How do forms, labels, and inputs work in HTML?

The form element in HTML is used to gather user information, such as names and email addresses. Here is an example of a form element:

<form action="url-goes-here">

<!-- input elements go here -->

</form>

The action attribute specifies where the form data will be sent upon submission. To collect specific information, like names and email addresses, you would use the input element. Here is an example of using an input element:

<form action="">

<input type="text" />

</form>

input elements are void elements and do not have closing tags. The type attribute defines the data type expected from the user. In this case, the data would be plaintext. To add a label for the input, you would use a label element. Here is an example of using a label element with the text of Full Name::

<form action="">

<label>

Full Name:

<input type="text" />

</label>

</form>

By nesting an input inside a label element, you create an implicit association between the label and the input field. The term "implicit" refers to something that is understood or inferred without needing to be explicitly stated or defined with additional attributes or elements. To explicitly associate a label with an input, you can use the for attribute. Here is an example of using the for attribute for an email address label:

<form action="">

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

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

</form>

When using an explicit association, the values for the for attribute and id need to be the same. In this case, the values are both set to email. The email type in the input provides basic validation for correctly formatted email addresses. If you want to show additional hints to the users about the expected input, you can use the placeholder attribute. Here is an example using the placeholder attribute inside the email input:

<form action="">

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

<input type="email" id="email" placeholder="Ex. example@email.com" />

</form>

For the placeholder text, you want to provide helpful short text to show the format and type of data you expect from your users. In this case, the placeholder text, Ex. example@email.com, shows the user that they must enter a correctly formatted email address.