Module-02

1.Explain different form widgets created with the <input> tag.

different types of input tag are:

text : used to take text input

syntax:<input type="text">

search : used to create search box

syntax : <input type="search">

url : used to take url input

syntax:<input type="url">

email: used to take only email format input.

syntax:<input type="email">

tel: used to take teliphone no input i.e 10 digit input.

syntax:<input type="tel">

password: used to take password input

syntax:<input type="password">

datetime: used to take date and time input.

syntax:<input type="datetime">

date: used to take date input.

syntax:<input type="date">

month: used to take month input (jan,feb,mar etc)

syntax:<input type="month">

week: used to take day input(mon, tue, sun)

syntax:<input type="week">

time: use to take time as input

syntax:<input type="time">

number: used to take number as input

syntax:<input type="number">

button:used to create button input

syntax:<input type="button">

radio: used to create a radio button in which one can be select from two

syntax:<input type="radio">

checkbox:used to create check box.

syntax:<input type="checkbox">

file:used to take file input

syntax:<input type="file">

image: used to take image input.

syntax:<input type="image">

submit:used to create submit button for submiting values.

syntax:<input type="submit">.

b. Write HTML Code for the following table: **(08 Marks)**

Time / Day		9.00 am to 1.15 pm	2.00 pm to 5.00 pm
Mon to Fri	Sub	Theory class	ML/WTA Lab
	FI		AD block, 1st floor
Sat	Sub	Extra curricular activity	
	FI		

Ans.

```
<!DOCTYPE html>
<html>
<head>
<style>
table, th, td {
 border: 1px solid black;
 border-collapse: collapse;
}
</style>
```



```
</head>
<body>
<table style="width:100%">
 <tr>
  <th colspan = "2">TimeDay</th>
  <th>9.00AM to 1.15PM</th>
  <th>2.00Pm to 5.00PM</th>
 </tr>
 <tr>
  <td rowspan ="2">Mon to Fri</td>
  <td>Sub</td>
  <td>Theory Class</td>
  <td>ML/WTA Lab</td>

 </tr>
 <tr>
   <td>FI</td>
   <td>ABC/EFG/XYZ</td>
   <td>AD-Block, 1st Floor</td>

 </tr>
 <tr>
   <td rowspan = "2">      </td>
   <td>Sub</td>
   <td colspan ="2" rowspan = "2">Extra Curricular Activity</td>

 </tr>
 <tr>
   <tdcolspan ="2" rowspan = "2">      </td>
   <td >FI</td>
 </tr>

</table>
</body>
</html>
```

3.Discuss the difference between relative and absolute positioning.

Relative Positioning

In relative positioning an element is displaced out of its normal flow position and moved relative to where it would have been placed. When an element is positioned relatively, it is displaced out of its normal flow position and moved relative to where it would have been placed.

Example: Relative positioning to place an image.

figure {

border: 1pt solid #A8A8A8;

backgroundcolor: #EDEDDD;

padding: 5px;

width: 150px;

position: relative;

top: 150px;

left: 200px;

}

Absolute Positioning

When an element is positioned absolutely, it is removed completely from normal flow. Thus, unlike with relative positioning, space is not left for the moved element, as it is no longer in the normal flow. Its position is moved in relation to its container block.

Example: Absolute positioning to place an image

figure {

margin: 0;

border: 1pt solid #A8A8A8;

background-color: #EDEDDD;

padding: 5px;

width: 150px;

position: absolute;

top: 150px;

left: 200px;

}

4.What does floating an element do in CSS?How do you float an element?

The CSS float property specifies how an element should float. The CSS clear property specifies what elements can float beside the cleared element and on which side.

The float property is used for positioning and formatting content e.g. let an image float left to the text in a container. The float property can have one of the following values:

- left - The element floats to the left of its container
- right - The element floats to the right of its container
- none - The element does not float (will be displayed just where it occurs in the text). This is default
- inherit - The element inherits the float value of its parent

In its simplest use, the float property can be used to wrap text around images.

```
img {
  float: right;
}
img {
  float: left;
}
```

5.Compare radio and check box controls of HTML5 with examples.

Radio Button Control

Radio buttons are used when out of many options, just one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to radio.

```
<!DOCTYPE html>
 <html>
    <head>
        <title>Radio Box Control</title>
    </head>
    <body>
        <form>
            <input type = "radio" name = "subject" value = "maths"> Maths
            <input type = "radio" name = "subject" value = "physics"> Physics
        </form>
</body>
```

```
</html>
```

Checkbox Control:-

Checkboxes are used when more than one option is required to be selected. They are also created using the HTML <input> tag but type attribute is set to checkbox.

```
<!DOCTYPE html>

<html>

  <head>

     <title>Checkbox Control</title>

  </head>

  <body>

     <form>

        <input type = "checkbox" name = "maths" value = "on">Maths

        <input type = "checkbox" name = "physics" value = "on">Physics

     </form>

  </body>

</html>
```

6.Explain the structure of <form> element with an example.Illustrate the role of action and method attributes.

HTML Forms are required, when you want to collect some data from the site visitor. For example, during user registration you would like to collect information such as name, email address, credit card, etc.

The HTML <form> tag is used to create an HTML form and it has following syntax −

```
<form action = "Script URL" method = "GET|POST">

  form elements like input, textarea etc.

</form>
```

Example:

```
<!DOCTYPE html>

<html>

 <body>

    <form>

       Username:<br>

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

```
        <br>
        Email id:<br>
        <input type="text" name="email_id">
        <br><br>
       <input type="submit" value="Submit">
   </form>
</body>
</html>
```

Action:-Backend script ready to process your data passed.

Method:-Method to be used to upload data. The most frequently used are GET and POST methods.

7.Explain different forms of text input controls with examples.

Text Input Controls

There are three types of text input used on forms

1. Single-line text input controls − This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML <input> tag.

2. Password input controls − This is also a single-line text input but it masks the character as soon as a user enters it. They are also created using HTMl <input> tag.

3. Multi-line text input controls − This is used when the user is required to give details that may be longer than a single sentence. Multi-line input controls are created using HTML <textarea> tag.

Example:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Text Input Control</title>
    </head>
    <body>
        <form >
            First name: <input type = "text" name = "first_name" />
            <br>
            Last name: <input type = "text" name = "last_name" />
        </form>
```

```
    </body>
</html>
```

8.Explain liquid(fluid) layout design for websites with an example. List liquid layout benefits and limitations.

Liquid Layout The second approach to dealing with the problem of multiple screen sizes is to use a liquid layout (also called a fluid layout). In this approach, widths are not specified using pixels, but percentage values. The percentage values in CSS are a percentage of the current browser width, so a layout in which all widths are expressed as percentages should adapt to any browser size.

Example:

HTML:

```
<div class="wrapper">
  <h1>Liquid Layout Example</h>
  <header>HEADER</header>
  <nav>NAV</nav>
  <section>SECTION</section>
</div>
```

CSS:

```
.wrapper{  width:100%;  }
nav, section{   float:left;   }
nav{   width:20.83333%;
        margin-right:1.041667%;  }
section{  width: 78.125%;  }
```

Benefits of liquid layout are:

- Liquid Layouts are User-Friendly.
- Liquid Layouts are Appealing to the Eyes.
- Eliminate Horizontal Scrollbars using a Liquid Layout.
- With liquid layouts, you have less control over the look of your site.
- Liquid layouts can cause trouble for flash, video, etc.

There are several disadvantages,

• Liquid layouts can be more difficult to create because some elements, such as images, have fixed pixel sizes.
• Another problem will be noticeable as the screen grows or shrinks dramatically, in that the line length (which is an important contributing factor to readability) may become too long or too short.

9. Apply the following table elements to display the following table: (8M) Table elements: table, td, tr, th

Sl. No.	USN	Name	Dept.
1	2		

Solution: HTML code is

```
<html>
  <head>
    <title> Student Information </title>
  </head>
  <body>
    <h1> Student Information</h1>
    <table>
      <tr>
        <th>Sl. No</th>
        <th>USN</th>
        <th>Name</th>
        <th>Dept.</th>
      </tr>
      <tr>
        <td>1 </td >
        <td>101</td>
        <td>RAM</td>
        <td>ISE</td>
      </tr>
      <tr>
        <td>2 </td>
        <td>102</td>
        <td>RAVI</td>
        <td>ISE</td>
      </tr>
  </table>
</html>
```

10.Explain with a neat diagram how form works? Discuss about query strings and micro formats.

Solution: forms are constructed with HTML elements; a form also requires some type of server-side resource that processes the user's form input as shown in fig 2.1.

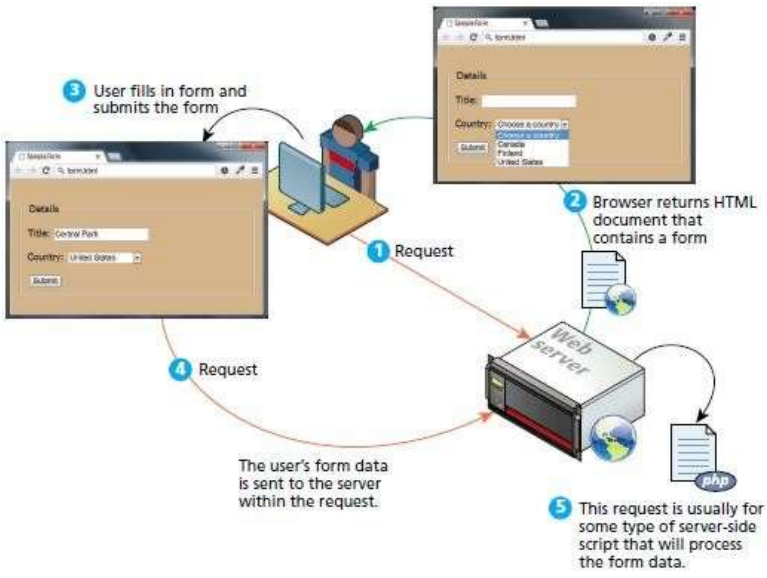


Fig 2.1: How forms work

The browser packages the user's data input into something called a query string. A query string is a series of name=value pairs separated by ampersands (the & character).

In the example shown in Figure 2.2, the names in the query string were defined by the HTML form, each form element (i.e., the first <input> elements and the <select> element) contains a name attribute, which is used to define the name for the form data in the query string. The values in the query string are the data entered by the user.

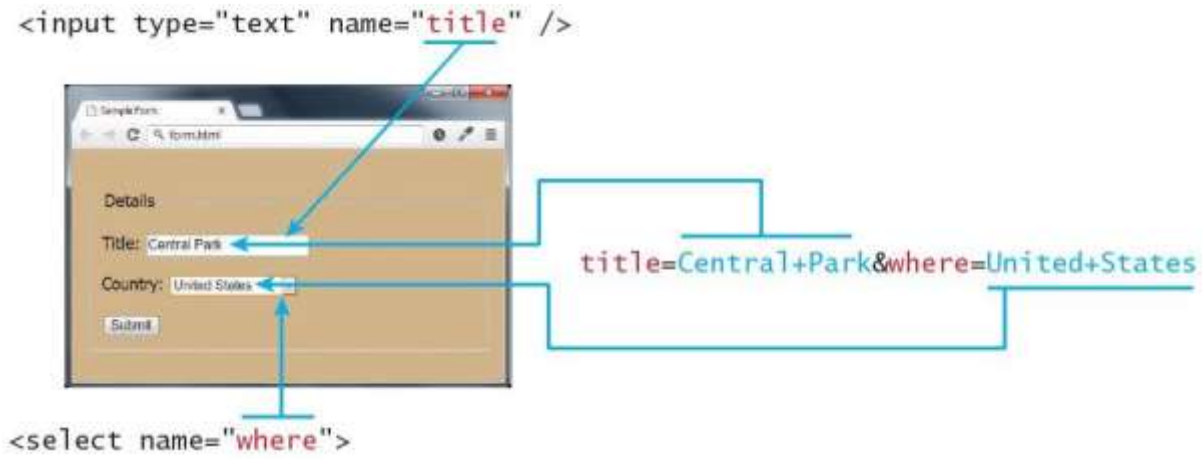


Fig:2.2QueryString

A microformat is a small pattern of HTML markup and attributes to represent common blocks of information such as people, events, and news stories so that the information in them can be extracted and indexed by software agents. One of the most common microformats is hCard, which is used to semantically markup contact information for a person.

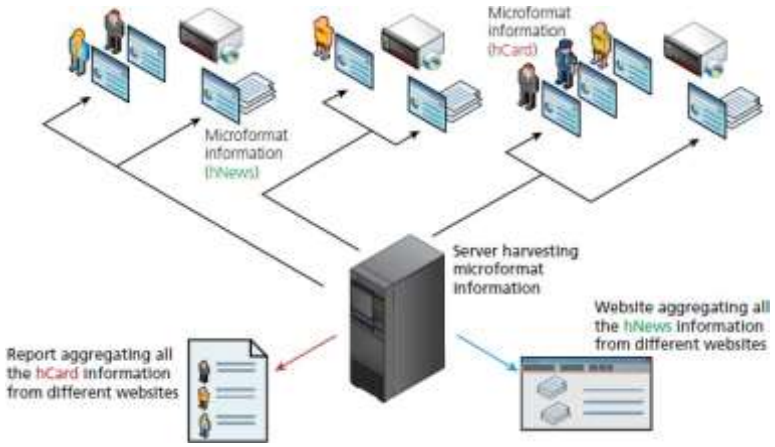


Fig 2.3 Microformats

11.Identify the approaches to CSS layouts and explain them in detail. (8M)

Solution: Block-level elements such as <p>, , <h2>, <ul>, and <table> are each contained on their own line. Because block level elements begin with a line break (that is, they start on a new line), without styling, two block-level elements can't exist on the same line.

Block-level elements use the normal CSS box model, in that they have margins, paddings, background colors, and borders.

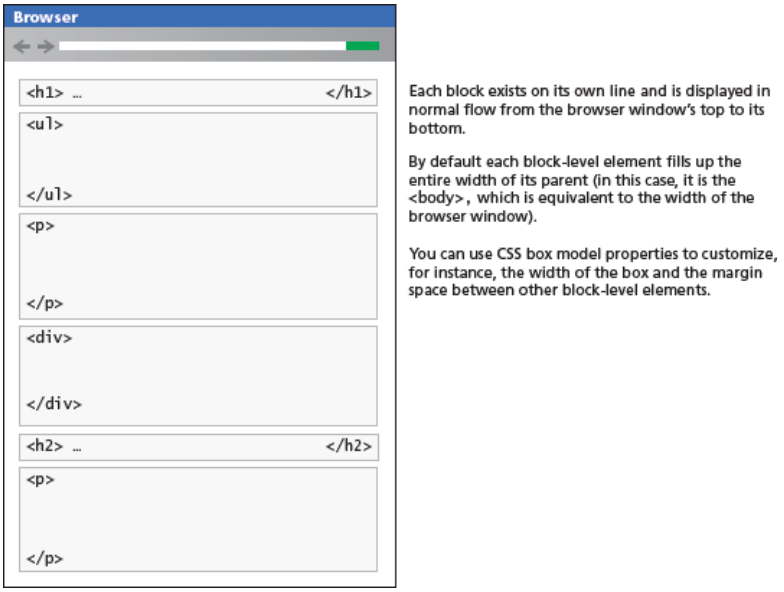
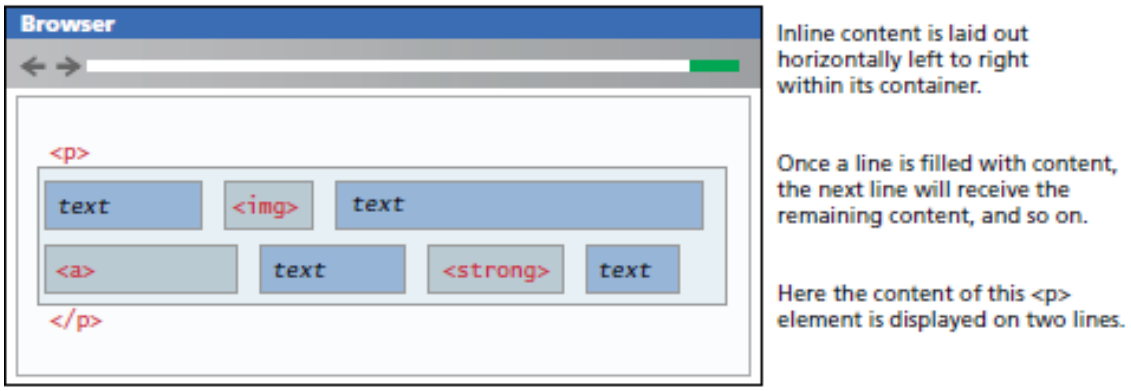


Fig: Block-level elements

Inline elements do not form their own blocks but instead are displayed within lines.



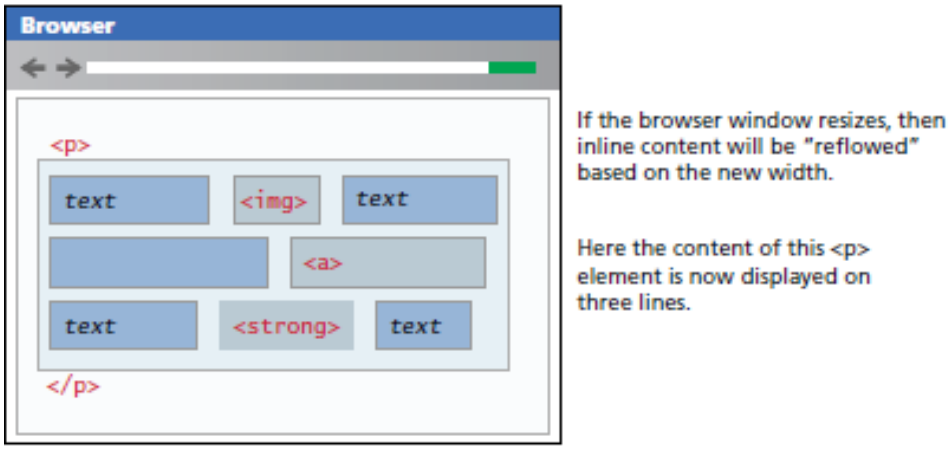


Fig: Inline layout

Normal text in an HTML document is inline, as are elements such as , <a>, <img>, and
. Inline elements line up next to one another horizontally from left to right on the same line; when there isn't enough space left on the line, the content moves to a new line.

There are actually two types of inline elements: replaced and nonreplaced.

a) **Replaced inline elements** are elements whose content and thus appearance is defined by some external resource, such as <img> and the various form elements.
b) **Nonreplaced inline elements** are those elements whose content is defined within the document, which includes all the other inline elements.

12.What is responsive design?Why its important?Explain in details.

Responsive Web Design is about using HTML and CSS to automatically resize, hide, shrink, or enlarge, a website, to make it look good on all devices (desktops, tablets, and phones).

Importance:

1. Cost effectiveness.
2. Flexibility.
3. Improved user experience.
4. Search engine optimization gains.
5. Ease of management.

13.Explain the role of display, position and visibility properties in CSS with examples.