5. HTML5 – WEB FORMS 2.0

Web Forms 2.0 is an extension to the forms features found in HTML4. Form elements and attributes in HTML5 provide a greater degree of semantic mark-up than HTML4 and free us from a great deal of tedious scripting and styling that was required in HTML4.

The <input> element in HTML4

HTML4 input elements use the **type** attribute to specify the data type.HTML4 provides following types –

Type	Description
text	A free-form text field, nominally free of line breaks.
password	A free-form text field for sensitive information, nominally free of line breaks.
checkbox	A set of zero or more values from a predefined list.
radio	An enumerated value.
submit	A free form of button initiates form submission.
file	An arbitrary file with a MIME type and optionally a file name.
image	A coordinate, relative to a particular image's size, with the extra semantic that it must be the last value selected and initiates form submission.
hidden	An arbitrary string that is not normally displayed to the user.
select	An enumerated value, much like the radio type.
textarea	A free-form text field, nominally with no line break restrictions.
button	A free form of button which can initiates any event related to button.

Following is the simple example of using labels, radio buttons, and submit buttons –

```
...
<form action="http://example.com/cgiscript.pl" method="post">


    <p>


        <label for="firstname">first name: </label>
        <input type="text" id="firstname"><br />


        <label for="lastname">last name: </label>
        <input type="text" id="lastname"><br />


        <label for="email">email: </label>
        <input type="text" id="email"><br>
```

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

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

        <input type="submit" value="send"> <input type="reset">

    </p>

</form>

 ...
```

The <input> element in HTML5

Apart from the above-mentioned attributes, HTML5 input elements introduced several new values for the **type** attribute. These are listed below.

NOTE: Try all the following example using latest version of **Opera** browser.

Type	Description
datetime	A date and time (year, month, day, hour, minute, second, fractions of a second) encoded according to ISO 8601 with the time zone set to UTC.
datetime-local	A date and time (year, month, day, hour, minute, second, fractions of a second) encoded according to ISO 8601, with no time zone information.
date	A date (year, month, day) encoded according to ISO 8601.
month	A date consisting of a year and a month encoded according to ISO 8601.
week	A date consisting of a year and a week number encoded according to ISO 8601.
time	A time (hour, minute, seconds, fractional seconds) encoded according to ISO 8601.
number	It accepts only numerical value. The step attribute specifies the precision, defaulting to 1.
range	The range type is used for input fields that should contain a value from a range of numbers.
email	It accepts only email value. This type is used for input fields that should contain an e-mail address. If you try to submit a simple text, it forces to enter only email address in email@example.com format.
url	It accepts only URL value. This type is used for input fields that should contain a URL address. If you try to submit a simple text, it forces to enter only URL address either in http://www.example.com format or in http://example.com format.

HTML5 - datetime

A date and time (year, month, day, hour, minute, second, fractions of a second) encoded according to ISO 8601 with the time zone set to UTC.

Example

```
<!DOCTYPE HTML>
```

```
<html>

    <body>


        <form action = "/cgi-bin/html5.cgi" method = "get">
            Date and Time : <input type = "datetime" name = "newinput" />
            <input type = "submit" value = "submit" />
        </form>


    </body>
</html>
```

Output

Date and Time : [   ] submit