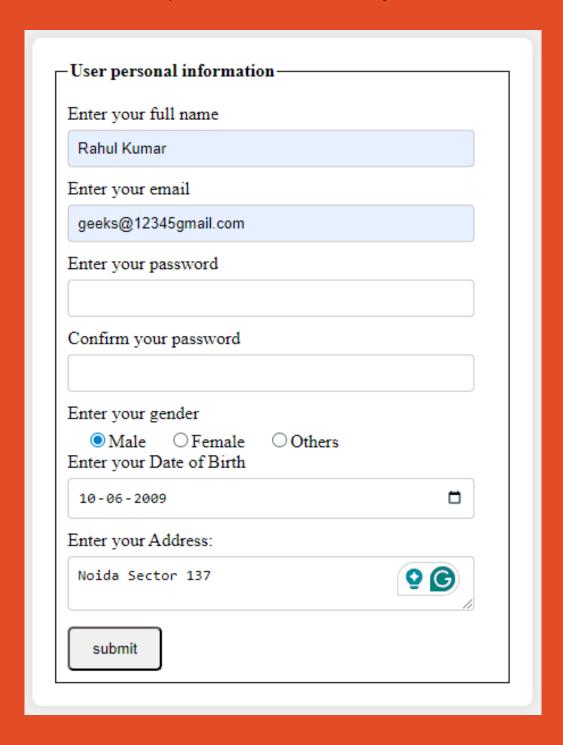# HYPER TEXT MARKUP LANGUAGE (HTML)

Class 07
HTML Forms

HTML Form

HTML Forms are essential for collecting user input on web pages. Whether it's a search bar, a login screen, or a multi-field registration form, HTML forms play a key role in web interactions. They enable users to submit data, which can be processed, stored, or returned by a server.

HYPER TEXT MARKUP LANGUAGE (HTML)

Why Do We Use Forms?

Forms serve as the gateway between the user and the server, allowing for dynamic, interactive web experiences. They are crucial for tasks such as user authentication, data submission, feedback collection, and more. Simply put, forms make websites more engaging and functional.

HTML Forms Structure

The fundamental structure of an HTML form is encapsulated within the <form> tags. Inside these tags, you'll place various form controls like text fields, checkboxes, radio buttons, and buttons for submitting the form.

```html
<form>
  <fieldset>
    <legend>Fruit juice size</legend>
    <p>
      <input type="radio" name="size" id="size_1" value="small" />
      <label for="size_1">Small</label>
    </p>
    <p>
      <input type="radio" name="size" id="size_2" value="medium" />
      <label for="size_2">Medium</label>
    </p>
    <p>
      <input type="radio" name="size" id="size_3" value="large" />
      <label for="size_3">Large</label>
    </p>
  </fieldset>
</form>
```

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How to Use Form Controls?

The `<input>` tag is commonly used to create form controls. The attributes of this tag define the control's behavior.

```
<input type="" id="" name="" value="" />
```

- The `"type"` attribute specifies the type of input control (e.g., text, password, checkbox).
- The `"name"` attribute is used for identifying the control, especially when the data is sent to the server.
- The `"value"` attribute sets a default value for the control, which the user can overwrite.

HTML Input Types

Input types in HTML forms are the backbone of interactive web applications. They allow users to send information to web servers for various purposes like searching, logging in, or providing feedback. In this blog, we'll explore common HTML input types: text, password, radio, and checkbox.

Text Input

The text input type is the most basic form of input and is widely used for collecting simple text data.

```
<input type="text" id="name" name="username" placeholder="Enter Name" required />
```

Password Input

The password input type is similar to the text type but hides the characters entered by the user for security reasons.

```
<input type="password" id="pwd" name="pwd" placeholder="YourPassword" required />
```

Radio Buttons

Radio buttons are used when you want the user to select only one option from a set of choices.

```
<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>
```

Checkbox

Checkboxes allow the user to select multiple options from a set.

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

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More input types

Here is a comprehensive list of input types you can use in html

Input Type	Description
text	Allows the user to type a single line of text.
password	Allows the user to type a password.
submit	Represents a button that, when pressed, submits the form.
reset	Represents a button that, when pressed, resets all the form controls to their initial values.
radio	Represents an option in a set of options that are mutually exclusive with each other.
checkbox	Represents an option in a set that may be selected independently of other options.
button	Represents a clickable button.
color	Allows the user to select a color.
date	Allows the user to select a date.
datetime-local	Allows the user to select a date and time with no time zone.
email	Allows the user to enter an email address.
file	Allows the user to select one or more files from their device storage.
hidden	Represents a value that is not displayed but is submitted to the server.
image	Defines an image that acts as a submit button.
month	Allows the user to select a month and year.
number	Allows the user to enter a number.
range	Allows the user to select a number from a range.
search	Allows the user to enter a search query string.
tel	Allows the user to enter a telephone number.
time	Allows the user to select a time.
url	Allows the user to enter a URL.
week	Allows the user to select a week.

HYPER TEXT MARKUP LANGUAGE (HTML)

Common Attributes

action

The action attribute specifies the URL where the form data should be sent after submission.

```
<form action="/submit.php" method="POST">
  <!-- form content -->
</form>
```

method

The method attribute defines how data is sent. The two most common methods are GET and POST.

```
<form action="/submit.php" method="POST">
  <!-- form content -->
</form>
```

placeholder

This attribute provides a hint to the user as to what can be entered in the field.

```
<input type="text" placeholder="Enter your username">
```

required

The required attribute makes a field mandatory to fill out.

```
<input type="text" required>
```

autofocus

The autofocus attribute automatically focuses the cursor on the particular input when the page loads.

```
<input type="text" autofocus>
```

pattern

The pattern attribute specifies a regular expression that the input must match to be valid.

```
<input type="text" pattern="[a-zA-Z0-9]+">
```