

## JavaScript HTML Forms

## Form Elements

- An HTML form begins with the **<FORM>** tag.
- This tag indicates that a form is beginning, and it enables form elements to be used.
- The **<FORM>** tag includes three parameters:
  - **NAME** is simply a name for the form. The **NAME** of the form is to be used with JavaScript.
  - **METHOD** is either **GET** or **POST**; these are the two ways the data can be sent to the server.
  - **ACTION** is a script or program that the form data will be sent to when submitted.

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## Form Elements

```
<FORM NAME="Order" METHOD="GET" ACTION="order.cgi">
```

For a form that will be processed entirely by JavaScript (such as a calculator or interactive game), the **METHOD** and **ACTION** attributes are not needed. You can use a simple **<FORM>** tag that names the form:

```
<FORM NAME="calculator">
```

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## Text Field

- Many of the form elements use the **<INPUT>** tag.
- This tag is followed by a **TYPE** parameter to determine which type of input is expected.

### Text Fields and Text Areas

- The first such field is the **TEXT** field.
- This enables the user to enter text in a one-line area.
- Example:

```
<INPUT TYPE="TEXT" NAME="text1" VALUE="textField" SIZE="30">
```

- This defines a text field called text1. The field is given a default value of "hello" and allows up to 30 characters to be entered.

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## Password Field

- An alternate form of text field is the **PASSWORD** field.
- This is a specialized text field that displays the text as asterisks on the screen.
- This type of input is often used for passwords so that observers don't see which password is being entered.
- The password field is defined like **TEXT**:

```
<INPUT TYPE="PASSWORD" NAME="textPassword" SIZE=30>
```

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## Text Area

- A third option is the text area, which allows multiple lines of text to be entered. Rather than using the **<INPUT>** tag, text areas are defined with a special tag, **<TEXTAREA>**.

- A typical **<TEXTAREA>** definition:

```
<TEXTAREA NAME="text1" ROWS="2" COLS="70"> ... </TEXTAREA>
```

- This is the content of the **TEXTAREA** tag. **</TEXTAREA>** The text between the opening and closing **<TEXTAREA>** tags is used as the initial value for the text area.

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## Checkboxes

- A checkbox displays a box that can be checked or unchecked.
- The **CHECKBOX** type to the **INPUT** tag is used to create a checkbox, as follows:

```
<INPUT TYPE="CHECKBOX" NAME="choice1" VALUE="Yes" CHECKED>
```

- **VALUE** attribute assigns a meaning to the checkbox; this is a value that is returned if the box is checked. The default value is "on."
- **CHECKED** attribute can be included to make the box checked by default.

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## Radio Buttons

- A radio button, using the **<INPUT>** tag's **RADIO** type.
- These buttons are similar to checkboxes, but they exist in groups, and only one button can be checked in each group.
- These are used for a multiple-choice or "one of many" input.

```
<INPUT TYPE="RADIO" NAME="radiol" VALUE="Option1" CHECKED> Option 1
<INPUT TYPE="RADIO" NAME="radiol" VALUE="Option2"> Option 2
<INPUT TYPE="RADIO" NAME="radiol" VALUE="Option3"> Option 3
```

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## Radio Buttons

- **NAME** attribute is used to name the entire group of radio buttons.
- All the buttons with the same name are considered to be in a group.
- **VALUE** attribute gives each button a name; this is essential so that you can tell which one is pressed.

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## Selection Lists

- A selection list **<SELECT>** is HTML tag is used to define a *selection list*, or a multiple-choice list of text items.

```
<SELECT NAME="selectionList" SIZE=40>
<OPTION VALUE="choice1" SELECTED>This is the first choice.
<OPTION VALUE="choice2">This is the second choice.
<OPTION VALUE="choice3">This is the third choice.
</SELECT>
```

- Each of the **OPTION** tags defines one of the possible choices.

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## Selection Lists

- The **VALUE** attribute is the name that is returned to the program, and the text outside the **OPTION** tag is displayed as the text of the option.
- An optional attribute to the **SELECT** tag, **MULTIPLE**, can be specified to allow multiple items to be selected. Browsers usually display a single-selection **SELECT** as a drop-down list and a multiple-selection list as a scrollable list.

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## Submit and Reset Buttons

- **TYPE=submit** is a submit button. This button causes the data in the form fields to be sent to the script or program.
- **TYPE=reset** is a reset button. This button sets all the form fields back to their default value, or blank.
- **TYPE=button** is a generic button. This button performs no action on its own, but you can assign it one using JavaScript.

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## Submit and Reset Buttons

- All three types of buttons include a
  - **NAME** to identify the button
  - **VALUE** that indicates the text to display on the button's face.

```
<INPUT TYPE="SUBMIT" NAME="sub1" VALUE="Click Here">
```



## Examples

- [Calculator](#)
- [Clock](#)
- [Form validation](#)
- [Popup window and random generator](#)
- [Scrolling text, status bar and drop-down menu](#)
- [Changing images](#)
- [Image map](#)
- [Frame with JavaScript](#)