

Project development -

1. Web Development -

1. Web site design - only provide the information.
2. Web Portal design - provide the information & Services provide - 90% Use - clients now required web projects.

2. Application Development - Standalone Application - run on current PC - like Java - AWT + Swing, C & C++ Applications, C# & VB.net Applications. outdated - use 5-10% only

3. Android/IOS App development - less use, 90% users/clients - focus on Web Projects

Q- What is Web Site?

Ans- A Website is a collection of interrelated Web pages that is identified by a common domain name and published / host / deploy on at least one web server.

hosting / host / deploy / deployment - register ur application on the web server for accessing over the whole network/remote.

ex - like - gmail.com - inside gmail.com we have sign in page + signup page + inbox page + compose page + send mail page + draft page + Trash page - all pages linked with each other using links - that is called interrelated web pages/concept. & all r the part of gmail.com

we want to design online shopping Web site for that we need to design multiple page for manage whole online shopping. all pages r part of one domain - like - myshopping.com / onlineshopping.com / abc.com / xyz.com.

we want to design own web project, for that we need / required -

1. Markup Language - which language written b/w <> that is called markup Language, written b/w tags - marks with tag.

2. Script Language - which language work with support of other language, means not a separate language depends on the other language that is called scripting language.

Type of Scripting - we have 2 Types of Scripting -

1. Client side Scripting Language - execute on the client - use for client side validations.
* before page submit all validations r the client side validations.

ex -

1. Java Script - product of Sun Microsystems + Netscape

2. JScript + VB Script - product of MS (Microsoft - no use - Out of market)

3. Java Applet - Product of Sun Microsystems - but not it is the product of Oracle Corp.

2. Server Side Scripting Language - execute on the server - use for server side validation after page submit all validations r the server side validations.

CGI with Perl - Common Gateway Interface with Perl

PHP - Old Name - Personal Home Page & new name - Preprocessor Hypertext
Preprocessor

Java Servlets + JSP - Product was Sun Microsystems - but not it is the product of
Oracle Corp.

ASP.net - product of Microsoft

Spring MVC + Spring Boot + Struts - Java's MVC Framework.

** All r depends on HTML without HTML support we cn't run or execute.

definition of any server side - it is a server side Technology, used to host dynamic data on the web server, means ek aisi technology jise use karke aap server side pe apne data ko dynamically host kar sakte ho.

3. Database - for store the project/product data. - MySQL / SQL Sevver / Oracle / DB2 /
Mongo DB

4. Web Server - for Local deploy - testing - Tomcat , Apache / Glassfish / JSW / JBoss/
Web Logic / WAMP / XAMP

5. IDE - for Designing - Coding - VS Code / Netbeans / Eclipse / Notepad++ / Notepad

Markup Language - which language written b/w <> - tags, that is called markup language. Markup Language is a computer language that consists of easily understood keywords, names, or tags that help format the overall view of a page and the data it contains.

- Markup languages are designed for the processing, definition and presentation of text.
- Markup language is a computer language that uses tags to define elements within a document.
- It is human-readable, means markup files contain standard words, rather than typical programming syntax.
- all markup languages r non programming languages.
- all Markup Languages r Interpreted Language.
- All Markup Languages r product of W3C - (World Wide Web Consortium - Group)

History of markup language -

GML (1980) - Generalized Markup Language. - this was the 1st markup language in Market.
Problem with GML - it was more complex.

SGML (1986)- Standard Generalized Markup Language - it is the Standard version of GML
problem with SGML - complex.

SGML is a kind of Meta Language - by using meta Language we can design own Language.

W3C break the SGML into small-small parts -

SGML
HTML DHTML XML XHTML CML MML VocML

not for Web -

CML - Chemical Markup Language

MML - Meth Markup Language

VocML - Voice Markup Language.

Tim Berners Lee invent the HTML in 1991 -

HT - Hyper Text - Text with Linked to another document, Whenever you click on a link which brings you to a new webpage, you have clicked on a hypertext. Hyper Text is a way to link two or more web pages (HTML documents) with each other.

ML - Markup Language - written b/w tags. A markup language is a computer language that is used to apply layout and formatting conventions to a text document. Markup language makes text more interactive and dynamic. It can turn text into images, tables, links, etc.

- HTML is the Mother Language for Web.
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.
- It is a very easy and simple language. It can be easily understood and modified.
- It is very easy to make an effective presentation with HTML because it has a lot of formatting tags.
- It is platform-independent because it can be displayed on any platform like Windows, Linux, and Macintosh, etc.
- It facilitates the programmer to add Graphics, Videos, and Sound to the web pages which makes it more attractive and interactive.
- HTML is a case-insensitive language, which means we can use tags either in lower-case or upper-case.
- HTML was created by Berners-Lee in 1991 but "HTML 2.0" was the first standard HTML specification which was published in 1995.
- HTML 4.01 was a major version of HTML and it was published in 1999.
- currently we are having HTML-5 version which is an extension to HTML 4.01, and this version was published in 2012.
- in HTML all tags are pre define, used for design the static web pages.

Tim Berners-Lee invented www	1989
Tim Berners-Lee invented HTML	1991
HTML Working Group defined HTML 2.0	1995
W3C Recommended HTML 3.2	1997
W3C Recommended HTML 4.01	1999
W3C Recommended XHTML 1.0	2000
HTML Working Group defined HTML 5.0	2012
HTML5 W3C Final Recommendation	2014
W3C Candidate Recommendation: HTML 5.1	2016
W3C Recommendation: HTML5.1 2nd Edition	2017
W3C Recommendation: HTML5.2	2017

**** WHATWG (Web Hypertext Application Technology Working Group)**

DHTML - Dynamic Hyper text Markup Language - in DHTML all tags r pre define, use for design the dynamic web pages - Validations + Animations + banners + all type of dynamic effects.

or

it is the concept by which we can design the dynamic web pages, concept of CSS & Script Languages. or DHTML means the combination of HTML, Scripting Language, and CSS.

DHTML stands for Dynamic HTML, it is totally different from HTML. The browsers which support the dynamic HTML are some of the versions of Netscape Navigator and Internet Explorer of version higher than 4.0. The DHTML is based on the properties of the HTML, javascript, CSS, and DOM (Document Object Model which is used to access individual elements of a document) which helps in making dynamic content. It is the combination of HTML, CSS, JS, and DOM. The DHTML make use of Dynamic object model to make changes in settings and also in properties and methods

DHTML is used to create interactive and animated web pages that are generated in real-time, also known as dynamic web pages so that when such a page is accessed, the code within the page is analyzed on the web server and the resulting HTML is sent to the client's web browser.

- Cascading Style Sheets. - for Presentation
- Scripting Language - for Validations & dynamic effects.
- which language working with support of other language means not a separate language depends on the other language that is called scripting Language.

Types -

Client side - execute on the client - before page submit all validations r client side validations
 Java Script + Java Applet + VB Script + JScript

Server side - execute on the server - after page submit all validations r client side validations
 JSP + ASP + ASP.Net + PHP + Servlets

All r depends on HTML without HTML support we can't run or execute.

XML - eXtensible Markup Language - in XML all tags r user define & it is a kind of Meta Language WML - written in XML - using meta language we can design own Language.

- XML not for presentation purpose, not for web page design.
- XML is a kind of Meta Language - using Meta Language we can design own Language - WML design in XML.
- XML play the imp role in data interchange on the Net. & used for config purpose - Java Technology - Servlets + Struts + Hibernate + Spring - config with XML or with Annotations - JPA.

data interchange mean, we have 2 PCs, now we want send information from one PC to another PC,

PC-1

PC-2

methods for data sending - 2 methods / we have 2 formats -
text formats binary format.

* in text format we can send only text other format not Supported, but with binary format we can send any format data, but if related software not install then we can't view that. then both r flop.

W3C says - we r design common format for data sending & that is XML, any client - browser must - user can view that..

XML - tags - declaration - for that we have - DTD & XML Schema -

DTD (extension - .dtd)

XML Schema (extension - .xsd)

Document Type Definition.

- | | |
|---|--|
| * Simple - basic | * Advance |
| * not Support the Inheritance
(not support OOPs concept) | * Support the Inheritance.
(support OOPs concept) |

XML data - non Presentable - for make its Presentable - as a html page, we have

CSS

XSL

Cascading Style Sheet

eXtensible Stylesheet Language.

- * non Conditional formatting * Conditional Formatting - data filter / data format
- Student info - marks > 75% - green / >= 60% - yellow , <60% - red color
- we have all Colleges data - want to see only IMS - MCA 2nd year info view.
- * non programming * programming, loops + conditions

for data fetch from XML document - DOM & SAX - both r XML Parsors.

DOM (Document Object Model)

- * for MS Technology - VB , .Net Technology
- * work with any Approach (first / last / prev / next)
- * dynamic - can add or remove element. in/from XML document.
- * slow

SAX (Simple API for XML)

- * for Sun Technology - for Java Tech.
- * work with only top to down Approach (only top to down)
- * static can't add/remove element/record in XML document

* Fast.

XHTML - eXtensible Hyper Text Markup Language - in XHTML we can use - pre define(HTML) + user define Tags(XML)- version of XHTML - 1.0

not for Web -

CML - Chemical Markup Language

MML - Meth Markup Language

VocML - Voice Markup Language.

finally -

- HTML - all tags r pre define, used for design the static web pages
- DHTML - all tags r pre define, used for design the dynamic web pages. it is the concept by which we can create the dynamic web pages - concept of Scripting Languages & CSS.
- XML - all r tags r user define, XML not for Web page design, XML play the imp role in data interchange on the net & use for config purpose - in java we have servlets + JSP + Struts + Spring - for config - with XML or with JPA - Annotations.
- XHTML - pre define + user define tags - XHTML = HTML + XML.

how to work with HTML -

** in HTML all tags r pre define -

Tags 2 Types -

1. Container Tags - need to close
Shivanshu Pandey.
2. Empty Tags - no need to close

 - for line break
<hr> - horizontal line
 - for image

Empty tags - proper syn -

HTML document / Page has 2 parts -

Head part - in head part we have - title + java script + css + Logo + meta info for SEO
body part - for content writing

```
<!DOCTYPE html>
<html>
  <head>
    <title>WELCME TO VGI</title>
  </head>
  <body bgcolor=lightyellow>
    Welcome to VGI.....
  </body>
</html>
```

- DOCTYPE - A DOCTYPE declaration must be specified on the first line of each web document.
- The <html> Element - Immediately following the DOCTYPE declaration is the <html> element. The <html> element tells the browser that the page will be formatted in HTML and, optionally, which world language the page.
- The <head> element surrounds all the special “behind the scenes” elements of a web document. Most of these elements do not get displayed directly on the web page.
- The <meta> Element - Immediately after the <head> line, we place this <meta> element. There can be multiple <meta> lines in the same web page. The <meta> element is often used to provide additional information such as page keywords, a page description, and the author(s) of a web document, document is encoded in the UTF-8 (Unicode) character set or not.
- The <title> Element - The <title> element defines what text will show in the web browser’s title bar.
- The <body> element surrounds all the actual content (text, images, videos, links, etc.) that will be displayed on our web page.

HTML Formatting - HTML Formatting is a process of formatting text for better look and feel. HTML provides us ability to format text without using CSS. There are many formatting tags in HTML. These tags are used to make text bold, italicized, or underlined.

In HTML the formatting tags are divided into two categories:

- Physical tag: These tags are used to provide the visual appearance to the text.
- Logical tag: These tags are used to add some logical or semantic value to the text.

1) Bold Text - HTML `` and `` formatting elements

The HTML `` element is a physical tag which display text in bold font, without any logical importance. If you write anything within `.....` element, is shown in bold letters.

```
<b>This is my Bold text with b tag</b>
```

The HTML `` tag is a logical tag, which displays the content in bold font and informs the browser about its logical importance. If you write anything between `????`, is shown important text.

```
<strong>This is my Bold text with strong tag</strong>
```

2) Italic Text - HTML `<i>`, `<cite>` and `` formatting elements -

The HTML `<i>` & `<cite>` element is physical element, which display the enclosed content in italic font, without any added importance. If you write anything within `<i>.....</i>` element, is shown in italic letters.

```
<i>This is my Italic Text with i tag</i><br>
<cite>This is my Italic Text with cite tag</cite><br>
```

The HTML `` tag is a logical element, which will display the enclosed content in italic font, with added semantics importance.

```
<em>This is my Italic Text with em tag</em><br>
```

3) Underlined Text -

If you write anything within `<u>.....</u>` element, is shown in underlined text.

```
<u>This is my underline text with u tag</u><br>
```

4) Strike Text - for strike we have `<s>`, `<strike>` & `` tag -

Anything written within `<strike>.....</strike>` element is displayed with strikethrough. It is a thin line which cross the statement.

```
<s>This is my strike text with s tag</s><br>
<strike>This is my strike text with strike tag</strike><br>
<del>This is my strike text with del tag</del><br>
Price - Rs. <s>45999.00</s>, Offer Price - Rs. 23999.00
```


5) Monospaced Font

If you want that each letter has the same width then you should write the content within `<tt>.....</tt>` element. - tt - for tele type

We know that most of the fonts are known as variable-width fonts because different letters have different width. (for example: 'w' is wider than 'i'). Monospaced Font provides similar space among every letter.

`<tt>This is my mono space text with tt tag</tt>
`

example of all 5 HTML formatting tags -

```
<html>
<head>
  <title>WELCOME TO VGI</title>
</head>
<body bgcolor=lightyellow link=red vlink=orange alink=green>
  This is my Simple text Line<br>
  <b>This is my Bold text with b tag</b><br>
  <strong>This is my Bold text with strong tag</strong>
  <hr size=3 color=red>
  <i>This is my Italic Text with i tag</i><br>
  <em>This is my Italic Text with em tag</em><br>
  <cite>This is my Italic Text with cite tag</cite><br>
  <hr size=2 color=green width=50% align=left>
  <u>This is my underline text with u tag</u><br>
  <s>This is my strike text with s tag</s><br>
  <strike>This is my strike text with strike tag</strike><br>
  <del>This is my strike text with del tag</del><br>
  Price - Rs. <s>45999.00</s>, Offer Price - Rs. 23999.00
  <hr size=2 color=red>
  <center><a href=Wel1.html>Next</a></center>
  <hr size=2 color=red>
  Powered by VGI&copy;2022, All Rights Reserved. www.vgi.ac.in
</body>
</html>
```

center - center tag use for center alignment for text.

6) Superscript Text

If you put the content within `^{.....}` element, is shown in superscript; means it is displayed half a character's height above the other characters.

`a²`

8) Subscript Text

If you put the content within `_{.....}` element, is shown in subscript ; means it is displayed half a character's height below the other characters.

`H₂O`

9) Larger Text

If you want to put your font size larger than the rest of the text then put the content within `<big>.....</big>`. It increase one font size larger than the previous one.

`<big>This is my big text with <big>Big</big> tag</big>`

10) Smaller Text

If you want to put your font size smaller than the rest of the text then put the content within `<small>.....</small>`tag. It reduces one font size than the previous one.

`<small>This is my small text with <small>Small</small> tag</small>`

HTML Heading

A HTML heading or HTML h tag can be defined as a title or a subtitle which you want to display on the webpage. When you place the text within the heading tags `<h1>.....</h1>`, it is displayed on the browser in the bold format and size of the text depends on the number of heading.

There are six different HTML headings which are defined with the `<h1>` to `<h6>` tags, from highest level h1 (main heading) to the least level h6 (least important heading).

h1 is the largest heading tag and h6 is the smallest one. So h1 is used for most important heading and h6 is used for least important.

Headings in HTML helps the search engine to understand and index the structure of web page.

`<h1>This is my Heading 1 - large</h1>`

`<h2>This is my Heading 2</h2>`

`<h3>This is my Heading 3</h3>`

`<h4>This is my Heading 4</h4>`

`<h5>This is my Heading 5</h5>`

`<h6>This is my Heading 6 - small</h6>`

`<h2>Pandey Ji</h2>`

`<p>Hello I m Saurabh Pandey from B.Tech, 3rd year, Today i am a Birthday Boy, say me
Happy B'Day.Hello I m Saurabh Pandey from B.Tech, 3rd year, Today I am a Birthday
Boy, say me Happy B'Day & ask me for party.`

`</p>`

HTML Paragraph

HTML paragraph or HTML p tag is used to define a paragraph in a webpage. Let's take a simple example to see how it work. It is a notable point that a browser itself add an empty line before and after a paragraph. An HTML <p> tag indicates starting of new paragraph.

- If we are using various <p> tags in one HTML file then browser automatically adds a single blank line between the two paragraphs.
- If you put a lot of spaces inside the HTML p tag, browser removes extra spaces and extra line while displaying the page. The browser counts number of spaces and lines as a single one.

```
<p>This is my paragraph 1</p>
```

```
<p>This is my paragraph 2</p>
```

```
<p>This is my paragraph 3</p>
```

```
<p>This is my paragraph 4</p>
```

How to Use
 and <hr> tag with paragraph -

An HTML
 tag is used for line break and it can be used with paragraph elements. Following is the example to show how to use
 with <p> element.

An HTML <hr> tag is used to apply a horizontal line between two statements or two paragraphs. Following is the example which is showing use of <hr> tag with paragraph.

```
<hr size=2 color=green>
```

```
<hr size=2 width="50%" align="left" color=green>
```

HTML Anchor

The HTML anchor tag defines a hyperlink that links one page to another page. It can create hyperlink to other web page as well as files, location, or any URL. The "href" attribute is the most important attribute of the HTML a tag. and which links to destination page or URL.

href attribute of HTML anchor tag - The href attribute is used to define the address of the file to be linked. In other words, it points out the destination page.

```
<a href=Wel.html>Prev</a> | <a href=Wel2.html>Next</a>
```

Specify a location for Link using target attribute - If we want to open that link to another page then we can use target attribute of <a> tag. With the help of this link will be open in next page.

```
<a href=Wel2.html target="_blank">Next</a>    target = blank or can be frame name
```

HTML Tag

The tag was used in HTML 4 to specify the font face, font size, and color of text.

```
<font color=red size=5 face="Comic Sans MS">This is my Font  example with <font  
color=green>Font</font> Tag.</font>
```

HTML Image

HTML img tag is used to display image on the web page. HTML img tag is an empty tag that contains attributes only, closing tags are not used in HTML image element.

Attributes of HTML img tag

The src and alt are important attributes of HTML img tag. All attributes of HTML image tag are given below.

- 1) **src** - It is a necessary attribute that describes the source or path of the image. It instructs the browser where to look for the image on the server. The location of image may be on the same directory or another server.
- 2) **alt** - The alt attribute defines an alternate text for the image, if it can't be displayed. The value of the alt attribute describe the image in words. The alt attribute is considered good for SEO prospective.
- 3) **width, height & border** - It is an optional attribute which is used to specify the width & height to display the image. It is not recommended now. You should apply CSS in place of width & height attribute.

```

```

Use tag as a link - We can also link an image with other page or we can use an image as a link. To do this, put tag inside the <a> tag.

```
<a href="Wel1.html"></a>
```

for video play we can use youtube embed code - this is the best way to play the video in page -

```
<iframe width="450" height="235"  
src="https://www.youtube.com/embed/3CZvClVEd88"  
allowfullscreen> </iframe>
```

HTML Lists

HTML Lists are used to specify lists of information. All lists may contain one or more list elements. There are three different types of HTML lists:

- 1) Ordered List or Numbered List (ol)
- 2) Unordered List or Bulleted List (ul)
- 3) Description List or Definition List (dl)

HTML Ordered List or Numbered List

HTML Ordered List or Numbered List displays elements in numbered format. The HTML `ol` tag is used for ordered list. We can use ordered list to represent items either in numerical order format or alphabetical order format, or any format where an order is emphasized. There can be different types of numbered list:

- Numeric Number (1, 2, 3)
- Capital Roman Number (I II III)
- Small Roman Number (i ii iii)
- Capital Alphabet (A B C)
- Small Alphabet (a b c)

type "1" - This is the default type. In this type, the list items are numbered with numbers.

type "I" - In this type, the list items are numbered with upper case roman numbers.

type "i" - In this type, the list items are numbered with lower case roman numbers.

type "A" - In this type, the list items are numbered with upper case letters.

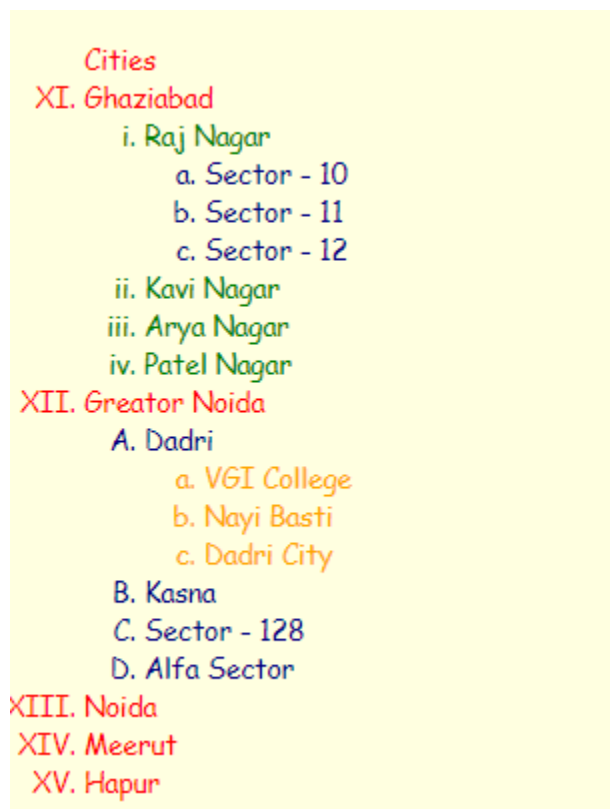
type "a" - In this type, the list items are numbered with lower case letters.

start attribute

The start attribute is used with `ol` tag to specify from where to start the list items.

`<ol type="1" start="5">` : It will show numeric values starting with "5".

`<ol type="I" start="5">` : It will show Roman upper case value starting with "V".



```

<html>
  <head>
    <title>WELCOME TO VGI</title>
  </head>
  <body bgcolor=lightyellow>
    <font color=red face="Comic Sans MS" size=4>
      <ol type=I start=11>
        <lh>Cities</lh>
        <li>Ghaziabad
          <font color=green>
            <ol type=i>
              <li>Raj Nagar
                <font color=navy>
                  <ol type=a>
                    <li>Sector - 10</li>
                    <li>Sector - 11</li>
                    <li>Sector - 12</li>
                  </ol>
                </font>
              </li>
              <li>Kavi Nagar</li>
              <li>Arya Nagar</li>
              <li>Patel Nagar</li>
            </ol>
          </font>
        </li>
        <li>Greater Noida
          <font color=navy>
            <ol type=A>
              <li>Dadri
                <font color=orange>
                  <ol type=a>
                    <li>VGI College</li>
                    <li>Nayi Basti</li>
                    <li>Dadri City</li>
                  </ol>
                </font>
              </li>
              <li>Kasna</li>
              <li>Sector - 128</li>
              <li>Alfa Sector</li>
            </ol>
          </font>
        </li>
        <li>Noida</li>
        <li>Meerut</li>
        <li>Hapur</li>
      </ol>
    </font>
  </body>
</html>

```

HTML Unordered List | HTML Bulleted List

HTML Unordered List or Bulleted List displays elements in bulleted format . We can use unordered list where we do not need to display items in any particular order. The HTML ul tag is used for the unordered list. There can be 4 types of bulleted list:

- disc
- circle
- square
- none

To represent different ordered lists, there are 4 types of attributes in tag.

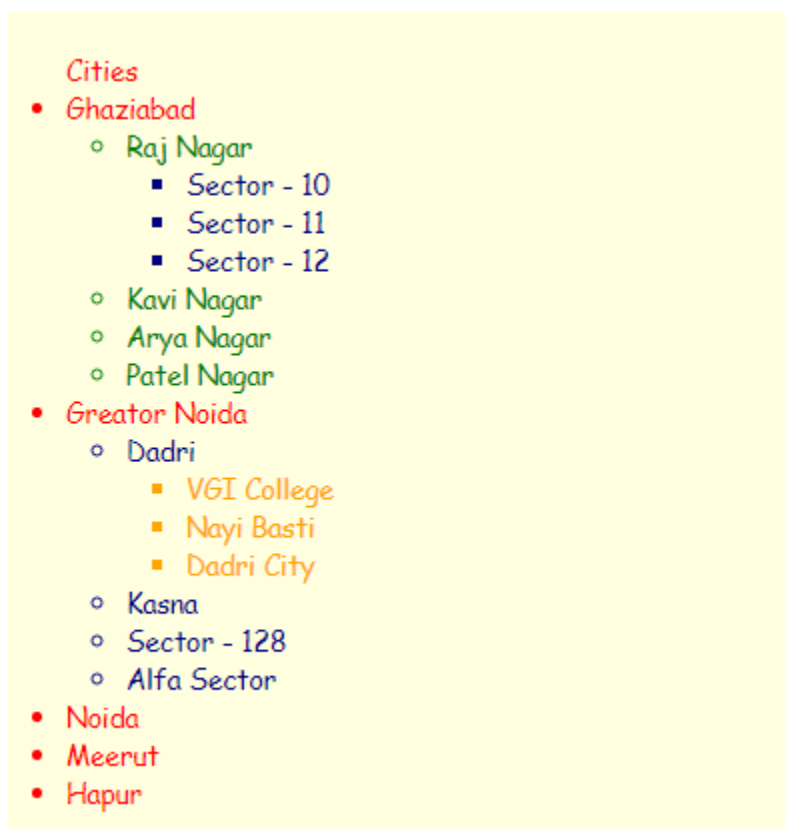
Type Description

Type "disc" - This is the default style. In this style, the list items are marked with bullets.

Type "circle" - In this style, the list items are marked with circles.

Type "square" - In this style, the list items are marked with squares.

Type "none" - In this style, the list items are not marked .



```

<html>
  <head>
    <title>WELCOME TO VGI</title>
  </head>

  <body bgcolor=lightyellow>
    <font color=red face="Comic Sans MS" size=4>
    <font color=red face="Comic Sans MS" size=4>
      <ul>
        <lh>Cities</lh>
        <li>Ghaziabad
          <font color=green>
            <ul>
              <li>Raj Nagar
                <font color=navy>
                  <ul>
                    <li>Sector - 10</li>
                    <li>Sector - 11</li>
                    <li>Sector - 12</li>
                  </ul>
                </font>
              </li>
              <li>Kavi Nagar</li>
              <li>Arya Nagar</li>
              <li>Patel Nagar</li>
            </ul>
          </font>
        </li>
        <li>Greator Noida
          <font color=navy>
            <ul>
              <li>Dadri
                <font color=orange>
                  <ul>
                    <li>VGI College</li>
                    <li>Nayi Basti</li>
                    <li>Dadri City</li>
                  </ul>
                </font>
              </li>
              <li>Kasna</li>
              <li>Sector - 128</li>
              <li>Alfa Sector</li>
            </ul>
          </font>
        </li>
        <li>Noida</li>
        <li>Meerut</li>
        <li>Hapur</li>
      </ul>
    </font>
  </body>
</html>

```


HTML Description List | HTML Definition List

HTML Description List or Definition List displays elements in definition form like in dictionary. The `<dl>`, `<dt>` and `<dd>` tags are used to define description list.

The 3 HTML description list tags are given below:

`<dl>` tag defines the description list.

`<dt>` tag defines data term.

`<dd>` tag defines data definition (description).

```
<!DOCTYPE html>
<html>
<body>
<tt>
  <dl>
    <dt>HTML</dt>
    <dd>is a markup language</dd>
    <dt>Java</dt>
    <dd>is a programming language and platform</dd>
    <dt>JavaScript</dt>
    <dd>is a scripting language</dd>
    <dt>SQL</dt>
    <dd>is a query language</dd>
  </dl>
</tt>
</body>
</html>
```

output -

```
HTML
    is a markup language
Java
    is a programming language and platform
JavaScript
    is a scripting language
SQL
    is a query language
```

HTML <fieldset> tag

HTML <fieldset> tag is used to group the logically related fields/labels contained within an HTML form.

The use of this tag is optional while creating an HTML form but using <fieldset>, it is easy to understand the purpose of grouped elements of form.

The <legend> tag is used with the <fieldset> element as a first child to define the caption for the grouped related fields.

```
<fieldset style="border-radius:20px;">
  <legend align=center><font face="Comic Sans MS" size=3 color=green>This is Unorder
  List Example</font></legend>
  ur page contents....
</fieldset>
```

HTML Table

HTML table tag is used to display data in tabular form (row * column). There can be many columns in a row.

We can create a table to display data in tabular form, using <table> element, with the help of <tr> , <td>, and <th> elements.

In Each table, table row is defined by <tr> tag, table header is defined by <th>, and table data is defined by <td> tags.

HTML tables are used to manage the layout of the page e.g. header section, navigation bar, body content, footer section etc. But it is recommended to use div tag over table to manage the layout of the page .

HTML Border attribute - You can use border attribute of table tag in HTML to specify border. But it is not recommended now.

HTML Table width - We can specify the HTML table width using the CSS width property. It can be specify in pixels or percentage.

HTML Table with colspan - If you want to make a cell span more than one column, you can use the colspan attribute. It will divide one cell/row into multiple columns, and the number of columns depend on the value of colspan attribute.

HTML Table with rowspan - If you want to make a cell span more than one row, you can use the rowspan attribute. It will divide a cell into multiple rows. The number of divided rows will depend on rowspan values.

HTML Table Tags

Tag	Description
<table>	- It defines a table.
<tr>	- It defines a row in a table.
<th>	- It defines a header cell in a table. - table heading
<td>	- It defines a cell in a table. - table data
<caption>	- It defines the table caption.
<tbody>	- It is used to group the body content in a table.
<thead>	- It is used to group the header content in a table.
<tfooter>	- It is used to group the footer content in a table.

Employee Report				
Empno	Emp Name	Salary	Contact Information	
			Mobile No	Landline No
1001	Bharat Sharma	31,999.00	9211420420	0420420
1002	Harsh Nagar	32,999.00	9211420421	0420421
1003	Abhishek	28,999.00	9211420422	0420422

```
<html>
  <head>
    <title>WELCOME TO VGI</title>
  </head>
  <body bgcolor=lightblue>
    <tt>
      <div align=right><a href=Wel3.html>Prev</a> | <a href=Wel5.html>Next</a></div>
      <table bgcolor=pink border=1 width='100%'>
        <caption>Employee Report</caption>
        <tr>
          <th rowspan=2>Empno</th><th rowspan=2>Emp Name</th><th rowspan=2>Salary</th><th
            colspan=2>Contact Information</th>
          </tr>
          <tr>
            <th>Mobile No</th><th>Landline No</th>
          </tr>
          <tr>
            <td>1001</td><td>Bharat Sharma</td><td>31,999.00</td><td>9211420420</td><td>0420420</td>
          </tr>
          <tr>
            <td>1002</td><td>Harsh Nagar</td><td>32,999.00</td><td>9211420421</td><td>0420421</td>
          </tr>
          <tr>
            <td>1003</td><td>Abhishek</td><td>28,999.00</td><td>9211420422</td><td>0420422</td>
          </tr>
        </table>
      </tt>
    </body>
  </html>
```