UNIT-2

HTML background:

- HTML Background with Colors
- HTML Background with Images

Html Background with Colors

The bgcolor attribute is used to control the background of an HTML element, specifically page body and table backgrounds.

<tagname bgcolor = "color_value"...>

Html Background with Images

- <tagname background = "Image URL"...>

HTML layout:

□ Page layout is the part of graphic design that deals with the arrangement of visual elements on a page. Page layout is used to make the web pages look better. It establishes the overall appearance, relative importance, and relationships between the graphic elements to achieve a smooth flow of information and eye movement for maximum effectiveness or impact.

Header Section	
Navigation Bar	
Index	Content section
Footer Section	

- Header: The part of the front end which is used at the top of the page. <header> tag is used to add a header section on web pages.s
- Navigation bar: The navigation bar is the same as the menu list. It is used to display the content information using hyperlinks. <nav> tag is used to add the nav section(nav elements) in web pages.
- Index / Sidebar: It holds additional information or advertisements and is not always necessary to be added to the page.

- Content Section: The content section is the central part where content is displayed.<main> tag is used to add the main content of the webpages.
- Footer: The footer section contains the contact information and other query related to web pages.
 The footer section is always put on the bottom of the web pages. The <footer> tag sets the footer on web pages.

Header:

```
<!DOCTYPE html>
<html>
<head>
<title>Page Layout</title>
</head>
<body>
<!-- Header Section -->
<header style="background-color:DodgerBlue;">
<div class="head1">GeeksforGeeks</div>
<div class="head2">A computer science portal for geeks</div>
</header>
```

Navigation bar:

```
<!-- Menu Navigation Bar -->
<nav class="menu" style="background-color:Red;" >
<a href="#home">HOME</a>
<a href="#news">NEWS</a>
<a href="#notification">NOTIFICATIONS</a>
<div class="menu-log">
<a href="#login">LOGIN</a>
</div>
</div>
</nav>
```

Body section:

```
<!-- Body section -->

<main class = "body_sec" style="background-color:Green;" >

<section id="Content">

<h3>Content section</h3>

</section>

</main>
```

Footer section:

```
<!-- Footer Section -->
<footer style="background-color:Yellow;">Footer
Section</footer>
</body>
</html
```

HTML forms:

- An HTML form is used to collect user input. The user input is most often sent to a server for processing.
- The HTML <form> element is used to create an HTML form for user input:

```
<form>
.
form elements
.
</form>
```

- The HTML <input> element is the most used form element.
- An <input> element can be displayed in many ways, depending on the type attribute.
- □ Types of inputs:
 - Text
 - Radio
 - □ Check box
 - Submit
 - Button
 - Dropdown box

- Checkbox: It is used to define a checkbox field. The checkbox is shown as a square box that is ticked when it is activated. It allows the user to select one or more option among all the limited choices.
- Radio button: It is used to define a Radio Button. Radio Buttons are used to let the user select exactly one option from a list of predefined options. Radio Button input controls are created by using the "input" element with a type attribute having value as "radio".

- Text: It is used to define a single-line text field.
 The default width of the text field is 20 characters.
- Submit: It is used to define a submit button. It is used to submit all the user value to the form handler. The Form Handler is a server page that activates a script for processing all the input values.
- Reset: It is used to defines a reset button. The reset button is used to reset all the form values to its initial values.

Drop down box:

- The <select> element is used to create a dropdown list.
- The id attribute is needed to associate the dropdown list with a label.
- The <u><option></u> tags inside the <select> element define the available options in the drop-down list.
- □ **Tip:** Always add the <u><label></u> tag for best accessibility practices!

date

■ The <input type="date"> is used for input fields that should contain a date.

□ color

The <input type="color"> is used for input fields that should contain a color.

email

- □ The <input type="email"> is used for input fields that should contain an e-mail address.
- Depending on browser support, the e-mail address can be automatically validated when submitted.

image

- The <input type="image"> defines an image as a submit button.
- The path to the image is specified in the src attribute.

password

cinput type="password"> defines a password field:

□ file

■ The <input type="file"> defines a file-select field and a "Browse" button for file uploads.

quantity

- The <input type="number"> defines a numeric input field.
- You can also set restrictions on what numbers are accepted.

□ url

■ The <input type="url"> is used for input fields that should contain a URL address.

□ time

■ The <input type="time"> allows the user to select a time (no time zone).

telephone

■ The <input type="tel"> is used for input fields that should contain a telephone number.

Gsearch

The <input type="search"> is used for search fields (a search field behaves like a regular text field).

volume

□ The <input type="volume"> is used to adjust voulme.

HTML input attributes

value

The input value attribute specifies an initial value for an input field:

readonly

- The input readonly attribute specifies that an input field is read-only.
- A read-only input field cannot be modified (however, a user can tab to it, highlight it, and copy the text from it).

disabled

- The input disabled attribute specifies that an input field should be disabled.
- A disabled input field is unusable and un-clickable.

□ size

- The input size attribute specifies the visible width, in characters, of an input field.
- The default value for size is 20.

maxlength

The input maxlength attribute specifies the maximum number of characters allowed in an input field.

min and max

- The input min and max attributes specify the minimum and maximum values for an input field.
- The min and max attributes work with the following input types: number, range, date, datetime-local, month, time and week.

pattern

- The input pattern attribute specifies a regular expression that the input field's value is checked against, when the form is submitted.
- □ The pattern attribute works with the following input types: text, date, search, url, tel, email, and password.

required

- The input required attribute specifies that an input field must be filled out before submitting the form.
- The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.

□ step

- The input step attribute specifies the legal number intervals for an input field.
- Example: if step="3", legal numbers could be -3, 0, 3,6, etc.

height and width

■ The input height and width attributes specify the height and width of an <input type="image"> element.

autocomplete

- The input autocomplete attribute specifies whether a form or an input field should have autocomplete on or off.
- Autocomplete allows the browser to predict the value. When a user starts to type in a field, the browser should display options to fill in the field, based on earlier typed values.

CSS

Cascading Style Sheet

Introduction:

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once

HTML vs CSS

HTML

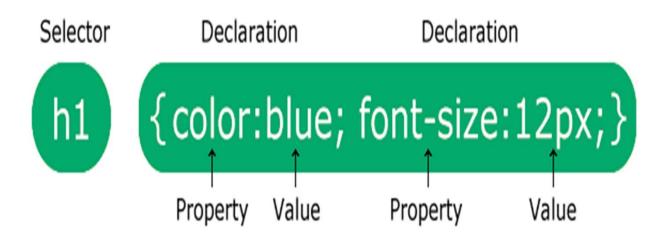
- HTML is a markup
 language used to define
 a structure of a web
 page.
- It consists of tags inside
 which text is enclosed.
- HTML doesn't have further types.

CSS

- CSS is a style sheet language used to style the web pages by using different styling features.
- It consists of selectors and declaration blocks.
- CSS can be internal or external depending upon the requirement.

- We cannot use HTML inside a CSS sheet.
- HTML is not used for presentation and visualization.
- HTML doesn't allow animations and transitions.
- HTML files are saved
 with .htm or .html extension.

- We can use CSS inside an HTML document.
- CSS is used for presentation and visualization.
- CSS allows animation and transitions which helps to improve the UI.
- CSS files are saved with .css extension.



- The selector points to the HTML element you want to style.
- The declaration block contains one or more declarations separated by semicolons.
- Each declaration includes a CSS property name and a value, separated by a colon.
- Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

```
□ <html> <head>
  <style>
   color: red;
   text-align: center;
  </style>
  </head> <body>
  Hello World!
  These paragraphs are styled with CSS.
  </body> </html>
```

CSS element selector:

□ The element selector selects HTML elements based on the element name.

CSS id selector:

- The id selector uses the id attribute of an HTML element to select a specific element.
- The id of an element is unique within a page, so the id selector is used to select one unique element!
- To select an element with a specific id, write a hash
 (#) character, followed by the id of the element.

CSS class selector:

- The class selector selects HTML elements with a specific class attribute.
- To select elements with a specific class, write a period (.) character, followed by the class name.

Background image and colour:

```
- <style>
body {
background-image: url("paper.gif");
background-color: #ccccc;
}
</style>
```

Multiple images:

```
□ <style>
  body {
     background-image: url("img_tree.gif"),
     url("paper.gif");
     background-repeat: no-repeat, repeat;
     background-color: #ccccc;
```

CSS lists:

- □ The CSS list properties allow you to:
 - Set different list item markers for ordered lists
 - Set different list item markers for unordered lists
 - Set an image as the list item marker
 - Add background colors to lists and list items
- Two types of lists:
 - Ordered list
 - Unordered list

- The list-style-type property specifies the type of list item marker.
- The list-style-image property specifies an image as the list item marker.
- □ The list-style-position property specifies the position of the list-item markers (bullet points).
 - "list-style-position: outside;" means that the bullet points will be outside the list item. The start of each line of a list item will be aligned vertically.
 - □ list-style-position: inside;" means that the bullet points will be inside the list item. As it is part of the list item, it will be part of the text and push the text at the start: