

# UI FULL STAGE WEB WITH REACT

## Web Applications

### 1. What is Network?

- A computer network comprises of group of computers connecting with each other for sharing of information and resources.
- ARPANET [Advance Research Projects Agency Network] is the first computer network introduced by US-DOD.
- Network is classified into various type group based on range and capacity.

- a) LAN
- b) MAN
- c) WAN

### 2. What is Internet?

- Internet is a wide area network that connects computers across the globe.
- CERN labs introduced the concept of Internet.  
[Council for European Research and Nuclear]

### 3. What is Web?

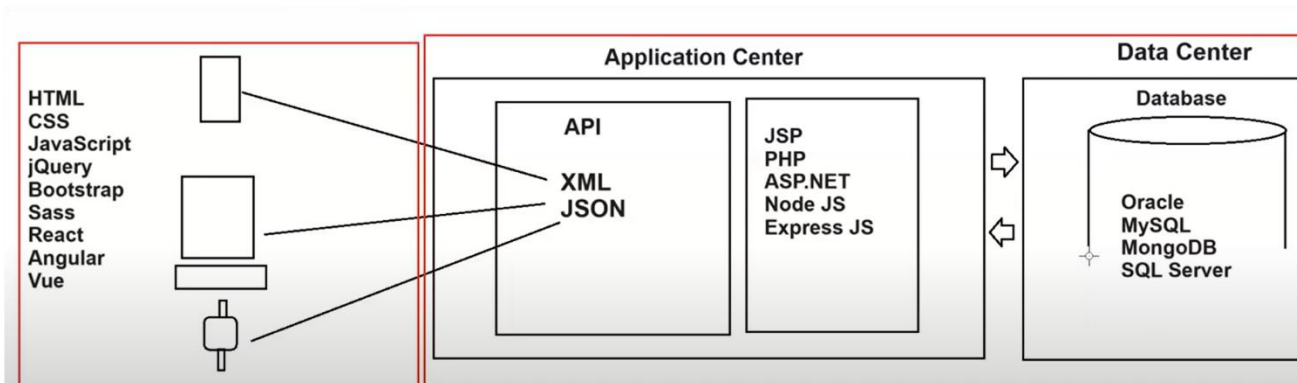
- Web is a portion of Internet with restricted access.
- "Tim Berners Lee" introduced the concept of web.
- Web standards are now maintained by a community "W3C".  
[Word Wide Web Consortium] - w3.org
- Web Standards follow 4 basic principles
  - a) Accessibility
  - b) Internationalization
  - c) Privacy
  - d) Security
- The latest version of Web is "Web3".

### 4. What web comprises of ?

- A typical web comprises of
  - a) Website
  - b) Web Application
  - c) Blogs [Web-Log]
  - d) Micro Blogs
  - e) Wiki [Quick]
  - f) Podcasting
  - g) Widgets
  - etc..

### 5. Web Application Architecture

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What is Network?

What is Internet?

What is Web?

Web Standards & Principles?

## Setup Environment for Web Development

**1. Your device requires Window 8+ versions. You can also have other OS services like Mac, Linux.**

**2. Download and Install "Node JS" on your PC.**

<https://nodejs.org/en>

- Node JS is a JavaScript runtime used by developers to build Servers, Web Applications, Command Line Tools & Scripts.

- After installing open Command Prompt "run > cmd"

```
C:\> node -v
```

// make sure that Node is above 20x version

```
C:\> npm -v
```

// NPM is above 8x version

- NPM is "Node Package Manager".

- Package Manager is a software tool used by developers to install, update and uninstall any library or framework required for project.

- There are various package manager tools like

a) NPM

b) Yarn

c) NuGet

d) RubyGEMS

e) Composer etc..

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### 3. Download and Install "Visual Studio Code" editor

- Editor provides an IDE [Integrated Development Environment]
- It allows to build, debug, test and deploy applications.
- There are various types of editors
  - a) Webstrom
  - b) Sublime
  - c) Edit Plus
  - d) PyCharm
  - e) Visual Studio
  - f) Visual Studio Code etc..

<https://code.visualstudio.com/>

### 4. Open Visual Studio Code on your PC and install following extensions

- a) Live Server [Ritwick Dey]
- b) vscode-icons [vscodeicons.team]
- c) IntelliSense for CSS class names in HTML
- d) ESLint

- Live server provides a local server for hosting your web applications.
- Live server runs on "http://127.0.0.1" (or) "http://localhost" [Browser]

Run => ping -t 127.0.0.1

#### 1. Install Node JS

```
C:\>node -v
C:\>npm -v
```

#### 2. VS Code

#### 3. Extensions

## Creating Web Application

### FAQ: What is a Website or Web Application?

Ans: Website is a virtual directory on server that provides access to resources on server.

### FAQ: What is Web Server?

Ans: Web Server resembles both hardware and software, it satisfies client request by sending and receiving data. Local web server runs on "http://127.0.0.1".

### FAQ: Where the resources are kept?

Ans: Web Application resources are kept in "Physical Path", which is accessed by using "Virtual Path".

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D:\project

=> Physical Path

http://127.0.0.1/project

=> Virtual Path

http://127.0.0.1:5500

=> Virtual Path

Every project runs on specific "Port" number.

## 1. Create a new folder for your project at any location on your PC.

D:\Flipkart

## 2. Open Project folder in VS Code

## 3. Open Terminal in VS Code

Terminal Menu => New Terminal

(or)

Ctrl + `

## 4. Switch terminal to "Command Prompt" from "Power Shell"

## 5. Run the following command

```
> npm init -y
```

It generates "package.json", which is a configuration file required for project.

It comprises of project meta data, which includes details like

- a) Author
- b) Project Name
- c) Version Number
- d) Test Commands
- e) Entry Point
- f) Dependencies etc..

## 6. Add a new file into project by name "README.md". It is a help document designed by developer for developer.

## 7. Add folders

- a) public
- b) src

- public is used to keep all static resources like html, images, documents, videos, spread sheet, ppt, etc.

- src is used to keep all dynamic resources like css, scss, js, ts, jsx, tsx etc.

D:\Flipkart

|

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```
|_public
| |_images
| |_videos
| |_docs
|
|_src
| |_scripts
| |_styles
| |_scss
|
|_package.json
|_README.md
```

<https://www.freepik.com/>  
<https://www.canva.com/>  
<https://copilot.microsoft.com/>

### 8. Click "Go Live" in the status bar of VS code

## Web Page

- Web Page is a Hyper Text Document that provides an UI for interacting with the resources in application.
- Hyper refers to the term "Beyond".
- A Hyper Text Document can display content and take the user beyond displayed content.
- Web Pages are classified into 2 types

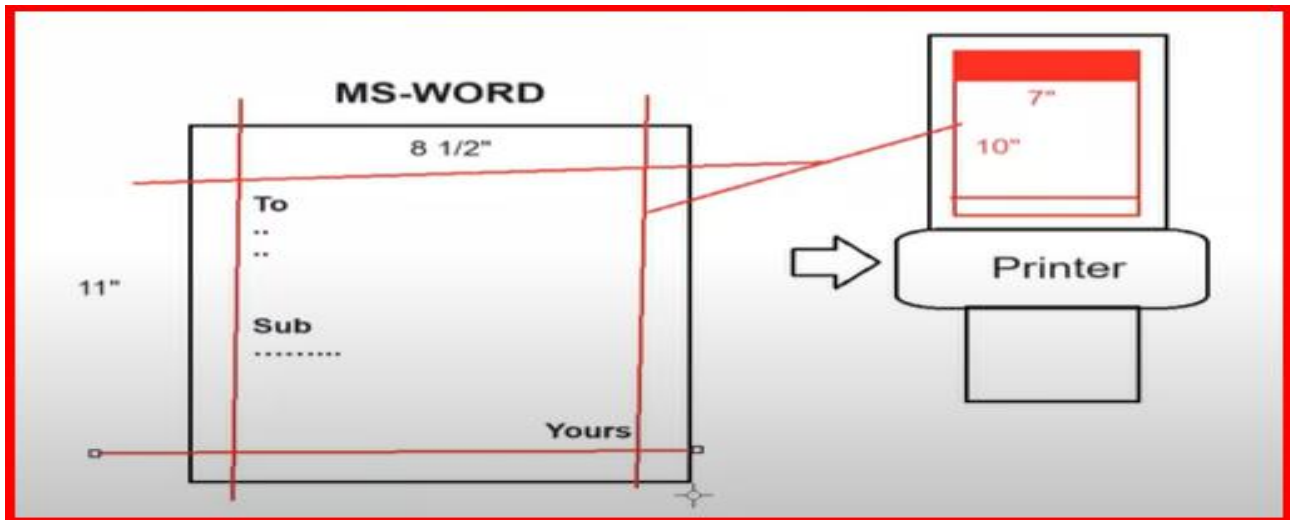
- a) Static Page
- b) Dynamic Page

- Static Page comprises of same content to display as response across multiple requests. It have extensions ".html, .htm"
- Dynamic page have a customized response for every client request. It have extensions ".jsp, .asp, .aspx, .php"
- HTML is a language used for designing both static and dynamic pages.

## HTML

- Hyper Text Markup Language
- Hyper means "Beyond".
- Hyper text navigates the user beyond what he can see on screen.
- Markup refers to the term "Marking Up", which is a process of preparing content to present on desired target location.
- HTML is a markup language for presenting content on browser.

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### Evolution of HTML:

- Internet started with a browser called "Mosaic".
- CERN [Council for European Research and Nuclear] labs developed a language called GML [Generic Markup Language] for browser.
- Later new features were added to GML and improved as "SGML".  
[Standard Generic Markup Language]
- "Tim Berners Lee" in early 1990 introduced HTML which is super to GML & SGML.
- IETF [Internet Engineering Task Force] developed HTML up to version 3.1.
- In 2004 "WHATWG" [Web Hyper Text Application Technology Work Group] took the responsibility of HTML and started evolving and maintaining HTML till date.
- WHATWG start HTML4 in 2004, and developed a new version HTML5 2014.
- The latest available version of HTML is HTML5.

<https://whatwg.org/>

mdn - <https://developer.mozilla.org/en-US/>

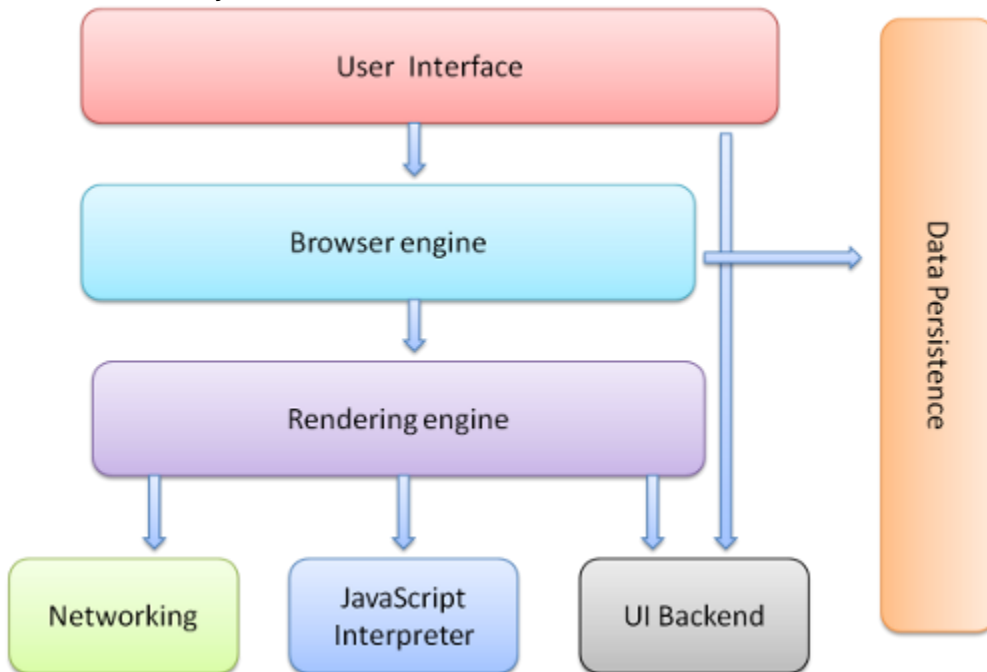
### Browser Architecture

- Browser is a software tool used by client to access and view web pages.
- Some of the popular browser softwares
  - \* Chrome
  - \* Edge
  - \* FireFox
  - \* Opera
  - \* Safari etc..
- Every browser comprises of following components
  - a) User Interface
  - b) UI Backend
  - c) Browser Engine
  - d) Rendering Engine
  - e) Networking
  - f) JavaScript Interpreter
  - g) Data Persistence

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### User Interface & UI Backend:

- UI comprises of buttons [ back, referesh, forward] and other elements for interaction.
- The functionality for UI is defined in UI Backend.



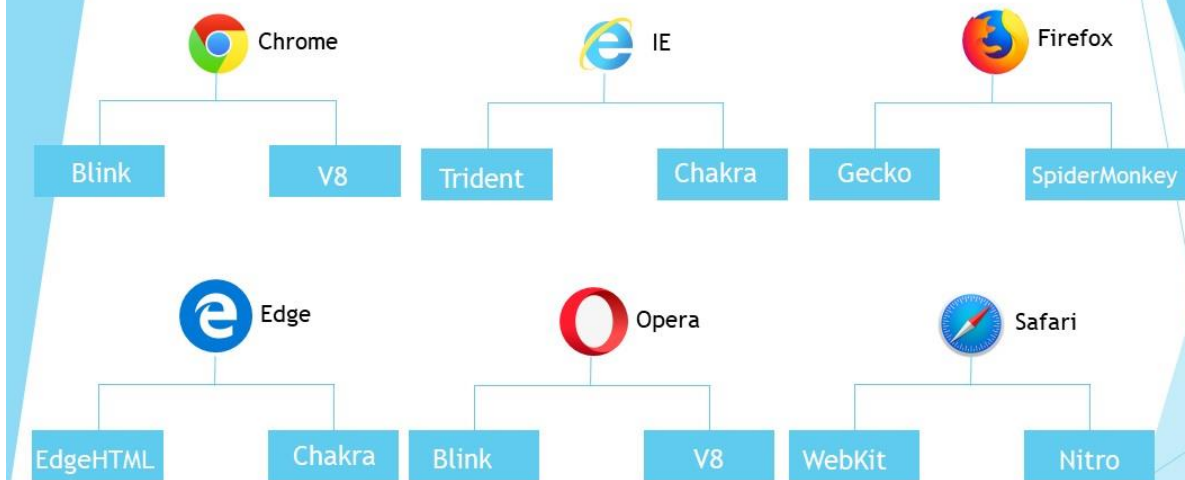
### Browser Engine:

- It is responsible for translating HTML & CSS into browser understandable content.
- Every browser have its own engine

Chrome	V8, Blink
Safari	Webkit
FireFox	Spider Monkey, Gecko
Edge	Chakra
Opera	V8

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### Rendering Engines & JavaScript Engines



#### Rendering Engine:

- It is responsible for creating a layout and rendering the output.
- The generated output is presented by using a process called "Painting".

#### JavaScript Interpreter:

- Interactions in a web application are designed by using Javascript.
- Javascript in browser is translated by "JavaScript Interpreter".

#### Networking:

- It identifies the requests.
- It returns various resources on request.
- It reports issues on requests.
- It tracks the load time of resources.

#### Data Persistence:

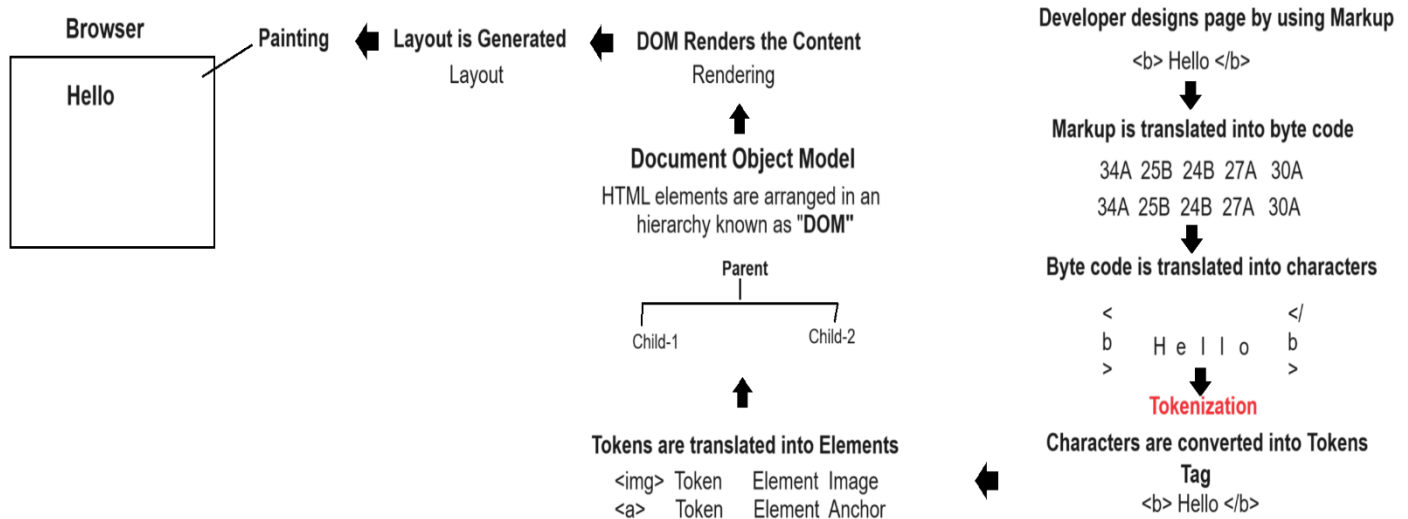
- It is the storage for browser.
- Client details can be stored in browser.
- It have various storage locations like
  - a) Cookies
  - b) Local Storage
  - c) Session Storage
 etc..

### HTML Parsing



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Markup => Bytes => Chars => Token => Node / Elements => DOM => Render => Layout => Paint



- HTML comprises of set of elements arranged in a hierarchy called "DOM". [Document Object Model]
- HTML elements are classified into 5 major groups

- Normal Elements
- Void Elements
- RC Data Elements
- Raw Text Elements
- Foreign Elements

## Normal Element:

- It returns a presentation directly on call back.
- It doesn't require additional attributes for initial presentation.
- It starts a presentation and can't stop implicitly.
- Explicitly it is stopped by using end token.

EX:

```
<b>   Start Token
</b>  End Token
```

## Void Element:

- The term void refers to "no-return".
- Void element will not return any presentation directly on call back.
- It ends implicitly.
- Hence it doesn't require end token.
- It is a self ending element.
- It returns presentation by using additional attributes.

Ex:

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<img>

## RC Data Type:

- Rich content data type element.
- It only to display rich text content.
- It will not allow any another element within the context.

Ex:

<textarea> </textarea>

## Raw Text Elements:

- Raw text is used for presentation.
- It doesn't require a token.

Ex:

&#8377;  
&copy;  
&deg;

## Foreign Elements:

- A foreign element is an HTML element but requires special privileges and credentials to use in browser.
- You have to import special libraries and extensions to run in browser.

Ex:

SVG  
MATHML  
Canvas

## FAQ's:

### 1. What are semantic and non-semantic elements?

- A. Semantic elements are used for a specific purpose.  
Non-Semantics can used universally for any purpose.

<header>, <footer>, <h2>	semantics
<span>, <div>	non-semantics

### 2. What are block level and inline elements?

- A. Block level element will not allow other element to wrap beside. You can display above or below.  
Inline Elements will allow other elements to wrap beside.

HTML Page Structure:

### 1. Page must have extension ".html or .htm"

#### FAQ: What is difference between .html & .htm ?

- Ans: Technically both are same.  
".htm" is extension name according to the standards of OS.

### 2. Every HTML page must have a document declaration. It is mandatory to defined document declaration from HTML 5 version.

```
<!DOCTYPE html>
```

## FAQ: What is the role of document declaration?

Ans: It notifies browser engine about version of HTML used in page design.

Document declaration is introduced from HTML 5 version.

Hence if there is no document declaration then it is HTML 4.

## 3. HTML document scope is defined by using <html> element.

### Syntax:

```
<!DOCTYPE html>
```

```
<html>
```

```
</html>
```

## FAQ: Can we display multiple documents simultaneously at the same time in browser?

Ans: Yes. Technically every document requires a scope to handle its elements.

## 4. <html> element requires "lang" attribute to defines the regional language used for web page. Browser handles date & time values, number and currency like reference using language type.

### Syntax:

```
<!DOCTYPE html>
```

```
<html lang="en-in">
```

```
</html>
```

Note: "lang" is an attribute, technically attributes provide additional behaviour for element.

## 5. Every HTML document have 2 sections at high level

a) <head>

b) <body>

- Content in head section is defined to save "Round Trips".

- Content in body section uses round trips.

## FAQ: What is Round Trip?

Ans: Round Trip is the process of accessing content from server on every request.

## FAQ: How to save round trip?

Ans: By caching the data in browser memory we can save round trip.

Frequently requested data is fetched from memory instead of fetching from server.

## 6. Every HTML page head section usually comprises of elements like

a) <title>

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- b) <link>
- c) <meta>
- d) <style>
- e) <script>
- f) <base>

## Title:

- It can display page title in browser title bar.
- It is used in bookmarking.
- It is used in SEO. [Search Engine Optimization]

## Syntax:

```
<!DOCTYPE html>
<html lang="en-in">
  <head>
    <title> Flipkart | Shopping </title>
  </head>
</html>
```

## HTML Page Structure

- Document Declaration
- Document Scope
- Language for document
- Head Section
- Head Section Elements
  - a) Title

## 2. Link

- It can link an external document to web page.
- You can link shortcut icons, stylesheets etc.

## Ex: Setup Favicon for Webpage

- Favicon must have extension ".ico"
- Make sure that the size is not maximum than 32pixels.

1. Open Ms-Paint on your PC
2. Go to File => Image Properties => Set size 32 x 32 pixels
3. Draw your icon and save into project physical path

D:\flipkart\public\images\favicon.png

4. Go to images folder in VS code and rename [F2] [fn + f2]

"favicon.ico"

5. Link the webpage

## UI FULL STAGE WEB WITH REACCT REACT

```
<head>
  <title> Flipkart </title>
  <link rel="shortcut icon" href="/public/images/favicon.ico">
</head>
```

**Ex:** index.html

```
<!DOCTYPE html>
<html lang="en-in">
  <head>
    <title>Flipkart | Online Shopping</title>
    <link href="/public/images/favicon.ico" rel="shortcut icon">
  </head>
</html>
```

### 3. Meta

- Meta refers to meta data.
- Meta data is information about your page given to browser or SEO.
- Meta provides options to make page

- a) Responsive
- b) SEO Friendly

#### Meta Responsive:

- Responsive allows the page to adjust its content according to the screen and device.
- To create a responsive web page several features are required.
- Meta is one of the feature to make page responsive.

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

- a) view port : It identifies the device type and its screen width.
- b) content : It specifies that your page content width is equal to device width.
- c) initial-scale : It is the default zoom level. 1=100%

[Note: To test responsive page your can download and install "Mobile Simulator" for google chrome browser.](#)

```
<meta http-equiv="refresh" content="4">
```

- a) http-equiv : It defines the action to perform on browser.  
"refresh" specifies that the page is requested at regular intervals.
- b) content : It defines the time interval in seconds.  
"4" specifies that page reloads every 4 seconds.

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## Meta SEO:

- SEO is Search Engine Optimization.
- Web Spiders and Web Crawlers are the robots used for searching and optimizing the results on Web.
- You have to design a page easily readable by ROBOTS, which is often called as SEO friendly.
- To make page SEO friendly meta provides various options

```
<meta name="keywords" content="some words used to search your business">
<meta name="description" content="something about your website">
```

```
<meta name="keywords" content="some keywords for finding page">
<meta name="description" content="something about your website">
<meta charset="utf-8">
```

a) UTF : Unicode Transformation Format  
It used for defining memory for the type of language used for HTML.

b) 8 : It refers to 8 bit memory.  
16 bit  
32 bit

0020c64 bit

## Ex:

```
<!DOCTYPE html>
<html lang="en-in">
  <head>
    <title>Flipkart | Online Shopping</title>
    <link href="/public/images/favicon.ico" rel="shortcut icon">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <meta http-equiv="refresh" content="5" >
    <meta name="keywords" content="some words">
    <meta name="description" content="something about your website">
    <meta charset="utf-8">
  </head>
</html>
```

## 4. Script & Style

- <script> is used to embed client side and server side scripts into page.
- <style> is used to embed CSS styles into page.

## Summary:

```
<head>
  <title>
  <link>
  <meta>
  <style>
  <script>
</head>
```

# UI FULL STAGE WEB WITH REACCT REACT

## Body Section

- It comprises of content to render in browser workspace.
- Content of body always require a round trip.

### Syntax:

```
<body>
```

```
</body>
```

### Attributes:

1. **bgcolor** : It sets a background color for page.
2. **text** : It sets color for text in page.

### HTML Colors:

1. Color Name
2. Shade Name
3. Hexadecimal code

```
<body bgcolor="green">
```

```
<body bgcolor="lightgreen">
```

Note: Hexadecimal is a 3 or 6 chars value starting with "#".  
Hexadecimal colors have RGB order. [Red Green Blue]

```
#RGB
```

```
#RRGGBB
```

R, G, B values can be "0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e, f"

0 is dark

f is bright

### Syntax:

```
<body bgcolor="#ff00ff" text="#fff">
```

3. **background** : It sets a background image for your page.

Note: Never use the physical path of any resource in web designing. You have to use only the virtual path.

```
<body background="D:\MyProject\Photos\pic.jpg"> // invalid
```

```
<body background="./public/images/pic.jpg"> // valid
```

```
"\"
```

=> back slash it is used for physical path

```
"/"
```

=> forward slash it is used for virtual path

### CSS Background Styles:

## UI FULL STAGE WEB WITH REACCT REACT

background-size	: width, height in pixels or cover, contain
background-position	: top, center, right, bottom, or you can use pixels
background-attachment	: fixed, scroll
background-repeat	: repeat, no-repeat, repeat-x, repeat-y

### Syntax:

```
<head>
  <style>
    body {
      background-size: 400px 400px;
      background-repeat: no-repeat;
      background-position: center center;
      background-attachment: fixed;
    }
  </style>
</head>
<body background="/public/images/banner.jpg">
</body>
```

Note: You can set the body height in CSS as "100vh" [Viewport Height] to fit the screen.

```
body {
  height: 100vh;
  width: 100vw;
}
```

Ex:

```
<!DOCTYPE html>
<html lang="en-in">
  <head>
    <title>Flipkart | Online Shopping</title>
    <link href="/public/images/favicon.ico" rel="shortcut icon">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <meta name="keywords" content="some words">
    <meta name="description" content="something about your website">
    <meta charset="utf-8">
    <style>
      body {
        height: 100vh;
        background-size: 400px 400px;
        background-position: center center;
        background-repeat: no-repeat;
        background-attachment: fixed;
      }
    </style>
  </head>
  <body background="/public/images/banner.jpg" text="white">

</body>
```



## UI FULL STAGE WEB WITH REACCT REACT

</html>

**4. align** : It aligns the page content left, center, right or justify.

Syntax:

```
<body align="center | justify | left | right">
```

```
</body>
```

**5. leftmargin**

]

**6. rightmargin**

]

margin is the space between page and content border.

**7. topmargin**

]

If there is no border then it is distance between page and

**8. bottommargin**

]

content.

Syntax:

```
<body leftmargin="100" rightmargin="100" topmargin="50" bottommargin="50">
```

```
</body>
```

**9. alink**

: It sets color for active links in page.

**10. vlink**

: It sets color for visited links in page.

Syntax:

```
<body alink="red" vlink="#0d0">
```

```
<a href="https://www.amazon.in"> Amazon </a>
```

```
</body>
```

### Semantic and Non Semantic Elements to design page Layout:

- HTML 4 uses tables to design page layout.
- Tables are not SEO friendly and lead to a situation called "Kiss-of-Death".
- HTML 5 introduces new semantics to design page layout so that is more SEO friendly and load content in an order.
- The semantics used for layout design are

```
<header>
```

```
<footer>
```

```
<section>
```

```
<aside>
```

```
<article>
```

```
<dialog>
```

```
<figure>
```

```
<figcaption>
```

```
<main>
```

```
<nav>
```

- The non semantics used for page design are

```
<div>
```

```
<span>
```

**FAQ: What is <div> ?**

Ans : It is a non semantic that defines the scope of any content in page.

A topic and sub topic can be separated with <div>, which is a division.

**FAQ: What is <span>?**

Ans: It is an non sematic that defines individual content within context of a topic.

It spans along with other content but accessible individually to highlight.

**CSS Border:**

```
{
  border: size style color;
}
```

size : pixels  
 style : solid, double, dotted, dashed, groove etc.  
 color : colorName, code

EX:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home</title>
  <style>
    div{
      border: 1px solid black;
      padding: 20px;
      margin: 10px;
    }
    span{
      color:red;
    }
  </style>
</head>
<body>
  <div>
    Web Technologies
    <div>
      Front End
      <div>
        HTML <br>
        It is a <span>markup</span> language.
      </div>
    </div>
    <div>
      CSS <br>
      It define styles.
```

## UI FULL STAGE WEB WITH REACCT REACT

```

    </div>
  </div>
  <div>
    Back End
    <div>
      MongoDB <br>
      It is database.
    </div>
    <div>
      Node JS <br>
      It is server side scripting.
    </div>
  </div>
</div>
</body>
</html>

```

### Header

- It defines the content to display at top margin of page.
- Typically header comprises of
  - a) Brand Logo
  - b) Brand Title
  - c) Navbar
  - d) Search etc..

#### Syntax:

```

<header>
  ... your content ...
</header>

```

<https://www.getbootstrap.com> => Themes  
<https://colorlib.com>

#### Setup Icons for project:

1. Open terminal in your project
2. Run the command

```
> npm install bootstrap-icons --save
```

3. It will create a new folder by name "node\_modules" and install bootstrap icons library into node\_modules.
4. All icons are defined in file "bootstrap-icons.css", which you have to link to your web page.

```

<head>
<link rel="stylesheet" href="../node_modules/bootstrap-icons/font/bootstrap-icons.css">
</head>

```

5. Bootstrap icons are configured under the reference of CSS class names. Class name

## UI FULL STAGE WEB WITH REACCT REACT

is defined by using "class" attribute.

```
<span class="bi bi-house"> </span>
<span class="bi bi-person"> </span>
<span class="bi bi-heart"> </span>
<span class="bi bi-facebook" > </span>
```

[icons.getbootstrap.com](https://icons.getbootstrap.com)

### Nav

- It defines the navigation area in web page.
- Nav comprises of menu items used for navigation in application.
- It keeps nav item SEO friendly.

Syntax:

```
<nav>
  <span> Home </span>
  <span> About </span>
  <span> Contact </span>
</nav>
```

### CSS Text Style Attributes:

font-family	: It defines font family name. [ Arial, Tahoma, Algerian ...]
font-size	: It sets text size
font-weight	: It sets bold
font-style	: It sets italics
color	: It sets text color

Syntax:

```
{
  font-family : Arial;
  font-size: 20px;
  font-weight: bold;
  font-style: italics;
  color: red;
}
```

### CSS Flex Display:

display : flex	It makes flexible alignment of content in a container.
flex-direction	It aligns content in row or column. [by default it is row]
justify-content	It keeps the content in container with <ul style="list-style-type: none"> <li>a) space-between</li> <li>b) space-around</li> <li>c) space-evenly</li> <li>d) center</li> <li>e) baseline [left]</li> <li>f) end [right]</li> </ul>

## UI FULL STAGE WEB WITH REACCT REACT

align-items

It keeps the alignment of items in container

a) baseline

b) center

c) end

If container have more height then it can be vertically top, center or bottom.

Syntax:

```
container
{
  display: flex;
  flex-direction: row;
  justify-content: space-between;
  align-items:center;
}
```

### Article

- It is a semantic used for publishing highlights or latest trends of website.
- It keeps the trends of your site SEO friendly.

Syntax:

```
<article>
  ... offers ...
</article>
```

### Section

- It is a semantic used to display content between header and footer.
- Website related all content is kept inside section.

Syntax:

```
<header>
  ... top margin ...
</header>
<section>
  ... page content ...
</section>
<footer>
  ... bottom margin ...
</footer>
```

Ex:

**shopper-template.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Shopper</title>
```

## UI FULL STAGE WEB WITH REACCT REACT

```
<link rel="stylesheet" href="../../node_modules/bootstrap-icons/font/bootstrap-icons.css">
<style>
  header {
    font-family: Segoe UI;
    font-size: 22px;
    display: flex;
    flex-direction: row;
    justify-content: space-between;
    padding: 20px;
    align-items: baseline;
  }
  .brand-title {
    font-weight: bold;
    font-size: 28px;
  }
  nav span {
    margin-left: 10px;
    margin-right: 10px;
  }
  .shortcuts span {
    margin-right: 5px;
  }
  article {
    background-color: black;
    color: white;
    text-align: center;
    padding: 10px;
    font-family: Segoe UI;
  }
  .bi-lightning-fill {
    color: goldenrod;
  }
</style>
</head>
<body>
  <header>
    <div>
      <span class="brand-title">Shopper.</span>
    </div>
    <div>
      <nav>
        <span>Home</span>
        <span>Catalog</span>
        <span>Shop</span>
        <span>Pages</span>
        <span>Blog</span>
        <span>Docs</span>
      </nav>
    </div>
```

## UI FULL STAGE WEB WITH REACCT REACT

```

<div class="shortcuts">
  <span class="bi bi-search"></span>
  <span class="bi bi-person"></span>
  <span class="bi bi-heart"></span>
  <span class="bi bi-cart2"></span>
</div>
</header>
<section>
  <article>
    <span class="bi bi-lightning-fill"></span>
    <span> HAPPY HOLIDAY DEALS ON EVERYTHING </span>
    <span class="bi bi-lightning-fill"></span>
  </article>
</section>
<footer>

</footer>
</body>
</html>

```

### CSS Border & Radius

border	: It sets border size, style and color [all directions]
border-radius	: It sets rounded border.
border-left	
border-right	
border-top	
border-bottom	
border-top-left-radius	
border-top-right-radius	
border-bottom-left-radius	
border-bottom-right-radius	

### Ex: Landkit

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Landkit</title>
  <style>
    header {
      font-size: 22px;
      font-family: Segoe UI;
      display: flex;
      flex-direction: row;
      justify-content: space-around;
      padding: 20px;
    }
  </style>

```

```

    }
    .title {
      font-weight: bold;
      color:blue;
      font-size: 28px;
    }
    nav span {
      margin-left: 20px;
      margin-right: 20px;
    }
    .btn-buy {
      background-color: blue;
      color:white;
      padding: 10px;
      border-top-left-radius: 20px;
      border-bottom-right-radius: 20px;
    }
  </style>
</head>
<body>
  <header>
    <div>
      <span class="title">Landkit.</span>
    </div>
    <div>
      <nav>
        <span>Landings</span>
        <span>Pages</span>
        <span>Account</span>
        <span>Documentation</span>
      </nav>
    </div>
    <div>
      <span class="btn-buy">Buy now</span>
    </div>
  </header>
</body>
</html>

```

Note: You can't change the width and height of any span element.

To control span width & height, you have to set the display style as "inline-block".

Syntax:

```

span {
  display:inline-block;
  width:30px;
  height:30px;
  border-radius:30px;
}

```



## UI FULL STAGE WEB WITH REACCT REACT

- Header
- Nav
- Section
- Article

### Footer

- Footer defines the content to display at bottom margin of page.
- Typically footer comprises of
  - a) Services
  - b) Contact
  - c) Copyrights
  - d) Sitemap
  - e) Social Links etc..

### Aside

- It is a semantic used to display content, which is not related to current context.
- It navigates the user outside current context to some other external services.
- Typically it contains ads, social links etc.

Syntax:

```
<aside>
  <span> Facebook </span>
  <span> Twitter </span>
</aside>
```

### CSS Grid:

- It will set a fixed number of rows and columns.
- You can dynamically change the content of rows and columns.
- Grid is designed by using the attribute "display" set to "grid".

```
{
  display: grid;
}
```

- Grid comprises columns defined using "grid-template-columns".
- Grid columns are defined with pixels [px] or fractions [fr].
- You can share among 1200px or 12fr.

Syntax:

```
{
  display: grid;
  grid-template-columns: 6fr 6fr;
}
```

Ex: Amazon Footer

```
<!DOCTYPE html>
<html lang="en">
```

## UI FULL STAGE WEB WITH REACCT REACT

```

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Amazon</title>
  <link rel="stylesheet" href="../node_modules/bootstrap-icons/font/bootstrap-icons.css">
  <style>
    .back {
      background-color: grey;
      color: white;
      padding: 5px;
      text-align: center;
      font-family: Arial;
    }
    footer {
      background-color: black;
      color: white;
      padding: 20px;
      font-family: Arial;
      display: grid;
      grid-template-columns: 3fr 3fr 3fr 3fr;
    }
    footer span {
      display: block;
      margin-top: 20px;
    }
    .footer-title {
      font-weight: bold;
      font-size: 22px;
    }
  </style>
</head>
<body>
  <div class="back">
    Back to Top
  </div>
  <footer>
    <div>
      <span class="footer-title">Get to Know Us</span>
      <span>About Us</span>
      <span>Careers</span>
      <span>Press Releases</span>
      <span>Amazon Science</span>
    </div>
    <div>
      <aside>
        <span class="footer-title">Connect with Us</span>
        <span class="bi bi-facebook"> Facebook</span>
        <span class="bi bi-twitter-x"> Twitter</span>
        <span class="bi bi-instagram"> Instagram </span>
      </aside>
    </div>
  </footer>
</body>

```

## UI FULL STAGE WEB WITH REACCT REACT

```

    </aside>
  </div>
  <div>
    <span class="footer-title">Make Money with Us</span>
    <span>Sell on Amazon</span>
    <span>Sell under Amazon Accelerator</span>
    <span>Protect and Build Your Brand</span>
    <span>Amazon Global Selling</span>
    <span>Supply to Amazon</span>
    <span>Become an Affiliate</span>
    <span>Fulfilment by Amazon</span>
    <span>Advertise Your Products</span>
    <span>Amazon Pay on Merchants</span>
  </div>
  <div>
    <span class="footer-title">Let Us Help You</span>
    <span>Your Account</span>
    <span>Returns Centre</span>
    <span>Recalls and Product Safety Alerts</span>
    <span>100% Purchase Protection</span>
    <span>Amazon App Download</span>
    <span>Help</span>
  </div>
</footer>
</body>
</html>

```

### Address

- It is a semantic used for making contact details SEO friendly.
- Search engine can find the website contact details if they are defined in <address> element.

Syntax:

```

<address>
  .. phone..
  .. email..
</address>

```

Ex: Shopper-Template

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Shopper</title>
  <link rel="stylesheet" href="../node_modules/bootstrap-icons/font/bootstrap-icons.css">
  <style>
    header {
      font-family: Segoe UI;

```

```
font-size: 22px;
display: flex;
flex-direction: row;
justify-content: space-between;
padding: 20px;
align-items: baseline;
}
.brand-title {
  font-weight: bold;
  font-size: 28px;
}
nav span {
  margin-left: 10px;
  margin-right: 10px;
}
.shortcuts span {
  margin-right: 5px;
}
article {
  background-color: black;
  color: white;
  text-align: center;
  padding: 10px;
  font-family: Segoe UI;
}
.bi-lightning-fill {
  color: goldenrod;
}
section {
  height: 100px;
}
footer {
  background-color: black;
  color: white;
  font-family: Segoe UI;
  padding: 20px;
}
.row-1 {
  text-align: center;
}
.footer-title {
  font-size: 24px;
  font-weight: bold;
}
.row-2 {
  text-align: center;
  margin-top: 30px;
}
.email {
```

```

display: inline-block;
padding: 20px;
background-color: #888;
color: white;
width: 300px;
text-align: left;
}
.subscribe {
display: inline-block;
padding: 20px;
background-color: #444;
width: 150px;
margin-left: 20px;
}
.row-3 {
display: grid;
grid-template-columns: 2.4fr 2.4fr 2.4fr 2.4fr 2.4fr;
margin-top: 30px;
}
.col span {
display: block;
margin-top: 15px;
}
.col-title {
font-weight: bold;
font-size: 18px;
}
aside span {
padding-right: 10px;
padding-top: 20px;
display: inline-block;
}

</style>
</head>
<body>
<header>
<div>
<span class="brand-title">Shopper.</span>
</div>
<div>
<nav>
<span>Home</span>
<span>Catalog</span>
<span>Shop</span>
<span>Pages</span>
<span>Blog</span>
<span>Docs</span>
</nav>

```

```

</div>
<div class="shortcuts">
  <span class="bi bi-search"></span>
  <span class="bi bi-person"></span>
  <span class="bi bi-heart"></span>
  <span class="bi bi-cart2"></span>
</div>
</header>
<section>
  <article>
    <span class="bi bi-lightning-fill"></span>
    <span> HAPPY HOLIDAY DEALS ON EVERYTHING </span>
    <span class="bi bi-lightning-fill"></span>
  </article>
</section>
<footer>
  <div class="row-1">
    <span class="footer-title">Want style Ideas and Treats?</span>
  </div>
  <div class="row-2">
    <span class="email">Enter Email*</span>
    <span class="subscribe"> Subscribe </span>
  </div>
  <div class="row-3">
    <div>
      <span class="brand-title">Shopper</span>
      <aside>
        <span class="bi bi-facebook"></span>
        <span class="bi bi-twitter"></span>
        <span class="bi bi-instagram"></span>
        <span class="bi bi-youtube"></span>
        <span class="bi bi-linkedin"></span>
      </aside>
    </div>
    <div class="col">
      <span class="col-title">Support</span>
      <span>Contact Us</span>
      <span>FAQs</span>
      <span>Size Guide</span>
      <span>Shipping & Returns</span>
    </div>
    <div class="col">
      <span class="col-title">Shop</span>
      <span>Men's Shopping</span>
      <span>Women's Shopping</span>
      <span>Kids' Shopping</span>
      <span>Discounts</span>
    </div>
    <div class="col">

```

## UI FULL STAGE WEB WITH REACCT REACT

```

    <span class="col-title">Company</span>
    <span>Our Story</span>
    <span>Careers</span>
    <span>Terms & Conditions</span>
    <span>Privacy & Cookie policy</span>
  </div>
</div>
  <address class="col">
    <span class="col-title">Contact</span>
    <span>1-202-555-0105</span>
    <span>1-202-555-0106</span>
    <span>help@shopper.com</span>
  </address>
</div>
</div>
</footer>
</body>
</html>

```

Ex: Flipkart footer

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Flipkart</title>
  <style>
    footer {
      height: 300px;
      background-color: black;
      color:white;
      font-size: 25px;
      padding: 10px;
      display: grid;
      grid-template-columns: 6fr 6fr;
    }
    .col-1 {
      display: grid;
      grid-template-columns: 3fr 3fr 3fr 3fr;
    }
    .col-2 {
      display: grid;
      grid-template-columns: 6fr 6fr;
      border-left: 1px solid white;
      padding-left: 20px;
    }
  </style>

```

```

</head>
<body>
  <footer>
    <div class="col-1">
      <div>
        1
      </div>
      <div>
        2
      </div>
      <div>
        3
      </div>
      <div>
        4
      </div>
    </div>
    <div class="col-2">
      <div>
        1
      </div>
      <div>
        2
      </div>
    </div>
  </footer>
</body>
</html>

```

### Ex: Bootstrap header

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Bootstrap</title>
  <link rel="stylesheet" href="../../node_modules/bootstrap-icons/font/bootstrap-icons.css">
  <style>
    header {
      background-color: #0033ff;
      color: white;
      padding: 20px;
      font-size: 20px;
      font-family: Segoe UI;
      display: flex;
      justify-content: space-between;
    }
    .bi-bootstrap {

```



```

    font-size: 25px;
  }
  .search-bar {
    display: flex;
    width: 300px;
    justify-content: space-between;
    border: 1px solid white;
    padding: 5px;
  }
  .btn-ctrl {
    font-size: 14px;
    background-color: #0000aa;
    padding: 2px;
  }
  nav span {
    padding-left: 10px;
  }
  .shortcuts span {
    padding-right: 10px;
    font-size: 17px;
  }
</style>
</head>
<body>
  <header>
    <div>
      <nav>
        <span class="bi bi-bootstrap"></span>
        <span>Docs</span>
        <span>Examples</span>
        <span>Icons</span>
        <span>Themes</span>
        <span>Blog</span>
      </nav>
    </div>
    <div>
      <span class="search-bar">
        <div>
          <span class="bi bi-search"></span>
          <span>Search</span>
        </div>
        <div>
          <span class="btn-ctrl">CTRL K</span>
        </div>
      </span>
    </div>
    <div class="shortcuts">
      <span class="bi bi-github"></span>
      <span class="bi bi-twitter"></span>
    </div>
  </header>
</body>
</html>

```

## UI FULL STAGE WEB WITH REACCT REACT

```

    <span class="bi bi-circle-half"></span>
    <span class="">|</span>
    <span> v5.3 <span class="bi bi-chevron-down"></span> </span> </span>
    <span>|</span>
    <span class="bi bi-sun-fill"></span>
    <span class="bi bi-chevron-down"></span>
  </div>
</header>
</body>
</html>

```

### Semantics for Layout Design

- header
- footer
- section
- article
- aside
- address

### Main

- Main in computer programming refers to "Entry Point".
- Website entry point is usually for new users.
- A new user can start browsing or accessing resources from Main area.

Syntax:

```

<main>
  ... entry point ...
</main>

```

- A page can have multiple entry points.

### CSS Colors:

1. Color Name
2. Shade Name
3. Hexadecimal
4. rgb()
  - Red, Green, Blue
  - Every color is derived from combination of RGB.
  - It is a method that uses color value range from 0 to 255.

Syntax:

```

h2 {
  color: rgb(redValue, greenValue, blueValue);
}

```

Ex:

```
h2 {
  color: rgb(255, 0, 0);
}
```

#### 5. rgba()

- Red, Green, Blue, Alpha
- Alpha is used to set transparent color, its value range is 0 to 1.

Syntax:

```
body {
  background-color: rgba(250,0,0,0.5);
}
```

#### 6. hsl()

- Hue, Saturation, Lightness
- Hue is RGB shade from 0 to 360 deg.
  - 0 - 120 Red
  - 121-240 Green
  - 241-360 Blue
- Saturation is Grey % in color from 1% to 100%
- Lightness is brightness in color from 1% to 100%

Syntax:

```
body {
  background-color: hsl(hue, sat, light);
}
```

Ex:

```
body {
  background-color: hsl(20deg, 50%, 40%);
}
```

#### 7. hsla()

- Hue, Saturation, Lightness, Alpha

Syntax:

```
body {
  background-color: hsla(5deg, 50%, 50%, 0.6);
}
```

#### 8. Gradient Colors

- You can apply gradient by using "background-image"
- Linear Gradient
- Radial Gradient
- Gradient is a combinations of multiple colors and shades.

## UI FULL STAGE WEB WITH REACCT REACT

- a) linear-gradient()      horizontal, vertical and diagonal
- b) radial-gradient()      from center

Syntax:

```
body{
  background-image: linear-gradient(to top right, red 50%, yellow, green);
}
```

Ex:

Netflix.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Netflix</title>
  <link rel="stylesheet" href="../node_modules/bootstrap-icons/font/bootstrap-icons.css">
  <style>
    body{
      background-size: cover;
    }
    .shade{
      height: 100vh;
      background-color: rgba(0,0,0,0.6);
      margin-top: -10px;
      margin-left: -10px;
      width: 101.4%;
    }
    header{
      color:white;
      padding: 20px;
      display: flex;
      justify-content: space-between;
    }
    .brand-title{
      color:red;
      font-size: 40px;
      font-family: Arial;
      font-weight: bold;
    }
    .language{
      background-color: white;
      color:black;
      padding: 5px;
      border-radius: 5px;
      font-size: 18px;
      font-family: Segoe UI;
    }
  </style>
</head>
<body>
```

```
.btn-signin {
  background-color: red;
  color: white;
  padding: 5px;
  border-radius: 5px;
  margin-left: 20px;
  font-size: 18px;
  font-family: Segoe UI;
  display: inline-block;
  width: 80px;
  text-align: center;
}
section {
  text-align: center;
  color: white;
  margin-top: 150px;
  font-family: Arial;
}
.title {
  font-size: 50px;
  font-weight: bold;
  margin-bottom: 20px;
}
.subtitle {
  font-size: 30px;
}
main {
  margin-top: 40px;
}
.email {
  padding: 20px;
  display: inline-block;
  background-color: rgba(0,0,0,0.5);
  width: 300px;
  border: 1px solid white;
  text-align: left;
  margin-right: 10px;
}
.btn-start {
  background-color: red;
  display: inline-block;
  width: 200px;
  padding: 20px;
  font-size: 20px;
}
</style>
</head>
<body background="/images/netflix-banner.jpg">
  <div class="shade">
```

## UI FULL STAGE WEB WITH REACCT REACT

```

<header>
  <div>
    <span class="brand-title">NETFLIX</span>
  </div>
  <div>
    <span class="language">
      <span class="bi bi-translate"></span>
      <span>English</span>
      <span class="bi bi-chevron-down"></span>
    </span>
    <span class="btn-signin">
      <span>Signin</span>
    </span>
  </div>
</header>
<section>
  <div class="title">Unlimited movies, TV shows and more</div>
  <div class="subtitle">Watch anywhere. Cancel anytime.</div>
  <main>
    <span class="email">Your email address</span>
    <span class="btn-start"> Get Started <span class="bi bi-chevron-right"></span> </span>
  </main>
</section>
</div>
</body>
</html>

```

<https://www.instagram.com/sharmatechgroup/>

### Semantics for Body layout

1. <header>
2. <footer>
3. <section>
4. <aside>
5. <article>
6. <address>
7. <nav>
8. <main>

### Dialog

- It is used for displaying a popup message.
- Dialog is hidden by default, you have to set "open" attribute.

Syntax:

```
<dialog open>
```

your content

</dialog>

## Figure & Caption

- It is a container used for display graphics and images.
- It keeps the images SEO friendly.

Syntax:

```
<figure>
  ... your image ...

  <figcaption> Fig-1 </figcaption>

</figure>
```

## CSS Background Image:

- CSS provides background color and image attributes.
- You can set a background image for any element.

Syntax:

```
{
  background-image: url ("path_name");
}
```

- You can control background image with attributes

```
background-size
background-position
background-repeat
background-attachment
```

## CSS Box Shadow & Text Shadow:

- Box shadow is defined for containers like div, header, section etc..
- Text shadow is for container that have text.
- Shadow have 4 values.
  - a) horizontal
  - b) vertical
  - c) blur
  - d) color

Syntax:

```
{
  text-shadow : Hpx Vpx Bpx color;
}
```

## CSS Hover and Opacity:

- CSS provides opacity attribute to set transparent content.

## UI FULL STAGE WEB WITH REACCT REACT

- Opacity can from 0 to 1.

```
{
  opacity: 0.5;
}
```

- CSS provides "hover" class, which defined effects to apply when mouse pointer is over the element.

```
div {           => normal state
}

div:hover {     => on mouse over
}
```

Ex:

### **Shopper-template.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Shopper</title>
  < rel="stylesheet" href="../node_modules/bootstrap-icons/font/bootstrap-icons.css">
  <style>
    header {
      font-family: Segoe UI;
      font-size: 22px;
      display: flex;
      flex-direction: row;
      justify-content: space-between;
      padding: 20px;
      align-items: baseline;
    }
    .brand-title {
      font-weight: bold;
      font-size: 28px;
    }
    nav span {
      margin-left: 10px;
      margin-right: 10px;
    }
    .shortcuts span {
      margin-right: 5px;
    }
    article {
      background-color: black;
      color:white;
      text-align: center;
```



```
padding: 10px;
font-family: Segoe UI;
}
.bi-lightning-fill {
  color: goldenrod;
}

footer {
  background-color: black;
  color: white;
  font-family: Segoe UI;
  padding: 20px;
}
.row-1 {
  text-align: center;
}
.footer-title {
  font-size: 24px;
  font-weight: bold;
}
.row-2 {
  text-align: center;
  margin-top: 30px;
}
.email {
  display: inline-block;
  padding: 20px;
  background-color: #888;
  color: white;
  width: 300px;
  text-align: left;
}
.subscribe {
  display: inline-block;
  padding: 20px;
  background-color: #444;
  width: 150px;
  margin-left: 20px;
}
.row-3 {
  display: grid;
  grid-template-columns: 2.4fr 2.4fr 2.4fr 2.4fr 2.4fr;
  margin-top: 30px;
}
.col span {
  display: block;
  margin-top: 15px;
}
.col-title {
```

```
    font-weight: bold;
    font-size: 18px;
  }
  aside span {
    padding-right: 10px;
    padding-top: 20px;
    display: inline-block;
  }
  main {
    display: grid;
    grid-template-columns: 4fr 4fr 4fr;
    height: 450px;
    margin-top: 5px;
    margin-bottom: 10px;
  }
  .women-fashion {
    background-image: url("images/women-fashion.jpg");
    background-size: cover;
    display: flex;
    flex-direction: column;
    justify-content: space-evenly;
    align-items: center;
    opacity: 0.6;
  }
  .men-fashion {
    background-image: url("images/men-fashion.jpg");
    background-size: cover;
    display: flex;
    flex-direction: column;
    justify-content: space-evenly;
    align-items: center;
    opacity: 0.6;
  }
  .kids-fashion {
    background-image: url("images/kids-fashion.jpg");
    background-size: cover;
    display: flex;
    flex-direction: column;
    justify-content: space-evenly;
    align-items: center;
    opacity: 0.6;
  }
  .main-title {
    color: white;
    font-size: 50px;
    font-family: Segoe UI;
    font-weight: bold;
    text-shadow: 2px 2px 2px black;
  }
}
```

```

.btn-shop {
  background-color: white;
  padding: 10px;
  font-family: Segoe UI;
  width: 130px;
  text-align: center;
}
.women-fashion:hover {
  opacity: 1;
}
.men-fashion:hover {
  opacity: 1;
}
.kids-fashion:hover {
  opacity: 1;
}
</style>
</head>
<body>
<header>
<div>
  <span class="brand-title">Shopper.</span>
</div>
<div>
  <nav>
    <span>Home</span>
    <span>Catalog</span>
    <span>Shop</span>
    <span>Pages</span>
    <span>Blog</span>
    <span>Docs</span>
  </nav>
</div>
<div class="shortcuts">
  <span class="bi bi-search"></span>
  <span class="bi bi-person"></span>
  <span class="bi bi-heart"></span>
  <span class="bi bi-cart2"></span>
</div>
</header>
<section>
<article>
  <span class="bi bi-lightning-fill"></span>
  <span> HAPPY HOLIDAY DEALS ON EVERYTHING </span>
  <span class="bi bi-lightning-fill"></span>
</article>
<main>
  <div class="women-fashion">

```

## UI FULL STAGE WEB WITH REACCT REACT

```

    <div class="main-title">Women</div>
    <div class="btn-shop">
      Shop Women <span class="bi bi-arrow-right"></span>
    </div>

  </div>
  <div class="men-fashion">
    <div class="main-title">Men</div>
    <div class="btn-shop">
      Shop Men <span class="bi bi-arrow-right"></span>
    </div>
  </div>
  <div class="kids-fashion">
    <div class="main-title">Kids</div>
    <div class="btn-shop">
      Shop Kids <span class="bi bi-arrow-right"></span>
    </div>
  </div>
</main>
</section>
<footer>
  <div class="row-1">
    <span class="footer-title">Want style Ideas and Treats?</span>
  </div>
  <div class="row-2">
    <span class="email">Enter Email*</span>
    <span class="subscribe"> Subscribe </span>
  </div>
  <div class="row-3">
    <div>
      <span class="brand-title">Shopper</span>
      <aside>
        <span class="bi bi-facebook"></span>
        <span class="bi bi-twitter"></span>
        <span class="bi bi-instagram"></span>
        <span class="bi bi-youtube"></span>
        <span class="bi bi-linkedin"></span>
      </aside>
    </div>
    <div class="col">
      <span class="col-title">Support</span>
      <span>Contact Us</span>
      <span>FAQs</span>
      <span>Size Guide</span>
      <span>Shipping & Returns</span>
    </div>
    <div class="col">
      <span class="col-title">Shop</span>
      <span>Men's Shopping</span>
      <span>Women's Shopping</span>
    </div>
  </div>

```

## UI FULL STAGE WEB WITH REACCT REACT

```

    <span>Kids' Shopping</span>
    <span>Discounts</span>
  </div>
  <div class="col">
    <span class="col-title">Company</span>
    <span>Our Story</span>
    <span>Careers</span>
    <span>Terms & Conditions</span>
    <span>Privacy & Cookie policy</span>
  </div>
  <div>
    <address class="col">
      <span class="col-title">Contact</span>
      <span>1-202-555-0105</span>
      <span>1-202-555-0106</span>
      <span>help@shopper.com</span>
    </address>
  </div>
</div>
</footer>
</body>
</html>

```

### Semantics and Entities for Body Content

- Browser can't present the content exactly as defined in your editor.
- Hence you have to use entities and semantics to display content as expected.

**1. Line Break**      **<br>**

**2. Blank Space**      **&nbsp;**

FAQ: What is difference between `<br>` & `<br />` ?

Ans:

- There is no `<br />` in HTML.
- Browser can understand only `<br>`.
- `<br />` is to represent self ending elements. [void]

Syntax:

H &nbsp;&nbsp;  T M L `<br>`

It is a markup language.

**3. Preformatted**      **<pre>**      **Keeps the formats as defined in editor**

**4. Code**      **<code>**      **To display code blocks or snippets**

Ex:

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    code {
      color:white;
    }
    pre {
      background-color: black;
    }
  </style>
</head>
<body>
  <div>
    <pre>
      <code>
        var createHelloWorld = function() {

          return function(...args) {

            }
          };
        </code>
      </pre>
    </div>
  </body>
</html>

```

### Body Semantic and Entities

1. Line Break           <br>
2. Blank Space         &nbsp;
3. Pre Formatted       <pre>
4. Code                <code>
5. Variables           <var>

Syntax:

```
var <var> x </var> = 10;
```

6. Sample Text       <samp>

Syntax:

Write a program to print <samp> Hello ! World </samp>.

7. Big [Large Text]   <big>

8. Small [Small Text] <small>

Syntax:

```
<small> createHelloWorld </small>
<big> Hello ! World </big>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    var {
      color:blue;
    }
    samp {
      background-color: rgb(237, 236, 236);
      padding: 2px;
      border-radius: 2px;
    }
  </style>
</head>
<body>
  <div>
    Write a function <samp><small>createHelloWorld</small></samp> in JavaScript to print <samp><big>"Hello !
World"</big></samp>.
    <pre>
    <code>
      var <var>createHelloWorld</var> = function() {

        return function(...args) {

          }
        };
      </code>
    </pre>
  </div>
</body>
</html>
```

## 9. Headings

- Headings are used to summarize the content in page.
- Headings make the topics SEO friendly.
- Heading is defined with <hn> element, where "n" is level number from 1 to 6.

Syntax:

```
<h1> Heading-1 </h1>
<h2> Heading-2 </h2>
```

```
...
...
<h6> Heading-6 </h6>
```

FAQ's:

1. Why you need a heading element if you can define same appearance with styles?

A. To keep the topics SEO friendly.

2. What are the default styles applied for heading element?

A. font-size, font-weight, display:block.

3. How to remove any specific default style?

A. By using CSS style attributes defined for element, and set value as "unset".

Syntax:

```
h1 {
  font-weight:unset;
  font-size:unset;
  display:unset;
}
h1 {
  all : unset;
}
```

4. Can we change the default style of heading?

A. Yes. By using style attributes.

Rules:

- Don't use too many headings in a page, it may SPAM the page.
- Don't use headings to highlight any word or sentence in page.

10. Paragraphs and Blockquotes

- A paragraph is defined with <p> element.

- Blockquote is similar to paragraph but used to summarize the detailed content.

Syntax:

```
<p> Paragraph </p>
```

```
<blockquote>
... your text...
</blockquote>
```

- Blockquote have default padding left and right, which you can customize with styles.

FAQ's:

**1. How to set first line indent in paragraph or blockquote?**

A. By using CSS attribute "text-indent"

Syntax:



```
blockquote {
  text-indent : 200px;
}
```

## 2. How to set a Dropcap?

A. By using CSS class "first-letter" and CSS attributes like "float, font-size, line-height".

Syntax:

```
p::first-letter {
  font-size : 45px;
  font-weight: bold;
  font-family: Arial;
  float:left;
  line-height:30px;
}
```

## 3. How to set space between lines, words and chars?

A. By using CSS attributes

- a) line-height
- b) letter-spacing
- c) word-spacing

Syntax:

```
p {
  line-height : 40px;
  letter-spacing: 2px;
  word-spacing: 10px;
}
```

## 4. How to reduce the raggedness of right edge in a paragraph?

A. By using

- a) text-align: justify
- b) word-break:break-all

Syntax:

```
p {
  word-break: break-all ;
}
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    blockquote {
```

## UI FULL STAGE WEB WITH REACCT REACT

```
padding-left: 300px;
padding-right: 300px;
font-style: italic;
text-indent: 100px;
line-height: 40px;
word-spacing: 10px;
letter-spacing: 2px;
}
.para1::first-letter {
font-size: 60px;
font-weight: bold;
font-family: Algerian;
float: left;
line-height: 35px;
color:blue;
}
.para-2 {
word-break: break-all;
}
</style>

</head>
<body>
<h2 align="center">Sports News</h2>
<blockquote align="justify">
Lorem ipsum dolor sit amet consectetur adipisicing elit. Ut neque fugiat numquam consectetur ullam vero.
Delectus ad officiis, repudiandae, sint dicta neque incidunt maxime accusantium eaque accusamus atque
reprehenderit molestiae!
Lorem ipsum dolor sit amet consectetur, adipisicing elit. Nostrum veritatis dolores soluta, ipsam molestiae enim
ullam quam tenetur laboriosam fuga? Quod odit dolores rerum? Esse, nisi numquam? Dignissimos, quod
expedita?
</blockquote>
<p class="para1" align="justify">Lorem ipsum, dolor sit amet consectetur adipisicing elit. Soluta nostrum
incidunt nesciunt veritatis aspernatur praesentium facilis labore iure adipisci fugiat! Id iure illo ratione blanditiis
maxime ducimus facilis necessitatibus quidem?
Lorem ipsum dolor sit amet consectetur, adipisicing elit. Fuga illum officiis optio quos, saepe ut, consequatur
quidem at repudiandae perspiciatis laboriosam quaerat dicta incidunt ipsa facere debitis reprehenderit. Eveniet,
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maiores?
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quidem at repudiandae perspiciatis laboriosam quaerat dicta incidunt ipsa facere debitis reprehenderit. Eveniet,
architecto.
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nostrum id deleniti corrupti accusamus amet, modi cum itaque illum incidunt, hic quo alias? Voluptatibus,
maiores?
</p>
<p class="para-2">
```

## UI FULL STAGE WEB WITH REACCT REACT

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Aperiam est accusamus eligendi voluptates temporibus laudantium veniam. Pariatur quasi corrupti odio corporis at dolorum suscipit? Veritatis, itaque explicabo. Eligendi, ipsum et?

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dolor sit amet consectetur adipisicing elit. Minima molestias delectus qui pariatur animi veritatis error distinctio, et eligendi ut! Porro eligendi recusandae repellat mollitia molestias voluptas, vero dolores officiis.

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

### 5. How to design scrollable paragraph?

A. By using CSS attribute "overflow" set to scroll.

To define overflow container width and height must be less than the content length.

Syntax:

```
.container {
  height: 200px;
  width: 400px;
  border: 1px solid gray;
  padding: 10px;
  overflow: auto;
  text-align: justify;
}
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .container {
      border: 1px solid gray;
      padding: 10px;
      width: 500px;
      height: 200px;
      text-align: justify;
      overflow: auto;
    }
  </style>

</head>
```

## UI FULL STAGE WEB WITH REACT

```

<body>
  <h3>Terms of Service</h3>
  <div class="container">
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deserunt, beatae delectus! Dicta, architecto id
      sed accusantium corporis placeat eius impedit deleniti vero assumenda doloribus vel deserunt! Quaerat
      recusandae dignissimos quos?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. Neque nostrum nulla maxime molestias amet,
      officia tempore omnis. Porro, repellat! Debitis adipisci officiis quidem exercitationem ipsa nihil molestias
      sed quos
      sequi?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. In voluptate repellendus ipsam aspernatur magni
      natus quo? Quasi nostrum iste dignissimos dicta labore excepturi beatae fugiat mollitia ducimus fuga, impedit
      assumenda.
    </p>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deserunt, beatae delectus! Dicta, architecto id
      sed accusantium corporis placeat eius impedit deleniti vero assumenda doloribus vel deserunt! Quaerat
      recusandae dignissimos quos?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. Neque nostrum nulla maxime molestias amet,
      officia tempore omnis. Porro, repellat! Debitis adipisci officiis quidem exercitationem ipsa nihil molestias sed quos
      sequi?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. In voluptate repellendus ipsam aspernatur magni
      natus quo? Quasi nostrum iste dignissimos dicta labore excepturi beatae fugiat mollitia ducimus fuga, impedit
      assumenda.
    </p>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deserunt, beatae delectus! Dicta, architecto id
      sed accusantium corporis placeat eius impedit deleniti vero assumenda doloribus vel deserunt! Quaerat
      recusandae dignissimos quos?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. Neque nostrum nulla maxime molestias amet,
      officia tempore omnis. Porro, repellat! Debitis adipisci officiis quidem exercitationem ipsa nihil molestias sed quos
      sequi?
      Lorem ipsum dolor sit amet consectetur adipisicing elit. In voluptate repellendus ipsam aspernatur magni
      natus quo? Quasi nostrum iste dignissimos dicta labore excepturi beatae fugiat mollitia ducimus fuga, impedit
      assumenda.
    </p>
  </div>
</body>
</html>

```

### 6. How to define ellipsis in paragraph?

A.

- Set "nowrap" using "white-space" attribute.
- Set "width" for paragraph.
- Set "overflow" to hidden.
- Set "text-overflow" as "ellipsis"

Syntax:

```
p{
  width: 300px;
  border: 1px solid gray;
  padding: 2px;
  white-space: nowrap;
  overflow: hidden;
  text-overflow: ellipsis;
}
```

## 7. How to define screen tips?

A. By using "title" attribute for any container.

Syntax:

```
<span title="Hyper Text Markup Language"> HTML </span>
```

EX:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    p{
      width: 350px;
      border: 1px solid gray;
      padding: 2px;
      white-space: nowrap;
      overflow: hidden;
      text-overflow: ellipsis;
    }
  </style>
</head>
<body>
  <p title="Lorem ipsum dolor sit amet consectetur adipisicing elit. Sequi mollitia explicabo neque! Eveniet, harum itaque qui voluptas repudiandae quidem autem ipsum quisquam possimus fugit, consequuntur alias tempora, porro facere deserunt!">Lorem ipsum dolor sit amet consectetur adipisicing elit. Sequi mollitia explicabo neque! Eveniet, harum itaque qui voluptas repudiandae quidem autem ipsum quisquam possimus fugit, consequuntur alias tempora, porro facere deserunt!</p>
</body>
</html>
```

## 8. How to display paragraphs in multiple columns?

A. You can use "display:grid" or "columns" of CSS

## 9. What is difference between grid and columns?

A. Grid will not allow content of one column to span into another.

Columns allow continuous content, the content of one column will continue to next.

### 10. What are the attributes for columns?

A.

- a) column : It defines the number of columns to display
- b) column-gap : It sets space between columns
- c) column-width : It sets width for columns.
- d) column-rule : It sets a separator line between columns.  
[size , style and color]

Syntax:

```
section {
  columns : 4;
  column-gap: 20px;
  column-width: 200px;
  column-rule: 1px dotted gray;
}
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .title {
      font-family: Arial;
      font-size: 40px;
      font-weight: bold;
      padding: 10px;
    }
    .row-2 {
      columns: 4;
      column-rule: 2px dotted gray;
      font-size: 12px;
      text-align: justify;
      column-gap: 20px;
    }
    section {
      width: 60%;
      border: 15px groove black;
      padding: 15px;
    }
    .row-1 {
      margin-bottom: 10px;
      text-align: center;
      padding: 10px;
    }
  </style>
</head>
<body>
  <div class="title">
    <h1>Document</h1>
  </div>
  <div class="row-1">
    <div class="column">
      <p>Column 1</p>
    </div>
    <div class="column">
      <p>Column 2</p>
    </div>
    <div class="column">
      <p>Column 3</p>
    </div>
    <div class="column">
      <p>Column 4</p>
    </div>
  </div>
  <div class="row-2">
    <div class="column">
      <p>Column 1</p>
    </div>
    <div class="column">
      <p>Column 2</p>
    </div>
    <div class="column">
      <p>Column 3</p>
    </div>
    <div class="column">
      <p>Column 4</p>
    </div>
  </div>
</body>
</html>
```

## UI FULL STAGE WEB WITH REACCT REACT

```

.service {
  font-size: 15px;
  text-align: center;
  font-weight: bold;
}
.update {
  background-color: black;
  padding: 5px;
  color: white;
  text-align: center;
  font-size: 15px;
}
</style>
</head>
<body>
<section>
  <div class="row-1">
    <span class="title">GHMC give thumbs-up to 7 projects</span>
  </div>
  <div class="row-2">
    <div class="service">

      <div>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo
        tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem
        ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio
        aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum
        dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis
        obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo
        tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem
        ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio
        aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum
        dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis
        obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>
        <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo
        tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem
        ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio
        aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum
        dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis
        obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>
      </div>
      <div class="update"> Latest Updates </div>
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo
      tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem
      ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio
      aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum
      dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis
      obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>
      <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo

```

## UI FULL STAGE WEB WITH REACT

tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?

<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>

<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>

<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>

<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>

<p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Quis ipsum ab qui quisquam perferendis, quo tenetur rem quia eveniet repellendus fugiat eius? Minima ullam sunt voluptas suscipit ipsa vitae deleniti. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Natus, fugit omnis. Neque illo et id cumque excepturi sunt optio aliquam quibusdam quia voluptatem nobis tempore mollitia, quae minus commodi perferendis. Lorem ipsum dolor, sit amet consectetur adipisicing elit. Nihil eveniet ut officiis voluptatibus fuga eius explicabo nisi velit facilis obcaecati perferendis mollitia quis, illo, itaque, voluptate iste earum nobis id?</p>

</div>

</section>

</body>

</html>

### 11. Text formatting in HTML

- Text formatting includes font and font effects.
- The font is defined by using <font> element with size, color and face.

Syntax:

```
<font size=" " face=" " color=" "> Text </font>
```

- a) size : It can be from 1 to 7 levels.
- b) face : It refers to font family name.



## UI FULL STAGE WEB WITH REACCT REACT

c) color : It defines color name, shade or hexadecimal code.

FAQ: What are web-safe fonts?

Ans:

- If developer is using a font family installed on his device then other users can watch using default font family.
- Web safe fonts are the default font family available across all devices.
- Standard web safe font families are
  - a) serif
  - b) sans-serif
  - c) monospace

Note: Don't use <font> element in modern web design.

- Text styles and effects are controlled by using the following elements

<b>	Bold
<strong>	Strong - Bold
<i>	Italics
<em>	Emphasized - Italics
<u>	Underline
<ins>	Inserted - Underline
<strike>	Strikeout
<del>	Delete - Strikeout
<sup>	Super Script
<sub>	Sub Script

**FAQ: What is difference between <b> and <strong> if both look similar?**

Ans : <b> is a design mode element to highlight.

<strong> is a review mode element to highlight.

Note: Make sure that review elements are not present in page while publishing.

Ex:

<body>

Font style <b>Bold</b> is similar to <strong>Strong.</strong> <br>

Font style <i>Italics</i> is similar to <em>Emphasized.</em> <br>

Font effect <u>Underline</u> is similar to <ins>Inserted.</ins> <br>

Font effect <strike>Strikeout</strike> is similar to <del>Deleted.</del>

</body>

## 12. Data List with Terms and Definitions

- Data list defines with <dl>
- List comprises terms defined with <dt>
- Every term have definitions <dd>

Syntax:

```
<dl>
  <dt>Term </dt>
  <dd> Definition </dd>
</dl>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    dt {
      background-color: lightgray;
      font-weight: bold;
      padding: 5px;
      margin-bottom: 5px;
    }
  </style>
</head>
<body>
  <dl>
    <dt>HTML</dt>
    <dd>It is a markup language.</dd>
    <dd>It is used for presentation.</dd>
    <dt>CSS</dt>
    <dt>Styles</dt>
    <dd>It defines styles. </dd>
    <dt>JavaScript</dt>
    <dd>It manipulates DOM.</dd>
  </dl>
</body>
</html>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    dt {
      background-color: black;
      font-weight: bold;
      padding: 5px;
    }
  </style>
</head>
<body>
  <dl>
    <dt>HTML</dt>
    <dd>It is a markup language.</dd>
    <dd>It is used for presentation.</dd>
    <dt>CSS</dt>
    <dt>Styles</dt>
    <dd>It defines styles. </dd>
    <dt>JavaScript</dt>
    <dd>It manipulates DOM.</dd>
  </dl>
</body>
</html>
```

```

        margin-bottom: 5px;
        color:white;
    }
    dd{
        background-color: lightgray;
        padding: 5px;
        margin-bottom: 5px;
    }
    dl{
        display: grid;
        grid-template-columns: 3fr 9fr;
        width: 50%;
    }
</style>
</head>
<body>
    <dl>
        <dt>Your Name</dt>
        <dd>some text</dd>
        <dt>Age</dt>
        <dd>some age</dd>
        <dt>City</dt>
        <dd>some city</dd>
        <dt>Email</dt>
        <dd>something@gmail.com</dd>
    </dl>
</body>
</html>

```

#### CSS Sticky Position:

- It keeps elements according to normal flow of document.
- It allows to scroll up to specified position and stick to browser.
- It allows other content to scroll in backdrop.

#### Syntax:

```

dt{
    position:sticky;
    top:0px;
}

```

#### Ex:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        dt{

```

```

background-color: black;
font-weight: bold;
padding: 5px;
margin-bottom: 5px;
color:white;
position: sticky;
top: 0px;
}
dd {
background-color: lightgray;
padding: 5px;
margin-bottom: 5px;
}
dl {
width: 200px;
}
</style>
</head>
<body>
<dl>
<h2>Amazon</h2>
<dt>Electronics</dt>
<dd>Televisions</dd>
<dd>Mobiles</dd>
<dd>Watches</dd>
<dd>Watches</dd>
<dt>Footwear</dt>
<dd>Casuals</dd>
<dd>Sneakers</dd>
<dd>Boots</dd>
<dt>Fashion</dt>
<dd>Kids</dd>
<dd>Women</dd>
<dd>Men</dd>
<dd>Kids</dd>
<dd>Women</dd>
<dd>Men</dd>
<dd>Kids</dd>
<dd>Women</dd>
<dd>Men</dd>
<dd>Kids</dd>
<dd>Women</dd>
<dd>Men</dd>
<dd>Kids</dd>
</dl>
</body>
</html>

```

## UI FULL STAGE WEB WITH REACCT REACT

- Fieldset is a frame used to define a container with a category of content.
- Legend is a caption defined for fieldset.

Syntax:

```
<fieldset>
  <legend> Title </legend>

  ... your content...

</fieldset>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    dt {
      background-color: black;
      font-weight: bold;
      padding: 5px;
      margin-bottom: 5px;
      color:white;
      position: sticky;
      top: 0px;
    }
    dd {
      background-color: lightgray;
      padding: 5px;
      margin-bottom: 5px;
    }
    dl {
      display: grid;
      grid-template-columns: 3fr 9fr;
    }
    fieldset {
      border:2px solid black;
      margin: 20px;
      box-shadow: 4px 4px 2px gray;
      width: 600px;
    }
    legend {
      text-align: center;
      background-color: black;
      color:white;
      font-size: 16px;
```

```
font-family: Arial;
padding: 5px;
width: 150px;
border-radius: 5px;
box-shadow: 2px 2px 2px gray;
}
</style>
</head>
<body>
  <fieldset>
    <legend>Personal Details</legend>
    <dl>
      <dt>First Name</dt>
      <dd>some name</dd>
      <dt>Last Name</dt>
      <dd>some Name</dd>
      <dt>Age</dt>
      <dd>some age</dd>
    </dl>
  </fieldset>

  <fieldset>
    <legend>Address Details</legend>
    <dl>
      <dt>City</dt>
      <dd>some city</dd>
      <dt>State</dt>
      <dd>some state</dd>
      <dt>Postal</dt>
      <dd>some code</dd>
    </dl>
  </fieldset>
</body>
</html>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    fieldset {
      width: 50%;
      text-align: center;
      font-size: 12px;
      border-left: none;
      border-right: none;
```

```

border-bottom: none;
border-top: 1px solid gray;
display: flex;
justify-content: center;
}
legend {
padding-left: 10px;
padding-right: 10px;
}
.btn {
border : 1px solid black;
border-radius: 5px;
padding: 5px;
width: 60%;
margin-top: 10px;
}
</style>
</head>
<body>
<fieldset>
<legend>New to Amazon?</legend>
<div class="btn">
Create your Amazon acocunt
</div>
</fieldset>
</body>
</html>

```

#### 14. Details and Summary

- Details is a container that allows to expand and collapse the content dynamically.
- Summary is caption for details container.

Syntax:

```

<details>

<summary> Title </summary>

.... your content ....

</details>

```

- You can keep any details opened by default using "open" attribute.

Syntax:

```

<details open>

<summary> Title </summary>

</details>

```

## UI FULL STAGE WEB WITH REACCT REACT

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <h1>Frequently Asked Questions</h1>
  <details open>
    <summary>What is Netflix?</summary>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deleniti cupiditate fugiat voluptatibus fugit voluptatum autem quibusdam tempora sit repudiandae eligendi at, labore magnam est porro accusamus, iste earum! Blanditiis, magnam? Lorem ipsum dolor sit, amet consectetur adipisicing elit. Aliquam assumenda debitis, nesciunt quod asperiores illum possimus eaque dolorum placeat provident optio vel veniam quasi veritatis adipisci natus corrupti, eius tempora?</p>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deleniti cupiditate fugiat voluptatibus fugit voluptatum autem quibusdam tempora sit repudiandae eligendi at, labore magnam est porro accusamus, iste earum! Blanditiis, magnam? Lorem ipsum dolor sit, amet consectetur adipisicing elit. Aliquam assumenda debitis, nesciunt quod asperiores illum possimus eaque dolorum placeat provident optio vel veniam quasi veritatis adipisci natus corrupti, eius tempora?</p>
  </details>
  <details>
    <summary>How much does Netflix cost?</summary>
    <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Deleniti cupiditate fugiat voluptatibus fugit voluptatum autem quibusdam tempora sit repudiandae eligendi at, labore magnam est porro accusamus, iste earum! Blanditiis, magnam? Lorem ipsum dolor sit, amet consectetur adipisicing elit. Aliquam assumenda debitis, nesciunt quod asperiores illum possimus eaque dolorum placeat provident optio vel veniam quasi veritatis adipisci natus corrupti, eius tempora?</p>
  </details>
  <h1>Signin</h1>
  <details>
    <summary>Need Help?</summary>
    <dl>
      <dd>Forgot Password</dd>
      <dd>Change Password</dd>
    </dl>
  </details>
</body>
</html>
```

### 15. Ordered and Unordered List

- Ordered list is auto numbering for a list.
- Numbering updates automatically when you add or remove items.
- <ol> is used for ordered list.
- <li> is used for list item.



Syntax:

```
<ol>
  <li>HTML</li>      1. HTML
  <li>CSS </li>       2. CSS
</ol>
```

- You can change the numbering type by using "type" attribute.

Syntax:

```
<ol type="1, A, a, i, I">

</ol>
```

- You can configure numbering from any level by using "start" attribute.

- "start" refers to level number.

Syntax:

```
<ol type="A" start="5">
</ol>
```

- HTML 5 supports new attribute "reversed", which is a reversed numbering style.

Syntax:

```
<ol type="1" reversed>
</ol>
```

- You can create a nested list, but make sure that the child list is defined inside <li> element.

Syntax:

```
<ol>
  <li> Parent
    <ol>
      <li> Child </li>
    </ol>
  </li>
</ol>
```

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <ol type="1">
    <li>HTML
```

## UI FULL STAGE WEB WITH REACCT REACT

```

<ol type="a">
  <li>Normal Elements</li>
  <li>Void Elements</li>
</ol>
</li>

<li>JavaScript
  <ol type="a">
    <li>Variables
      <ol type="i">
        <li>var</li>
        <li>let</li>
        <li>const</li>
      </ol>
    </li>
    <li>Operators</li>
    <li>Statements</li>
  </ol>
</li>

</ol>
</body>
</html>

```

Ex:

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <style>
    .child-list {
      margin-top: 20px;
      columns: 2;
    }
    li {
      margin-top: 10px;
    }
  </style>
</head>
<body>
  <ol type="1">
    <li>
      &lt;br&gt is _____ element.
      <ol type="a" class="child-list">
        <li>Void Element</li>
        <li>Normal Element</li>

```

UI FULL STAGE WEB WITH REACCT REACT

```
<li>RC Type</li>
<li>Raw Text</li>
</ol>
</li>
</ol>
</body>
</html>
```