

# HTML FORMS

- HTML forms are used to collect user input.
- The `<form>` element defines an HTML form:
- HTML forms contain form elements.
- Form elements are different types of input elements, checkboxes, radio buttons, submit buttons, and more.

# FORM ELEMENTS

## 1. action

- Specifies the URL where the form data will be sent when the form is submitted.

Example: `<form action="submit.php">`

## 2. method

- Specifies the HTTP method (GET or POST) that the browser uses to submit the form data.
- **GET** sends data in the URL, suitable for non-sensitive data.
- **POST** sends data in the body of the request, suitable for sensitive data.

Example: `<form method="POST">`

### 3. target

- Specifies where to display the response after submitting the form.
- Values:
  - **\_blank** – Opens the response in a new tab.
  - **\_self** – Displays the response in the same frame (default).
  - **\_parent** – Displays the response in the parent frame.
  - **\_top** – Displays the response in the full body of the window.

Example: `<form target="_blank">`

### 4. name

- Defines a **name** for the form, useful when referencing the form in scripts or when submitting data to a server.
- Example: `<form name="myForm">`

## 5. enctype

- Specifies how the form data should be encoded when sending it to the server.
- Common values:
- application/x-www-form-urlencoded – Default value.
- multipart/form-data – Used when uploading files.
- text/plain – Sends form data as plain text.
- Example: `<form enctype="multipart/form-data">`

## 6. autocomplete

- Specifies whether the browser should automatically complete form fields based on previous input.
- Values:
- on – Allows autofill (default).
- off – Disables autofill.
- Example: `<form autocomplete="off">`

# THE <INPUT> ELEMENT

- The <input> element is the most important form element.
- The <input> element has many variations, depending on the type attribute.

Type	Description
text	Defines normal text input
radio	Defines radio button input (for selecting one of many choices)
submit	Defines a submit button (for submitting the form)

# INPUT ELEMENTS

- 1. type
  - Specifies the type of input (text, password, radio, checkbox, email, etc.).
  - Example: `<input type="text">`
- 2. name
  - Specifies the name of the input field, which is used to identify the field when sending data to the server.
  - Example: `<input type="text" name="username">`
- 3. value
  - Specifies the default value of the input field or the value to be sent to the server when the form is submitted.
  - Example: `<input type="text" value="John Doe">`

- 4. placeholder

- Provides a short hint or description of the input field's purpose, displayed inside the field when it is empty.

- Example: `<input type="text" placeholder="Enter your name">`

- 5. required

- Indicates that the input field must be filled out before submitting the form.

- Example: `<input type="text" required>`

- 6. readonly

- Specifies that the input field is read-only and cannot be modified by the user.

- Example: `<input type="text" value="Read only" readonly>`



- 7. disabled

- Specifies that the input field is disabled and cannot be interacted with.

- Example: `<input type="text" disabled>`

- 8. maxlength

- Specifies the maximum number of characters allowed in the input field.

- Example: `<input type="text" maxlength="10">`

- 9. min and max

- Specifies the minimum and maximum values for numeric inputs or date fields.

- Example (for numeric input): `<input type="number" min="1" max="100">`

- 10. size

- Specifies the visible width of the input field (in characters).

- Example: `<input type="text" size="30">`

- 11. checked

- Specifies that the checkbox or radio button is pre-selected.

- Example: `<input type="checkbox" checked>`

# TEXT INPUT

- `<input type="text">` defines a one-line input field for text input: or is used to create a single-line text field.
- example

```
<form>  
  First name:<br>  
  <input type="text" name="firstname"><br>  
  Last name:<br>  
  <input type="text" name="lastname">  
</form>
```

# EXAMPLE 1

- `<br>` to insert line break

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <form>
6    First name:<br>
7    <input type="text" name="firstname">
8    <br>
9    Last name:<br>
10   <input type="text" name="lastname">
11 </form>
12
13
14 </body>
15
16 </html>
17
```

First name:

Last name:

# EXAMPLE 2

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <form>
6    First name: <input type="text" name="firstname">
7    <br><br>
8    Last name:<input type="text" name="lastname">
9  </form>
10
11
12 </body>
13
14 </html>
15
```

First name:

Last name:

# RADIO BUTTON INPUT

- `<input type="radio">` defines a radio button.
- Radio button is an input element that allows users to select only one option from a group of choices.
- example

`<form>`

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

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

`<input type="radio" name="gender" value="other"> Other`

`</form>`

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4  |
5  |   <form>
6  |       <input type="radio" name="gender" value="male" checked> Male<br>
7  |       <input type="radio" name="gender" value="female"> Female<br>
8  |       <input type="radio" name="gender" value="other"> Other
9  |   </form>
10 |
11 |
12 </body>
13
14 </html>
15
```

- ☒ Male
- ☐ Female
- ☐ Other

# THE SUBMIT BUTTON

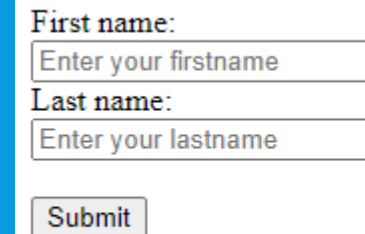
- `<input type="submit">` defines a button for submitting a form to a form-handler.
- The form-handler is typically a server page with a script for processing input data.
- The form-handler is specified in the form's action attribute:
- ```
<form action="action_page.php">  
  First name:<br>  
  <input type="text" name="firstname" ><br>  
  Last name:<br>  
  <input type="text" name="lastname"><br><br>  
  <input type="submit" value="Submit">  
</form>
```



# EXAMPLE:

- When the submit button is clicked the form data will be sent to the link on the (form action="link) action link

```
1  <!DOCTYPE html>
2  <html>
3  <body>
4
5  <form action="http://www.google.com/home/action_page.php">
6      First name:<br>
7      <input type="text" name="firstname" placeholder="Enter your firstname">
8      <br>
9      Last name:<br>
10     <input type="text" name="lastname" placeholder="Enter your lastname">
11     <br><br>
12     <input type="submit" value="Submit">
13 </form>
14
15 </body>
16
17 </html>
18
```



First name:

Last name:

# A CHECKBOX IS AN INPUT ELEMENT THAT ALLOWS USERS TO SELECT ONE OR MORE OPTIONS FROM A SET OF CHOICES

- This is a radio button with the male checked to true on left while on right is the checkbox selected to true

## Radio button

Choose your gender:

☒ Male  
☐ Female

## Checkbox

Subscribe to newsletter: ☒

# EXAMPLE: CHECKBOX AND RADIO BUTTON

```
1 <!DOCTYPE html>
2 <head>
3   <title>Form with Checkbox and Radio Button</title>
4 </head>
5 <body>
6
7   <h2>Form with Checkbox and Radio Buttons</h2>
8
9   <form action="/submit" method="POST">
10
11     <!-- Checkbox input -->
12     <label for="subscribe">Subscribe to newsletter:</label>
13     <input type="checkbox" id="subscribe" name="subscribe" value="yes" checked>
14     <br><br>
15     <!-- Radio buttons -->
16     <p>Choose your gender:</p>
17     <input type="radio" id="male" name="gender" value="male">
18     <label for="male">Male</label><br>
19
20     <input type="radio" id="female" name="gender" value="female">
21     <label for="female">Female</label><br>
22
23     <br><br>
24     <!-- Submit button -->
25     <input type="submit" value="Submit">
26
27   </form>
28
29 </body>
30 </html>
```

## Form with Checkbox and Radio Buttons

Subscribe to newsletter: ☒

Choose your gender:

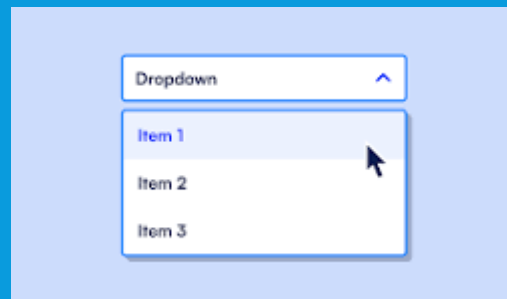
☒ Male  
☐ Female

Submit

# DROPDOWN (SELECT)

- A dropdown is a user interface (UI) element that displays a list of options when clicked or selected, typically in the form of a menu.

`<select>` element is used to create a dropdown menu that allows users to choose from a list of options.



# EXAMPLE OF DROPDOWN WITH OUTPUT

```
1 <!DOCTYPE html>
2 <head>
3   <title>Form with Dropdown</title>
4 </head>
5 <body>
6
7   <h2>Form with Dropdown</h2>
8
9   <form action="/submit" method="POST">
10
11     <!-- Dropdown (select) for choosing a country -->
12     <label for="country">Choose your country:</label>
13     <select id="country" name="country">
14       <option value="kenya">Kenya</option>
15       <option value="uganda">Uganda</option>
16       <option value="tanzania">Tanzania</option>
17       <option value="ethiopia">Ethiopia</option>
18       <option value="southAfrica">South Africa</option>
19     </select>
20     <br><br>
21
22     <!-- Submit button -->
23     <input type="submit" value="Submit">
24
25   </form>
26
27 </body>
28 </html>
29
```

**Form with Dropdown**

Choose your country:

- Kenya
- Uganda
- Tanzania
- Ethiopia
- South Africa

# TEXTAREA (MESSAGE BOX)

- Textarea allows users to enter multiple lines of text

## Attributes of textarea

.The rows attribute specifies the number of visible text lines.

- The cols attribute specifies the visible width of the textarea.
- The placeholder attribute gives a hint to the user about what should be entered.
- The name Specifies the name of the <textarea> element
- Required Ensures that the <textarea> is filled out before the form can be submitted.
- disabled Disables the <textarea> so it cannot be edited or submitted.



A screenshot of a web form titled "HTML Textarea tag". It features a large, empty rectangular text area for input. Below the text area is a small button labeled "Submit".

# EXAMPLE OF TEXTAREA

```
1  <!DOCTYPE html>
2  <head>
3  |   <title>Form with Message Box</title>
4  </head>
5  <body>
6  |
7  |   <h2>Feedback Form</h2>
8  |
9  |   <form action="/submit" method="POST">
10 |
11 |     <!-- Textarea for message -->
12 |     <label for="message">Your Message:</label><br>
13 |     <textarea id="message" name="message" rows="4" cols="50" placeholder="Enter your feedback here..."> </textarea><br><br>
14 |
15 |     <!-- Submit button -->
16 |     <input type="submit" value="Submit">
17 |
18 |   </form>
19 |
20 </body>
21 </html>
22
```

# TEXTAREA OUTPUT

## Feedback Form

Your Message:



# <FIELDSET>

- The <fieldset> element is used in HTML forms to group related form controls (like inputs, checkboxes, etc.) together.
- It creates a visual grouping by adding a border around the elements inside it, which helps organize the form and make it more user-friendly.

example

```
<fieldset>
```

```
  <label for="name">Name:</label>
```

```
  <input type="text" id="name" name="name">
```

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

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

```
</fieldset>
```

# <LEGEND>

The <legend> element is used as a caption for the <fieldset>.

- It provides a title for the grouped elements, describing the purpose of the section.

Example

```
<fieldset>
```

```
<legend>Personal Information</legend>
```

```
<label for="firstname">First Name:</label>
```

```
<input type="text" id="firstname" name="firstname">
```

```
<label for="lastname">Last Name:</label>
```

```
<input type="text" id="lastname" name="lastname">
```

```
</fieldset>
```

# FIELDSET AND LEGEND

## EXAMPLE IBP 2021 NOVEMBER Q6C

- (c) Write a HTML code that would display the following form as it appears in Figure 4 when the code is run on a browser. (9 marks)

Name

First Name:  Last Name:

Gender

☐ Male ☐ Female

Contact Details

Email Address:  Phone Number:

Password

Figure 4

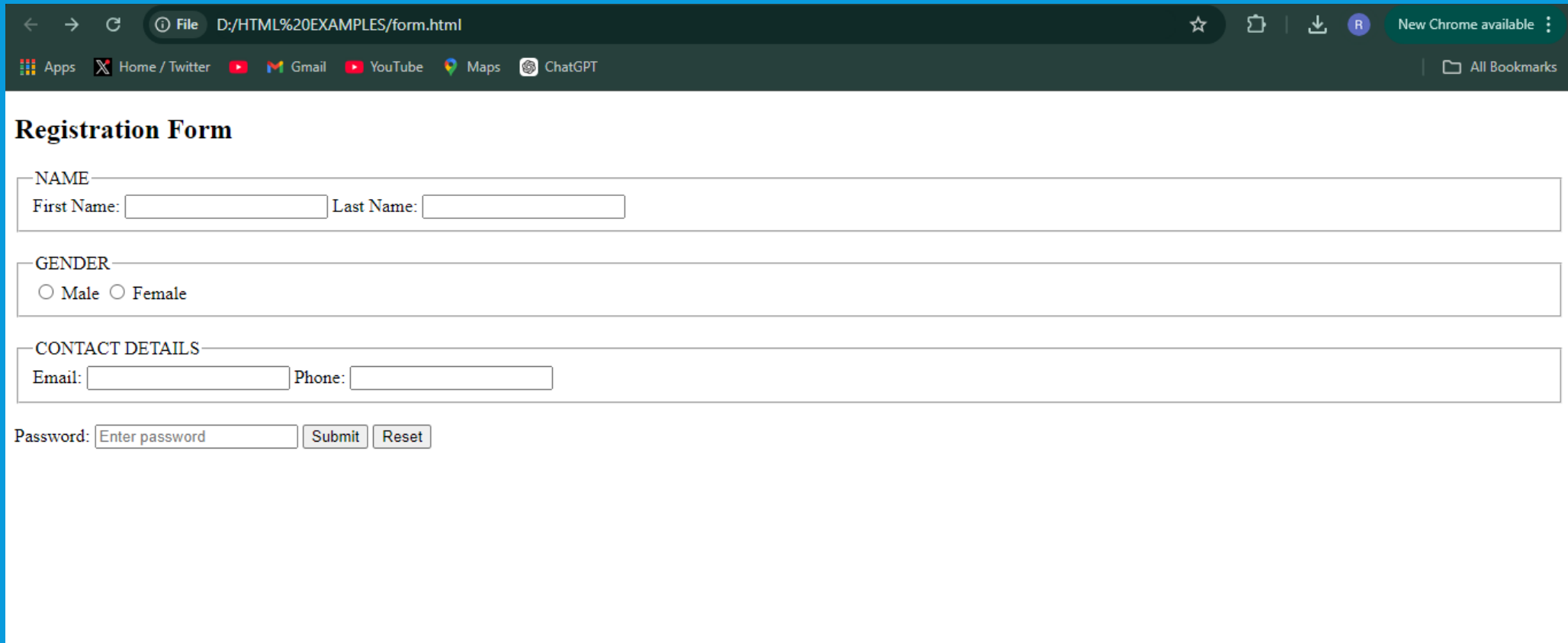
7. (a) Distinguish between `<em>` and `<i>` as used in HTML. (4 marks)

# ANSWER TO IBP NOV 6C FIELDSET AND LEGEND

```
1 <!DOCTYPE html>
2 <head>
3   <title>Form with Borders</title>
4 </head>
5 <body>
6   <h2>Registration Form</h2>
7
8   <form>
9     <!-- Name Section -->
10    <fieldset>
11      <legend>NAME</legend>
12      <label for="firstname">First Name:</label>
13      <input type="text" id="firstname" name="firstname">
14      <label for="lastname">Last Name:</label>
15      <input type="text" id="lastname" name="lastname">
16    </fieldset>
17
18    <br>
19
20    <!-- Gender Section -->
21    <fieldset>
22      <legend>GENDER</legend>
23      <label>
24        <input type="radio" name="gender" value="male"> Male
25      </label>
26      <label>
27        <input type="radio" name="gender" value="female"> Female
28      </label>
29    </fieldset>
30
31    <br>
```

```
31 <br>
32
33 <!-- Contact Details Section -->
34 <fieldset>
35   <legend>CONTACT DETAILS</legend>
36   <label for="email">Email:</label>
37   <input type="email" id="email" name="email">
38   <label for="phone">Phone:</label>
39   <input type="tel" id="phone" name="phone">
40 </fieldset>
41
42 <br>
43
44 <!-- Password and Buttons -->
45 <label for="password">Password:</label>
46 <input type="password" id="password" name="password" placeholder="Enter password">
47 <button type="submit">Submit</button>
48 <button type="reset">Reset</button>
49 </form>
50 </body>
51 </html>
52
```

# OUTPUT TO FIELDSET AND LEGEND



A screenshot of a web browser displaying a registration form. The browser's address bar shows the file path "D:/HTML%20EXAMPLES/form.html". The browser's toolbar includes icons for back, forward, and refresh, as well as a search bar and a notification for "New Chrome available". The browser's bookmark bar shows links to "Apps", "Home / Twitter", "Gmail", "YouTube", "Maps", and "ChatGPT".

The registration form is titled "Registration Form" and contains three fieldsets:

- NAME**: Contains two text input fields labeled "First Name:" and "Last Name:".
- GENDER**: Contains two radio button options labeled "Male" and "Female".
- CONTACT DETAILS**: Contains two text input fields labeled "Email:" and "Phone:".

Below the fieldsets, there is a "Password:" label followed by a text input field containing the placeholder text "Enter password". To the right of the password input field are two buttons labeled "Submit" and "Reset".

# QUESTION 1 : FROM KNEC PASTPAPER IBP2022 NOVEMBER Q3C

- Write html code to display as in the image (the choose the color and clear to restart are buttons) `<input type="submit" value="choose the color">`

(c) Write a HTML code that would display the following form when run on a browser. (10 marks)

Best colours:

black

select a colour

black

blue

green

orange

Please tell us more about your best colour

Select Color:

☐ Red

☒ Orange

Choose the color Clear to restart

4. (a) The following is a HTML statement. Use it to answer the questions that follow.

`<a href="page 5">The main Section </a>`

# QUESTION 2: IBP JULY 2022

- Do question 5 b

5. (a) Outline **four** advantages of having *internal links* in a web page. (4 marks)
- (b) Explain the function of each of the following statements as used in HTML forms.
- (i) `<input type="text">` (2 marks)
  - (ii) `<textarea>` (2 marks)
  - (iii) `<select>` (2 marks)
- (c) Distinguish between *responsive* web design and *adaptive* web design. (4 marks)
- (d) Explain **three** reasons for using of JavaScript as a client-side programming language. (6 marks)

# NOTE: SINGLE AND MULTIPLE LINE TEXT

- **Single Line Text:** The `<input>` element with the `type="text"` attribute is used to create a single-line text field. E.g `<input type="text">`
- **Multiple Line Text:** The `<textarea>` element is used to create a multi-line text field, allowing users to enter longer blocks of text.



# QUESTION: DO QUESTION 6C AND 7A AND 7B FROM IBP JULY 2022

6. (a) Explain the function of each of the following features in a web authoring tool:
- (i) hyperlink; (2 marks)
  - (ii) frameset; (2 marks)
  - (iii) layer. (2 marks)
- (b) In order to ensure the confidentiality, integrity, and availability of information in a website, organizations are opting to use various information security control methods. Describe **three** such security control methods. (6 marks)
- (c) Write a HTML code that would display the following form when run on a web browser. (8 marks)

USERNAME:

EMAIL ID:

SELECT GENDER  
☐ Male  
☐ Female

SELECT SUBJECTS  
☐ Maths ☐ Science

Description:

7. (a) Outline **four** types of *HTTP method attributes* used to send data when submitting a form. (4 marks)
- (b) Explain the function of each of the following attributes used in a form tag in HTML:
- (i) Target; (2 marks)
  - (ii) Name. (2 marks)

# QUESTION: IBP 2019 JULY Q5A,5C

5. (a) Outline **four** attributes of a `<textarea>` as used in HTML. (4 marks)
- (b) Explain **three** reasons for performing security test on a web site that has been developed. (6 marks)
- (c) Write a HTML code that would display the following form when run on a browser. (10 marks)

First name

Last name

COURSE

☐ ICT

☐ MEC

GAMES

☐ Football

☐ Netball

Comment

6. (a) Outline **four** attributes of a `<meta>` as used in HTML. (4 marks)