**Frontend Web Development Using HTML, CSS , JavaScript and jQuery**.

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* **Introduction:**

To implement the concepts of html, css, javascript and jQuery I have cloned the frontend for twitter homepage. The structure is built using html and styled using css ,the javascript provided functionality to the page. Bootstrap made the page responsive. The method of storing data using JavaScript in the local storage of browser is executed by creating a registration form. This registration form takes the information from the user, when the user submits the form the user’s data is stored in browser’s local storage and displayed on next page.

* **Technologies Used :**

**HTML**

HTML stands for Hyper Text Markup Language. It is the standard markup language for creating Web pages. It describes the structure of a Web page. it consists of a series of elements that tell the browser how to display the content. These elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

 HTML has many updates over time, and the latest [HTML](https://www.javatpoint.com/html-tutorial) version is [HTML5](https://www.javatpoint.com/html5-tutorial). There are some differences between the two versions:

* HTML5 supports both audio and video while none of them were part of
* HTML cannot allow JavaScript to run within the web browser, while HTML5 provides full support for running JavaScript.
* In HTML5, inline mathML and SVG can be used in a text, while in HTML it is not possible.
* HTML5 supports new types of form controls, such as date and time, email, number, category, title, Url, search, etc.
* Many elements have been introduced in HTML5. Some of the most important are time, audio, description, embed, fig, shape, footer, article, canvas, navy, output, section, source, track, video, etc.

The <!DOCTYPE html> declaration defines that this document is an HTML5 document.

**CSS**

CSS stands for Cascading Style Sheets. It is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes. The stylesheets can be included in three ways:

Inline : This definition includes describing the element style within its tag using the style command.

E.g.: <p style: “color:#red; font-size:12px;”>

Internal : The internal definition of CSS means the style code is written within the <style></style> tags which is enclosed in the <head></head> tags.

External : The definitions are normally saved in external .css files. The external stylesheet is then embedded using the <link> tag. With an external stylesheet file, you can change the look of an entire website by changing just one file!

The inline CSS definition is given the first priority followed by internal and then the external definition.

**JavaScript**

JavaScript is a scripting or programming language that allows you to implement complex features on web pages. The dynamic takeover to your static site is done with the help of JavaScript. Displaying timely content updates, interactive maps, animated 2D/3D graphics, scrolling video jukeboxes, etc., JavaScript is involved in all of these.

**jQuery**

jQuery is a javascript library. It is free, highly featured, open source software designed to make client side programming of HTML simple with easy to use API. It makes things like HTML document traversal and manipulation, event handling, animation and JAX much simpler with an easy to use API that works across a multitude of browsers. With a combination of versatility and extensibility , jQuery has changed the way of writing javascript. jQuery can be included using two methods.

1. Use the Google-hosted/ Microsoft-hosted content delivery network (CDN) to include a version of jQuery.
2. Download own version of jQuery from jQuery.com and host it on own server or local filesystem.

\*All the jQuery code must be executed only after the page loads completely.\*

* **Assignments’ Briefs**

**Twitter homepage** : I created a responsive twitter homepage using html, CSS, js and jQuery. For building a page/site the first thing is understanding and designing the layouts for each part that you need to include in that page/site. To make sure your page looks proper on every device, it should be responsive. The page is made responsive using bootstrap. Another method is using the media query. I have tried my best to create the exact twitter homepage.

**User Registration And storing data in browser’s local storage:** Using browser’s local storage was something that I have learnt. The local storage can only save up to 5-10mb of data. The localStorage is a property that allows JavaScript sites and apps to save key/value pairs in a web browser with no expiration date. This means the data stored in the browser will persist even after the browser window is closed. In Google Chrome, [web storage](https://en.wikipedia.org/wiki/Web_storage) data is saved in an SQLite file in a subfolder in the user’s profile. The subfolder is located at  \AppData\Local\Google\Chrome\User Data\Default\Local Storage on Windows machines.

Here’s the link to the GitHub repository of the assignment –

https://github.com/Radha34/Week1-Assignment-

* **Learnings:**

Being through with the html and css is not enough if you want to create some amazing website. Javascript and jQuery are the ones that add life to your site. JavaScript functions and object performs the major work. A JavaScript function is a block of code designed to perform a particular task. It is executed when "something" invokes it (calls it). JavaScript objects are containers for named values, called properties and methods.

The localStorage is a property that allows JavaScript sites and apps to save key/value pairs in a web browser with no expiration date.

To use localStorage in your web applications, there are five methods to choose from:

1. setItem(): Add key and value to localStorage
2. getItem(): This is how you get items from localStorage
3. removeItem(): Remove an item by key from localStorage
4. clear(): Clear all localStorage
5. key(): Passed a number to retrieve the key of a localStorage.