobbies:</label>

<input type="checkbox" name="hobby" value="reading" /> Reading

<input type="checkbox" name="hobby" value="traveling" /> Traveling<br><br>

<label for="city">City:</label>

<select name="city">

<option value="hyd">Hyderabad</option>

<option value="blr">Bangalore</option>

</select><br><br>

<input type="submit" value="Register" />

</form>

**🧠 Summary Points**

* <form>: Container for form controls
* <input>: Used to create various types of fields
* Always use label for better accessibility
* Use required, pattern, maxlength for better form validation