

# **A Summer Training Project Report**

**On**

## **Online Resources Website**

Submitted in partial fulfillment of the requirements for the award of the degree of

### **BACHELOR OF TECHNOLOGY**

(Computer Science & Engineering)

**Submitted To**

**Chouksey Engineering College, Bilapsur**

**Submitted By**

**B Rahul (300202219014)**

# CERTIFICATE



techgyan



Entrepreneurship Cell  
IIT Kharagpur

## CERTIFICATE

OF ACHIEVEMENT

THIS CERTIFICATE IS AWARDED TO

**B Rahul**

in acknowledgement of participation in the

### **Web Development With HTML & CSS**

Summer Training successfully completed with **Techgyan Technologies**

in association with **E-Cell, IIT Kharagpur** in the month of **August & September**

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## **DECLARATION**

I hereby declare that the Project Report entitled “Resource Curator Website” to be submitted to Chouksey Engineering College is an original work and the same has not been submitted to any other Institute for the award of any other degree. It contains no material previously written by another person, except where due acknowledgement has been made in the text.

Signature

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- A unique skill development platform that allows students to learn from the experts, get industry ready and create a high paying career for themselves.
- In the last 10 years, Techgyan have conducted over 5000 successful trainings, retained over 50,000 students, and collaborated with over 15+ platforms/colleges.
- Techgyan doesn't just teach the concepts, but also shares tips which enables quick development of software.
- 24/7 available support staff makes Techgyan standout , resolving the student's queries regarding not only the course but every other possible thing as well.

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## **ABBREVIATIONS**

**HTTP** - Hypertext Transfer Protocol

**HTML** - HyperText Markup Language

**CSS** - Cascading Style Sheets



# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 What is the Web?**

The World Wide Web commonly referred as Web is an information system consisting of web resources and documents identified by URL(uniform resource locator) which are interlinked and are accessible over the internet. Web and Internet are those two terms which are often misunderstood by the people. Web can be said as the subset of Internet, whereas Internet is the global network of interconnected servers (or) computers which aid in information sharing.

The resources of the Web are transferred via the Hypertext Transfer Protocol (HTTP), and may be accessed by users by a software application called a *web browser*, and are published by a software application called a *web server*.

### **1.2 History of the Web**

The World Wide Web was invented by a British scientist, Tim Berners-Lee in 1989, working at CERN.

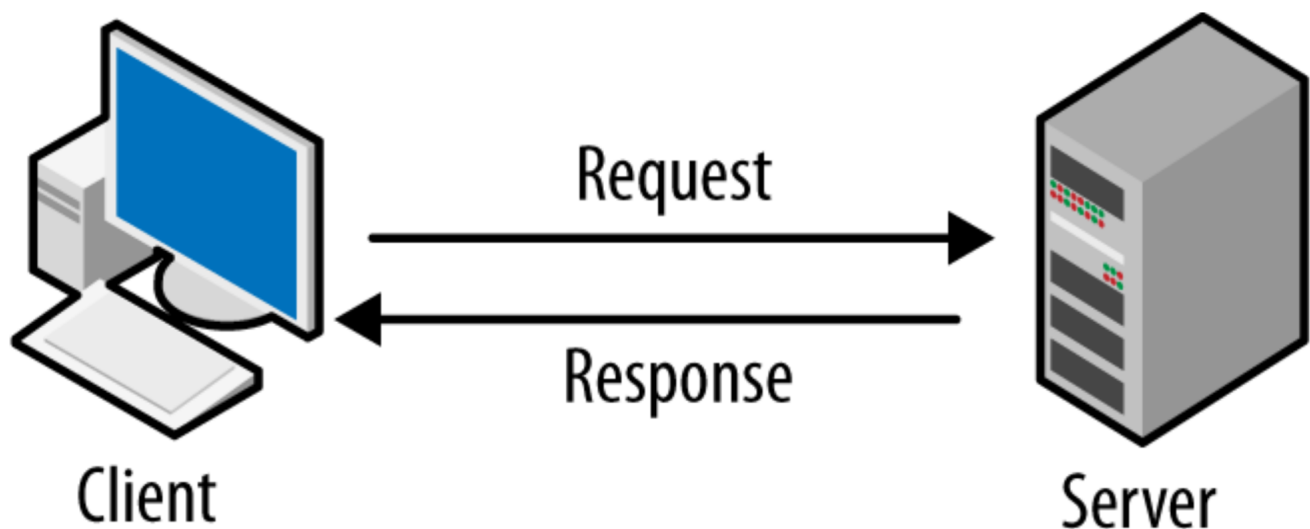
CERN, where Tim Berners worked, is a community of more than 1700 scientists from more than 100 countries. These scientists spend some time on CERN laboratories, and the rest of the time they worked at their universities and national laboratories in their home countries, so there was a need for reliable communication tools so that they can exchange information. It was developed by him to fulfill the need of automated information sharing between scientists across the world, so that they could easily share the data and results of their experiments and studies with each other.

Internet and Hypertext were available at this time, but no one knew how to use the internet to link or share one document to another. Tim focused on three main technologies that could make computers understand each other, HTML, URL, and HTTP. So, the objective behind the invention of WWW was to combine recent computer technologies, data networks, and hypertext into a user-friendly and effective global information system.

### **1.3 Client Server Model**

A client is a program/machine that runs locally, which sends requests to a server for some service. Services are initiated and terminated in this program.

A server is a program that runs on a remote pc with multiprocessing capabilities to handle/respond to multiple requests sent by the clients.



### **1.1 Client-Server Model**

In the client-server model, any process can act as Server or Client. It is not the type of machine, size of the machine, or its computing power which makes it a server, it is the ability of serving request that makes a machine a server.

The client server model works on a cycle of request and response. The client sends a request to the server and the server responds with the desired information.

The client and server should follow a common communication protocol so they can easily interact with each other. All the communication protocols are available at the application layer.

An example of a client server computing system is a web server. It returns the web pages to the clients that requested them.

# **CHAPTER 2**

## **Web Terminologies**

### **2.1 HTTP Protocol**

The Hypertext Transfer Protocol (HTTP) is the foundation of the World Wide Web, and is used to load web pages using hypertext links. HTTP is an application layer protocol designed to transfer information between networked devices and runs on top of other layers of the network protocol stack. A typical flow of HTTP involves a client machine making a request to a server, which then sends a response message.

An HTTP request is the way internet communications platforms such as web browsers ask for the information they need to load a website.

#### Features of HTTP:

1)Stateless: The server has no history of client visits.

2)Media independent: HTTP protocol is media independent, as data can be sent as long as both the client and server know how to handle the data content.

3)Connectionless Protocol: The connection between client and server exists only during the current request and response, only then it disconnects the connection.

HTTP clients generally use Transmission Control Protocol (TCP) connections to communicate with servers.

HTTP utilizes specific request methods in order to perform various tasks, some of them are:

- GET requests, a specific resource in its entirety
- POST adds content, messages, or data to a new page under an existing web resource

- PUT directly modifies an existing web resource or creates a new URI if need be
- DELETE gets rid of a specified resource.

## **2.2 Uniform Resource Locator(URL)**

An URL is needed to locate resources on the Web. It is an address format that specifies how and where to find a document. The general format is as follows, or omitted `http://pc_addr:port/path/file_name.file_extension`  
`pc_addr` is either an IP address, for example 168.434.34.79, or a Domain Name (also known as a DNS name, because Domain Name Servers map between Domain Names and IP addresses), for example,  
<https://www.ibm.com>.

In the `pc_addr`, HTTP is the protocol identifier, while `www.ibm.com` is the resource name. Port is the TCP port to connect to, this provides an entry point to software on the server, an optional part of a URL, 'path' is a relative file path from the server's document root; the server will start looking for a file in a specific directory and paths are relative to this `file_name` is the name of the file to be browsed, e.g. `welcome` `file_extension` is one of a number of suffixes which, by convention and operating system setup, indicate the type of data contained within the file, e.g. `html`, `TXT`.

For example, in the URL below

`http://www.ibm.com/about.html`, here 'about.html' is a file with the HTML extension.

# **CHAPTER 3**

## **HTML**

### **3.1 What is HTML?**

The HyperText Markup Language, or HTML, is the standard markup language for documents designed to be displayed on a web browser. *Hypertext* refers to the way in which Web pages (HTML documents) are linked together. When you click a link in a Web page, you are using hypertext. It is this system of linking documents that has made the World Wide Web the global phenomenon it has become. *Markup Language* describes how HTML works. With a markup language, you simply “mark up” a text document with tags that tell a Web browser how to structure it. HTML originally was developed with the intent of defining the structure of documents (headings, paragraphs, lists, and so forth) to facilitate the sharing of scientific information between researchers.

### **3.2 Elements**

All HTML pages are made up of *elements*. An element can be thought of as a container in which a segment of a page is placed. Whatever is contained inside the element will take on the characteristics of that element. For example, to identify a paragraph on a page, you would enclose it in a *paragraph* element `<p> </p>`. Similarly, to create a table, you put the table information inside the *table* element `<table> </table>`.

### **3.3 Tags**

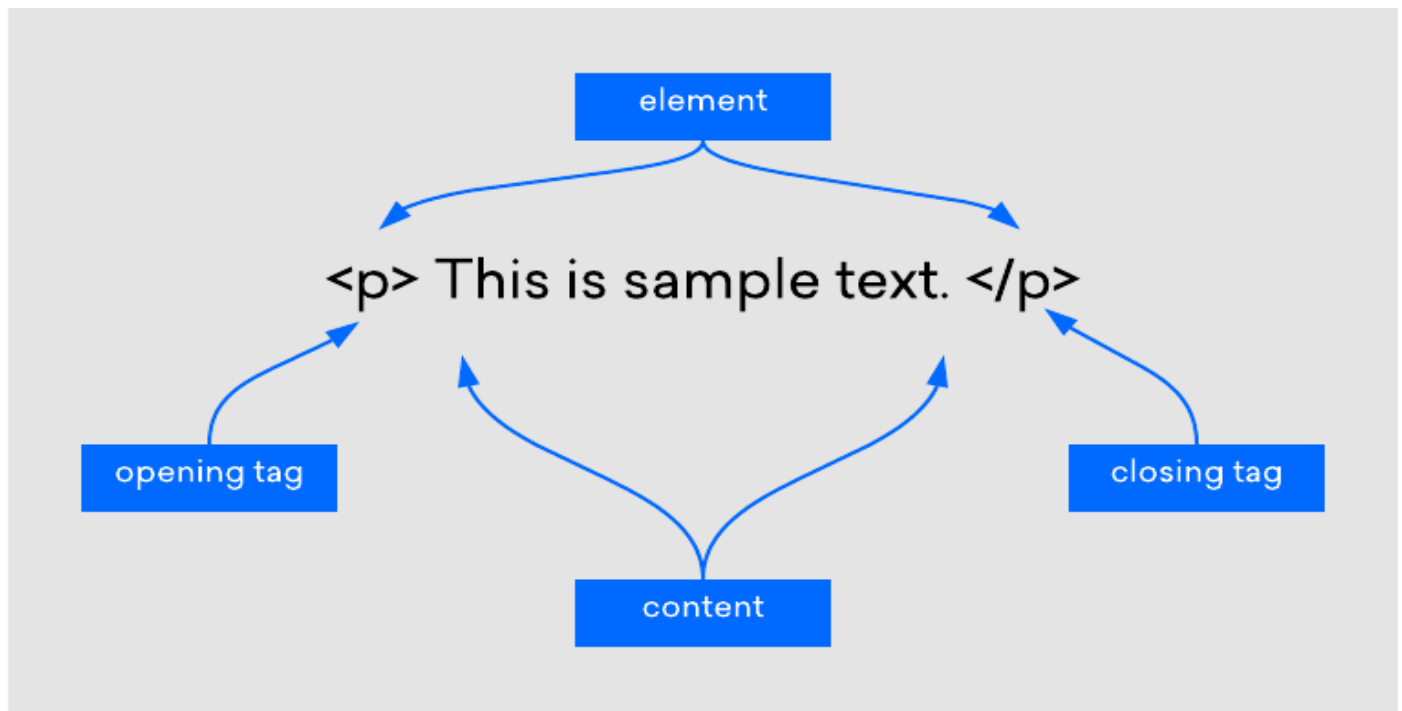
It is a markup language used to indicate beginning and ending of a HTML element in an HTML Document.

It helps the browser to convert HTML Documents into web pages. For example, the `<p>` tag is used to organize text content into *paragraph* elements and the `<img>` tag is used to embed *image* elements.

The tag begins with a “less than” sign (`<`), then the element name, followed by a “greater than” sign (`>`). For example, an opening tag for the *paragraph* element would look like this: `<p>`. The only difference in a closing tag is that the closing tag includes a slash (`/`) before the element name: `</p>`. Content goes between the tags.

A simple paragraph might look like this:

```
<p>This is an HTML paragraph.</p>
```



### **3.1 HTML Element & Tag**

## **3.4 Attributes**

An attribute is used to define the characteristics of an element and is placed inside the element's opening tag. For example, in `<a>` tag `href` is the attribute to link the text enclosed in `<a>` tag to a different webpage or document.

Example, <a href="www.google.com">Google<a> .

HTML attributes have a few key characteristics:

- Attributes provide more information about HTML elements
- Attributes are always specified in the start tag
- Attributes are presented in name/value pairs such as: name=value

## **3.5 Basic HTML Tags**

### **3.1 HTML Tags & their Attributes**

| Tag     | Definition and Attributes   |   |
|---------|---|---|
| <A></A> | The A tag is used for links and anchors. The tags go on either side of the link like this: <A HREF="aURL">the link </A> |   |
|         | HREF  | If the link is to another page HREF is set equal to the URL of that page:<br><A HREF="http://www.cnn.com"> CNN </A><br>If the link is an anchor HREF is set equal to the pound sign followed by the name of the anchor:<br><A HREF=#AnchorName> to the anchor</A> |
|         | NAME  | If the NAME attribute is included instead of the HREF attribute then the A tag is being used to mark a spot in the page that can later be pointed to by a link. In this case the </A> tag immediately follows the opening tag:<br><br><A NAME=ANCHORNAME></A>     |



|   |  |  |
|---|--|--|
| <b>&lt;BODY&gt;&lt;/BODY&gt;</b><br><i>All attributes are optional.</i> | The BODY tag surrounds all the content of your site. It allows you to set the look and feel of your site through its attributes.   |  |
|   | TEXT   | The TEXT attribute allows you to set the color of the text:<br><BODY TEXT=red><br>A page with that body will have red text.  |
|   | BGCOLOR  | The BGCOLOR attribute allows you to set the color of the background:<br><BODY BGCOLOR=blue>A page with that body will have a blue background.  |
|   | BACKGROUND   | The BACKGROUND attribute allows you to set an image as the background:<br><BODY BACKGROUND=monkey.jpg><br>A page with that body will have a monkey for a background (if there was an image monkey.jpg in the same folder as it). |
| <b>&lt;BR&gt;</b>   | The BR tag inserts a line break in the page.   |  |
| <b>&lt;FORM&gt;&lt;/FORM&gt;</b>  | The FORM tags must surround all elements of a form. The opening <FORM> tag has two attributes: method and action.  |  |
| <b>&lt;H1&gt;&lt;/H1&gt; through<br/>&lt;H6&gt;&lt;/H6&gt;</b>          | The header tags: H1, H2,H3,H4,H5,H6, make the text between their opening and closing tags bold and large. H1 is the largest and H6 is the smallest.<br><H3>Big Bold Text</H3><br><H1>Bigger Bold Text</H1> |  |

|  |   |  |
|--|---|--|
| <b>&lt;HEAD&gt;&lt;/HEAD&gt;</b>                           | The HEAD tag surrounds information about the page.  |  |
| <b>&lt;HTML&gt;&lt;/HTML&gt;</b>                           | The HTML tags must surround the entire page.  |  |
| <b>&lt;IMG&gt;</b><br><i>SRC is mandatory</i>              | This tag is used to insert an image into a page. The image is displayed where the <IMG> tag is inserted.    |  |
|  | SRC   | The SRC tag tells the browser what image to insert.<br><br><IMG SRC=monkey.jpg><br><br>Would insert the image of the monkey.   |
|  | WIDTH   | The width tag tells the browser what the dimensions of the image should be. If the dimensions of the image are different than what is given the browser stretches the image to make it fit.  |
|  | HEIGHT  | The height tag tells the browser what the dimensions of the image should be. If the dimensions of the image are different than what is given the browser stretches the image to make it fit. |
| <b>&lt;INPUT&gt;</b><br><i>NAME and TYPE are required.</i> | The input tag is used to insert a form element into a form. It must go between the <FORM> and </FORM> tags. |  |
|  | NAME  | The NAME attribute is used to determine what information came from what form element. In the case of radio buttons all the buttons in a set must have the same name.                         |

|   |  |   |
|---|--|---|
|   | TYPE   | <p>This attribute Tells the browser what type of form element to insert.&lt;INPUT TYPE = "text" &gt; will be a text field.</p> <p>&lt;INPUT TYPE = "checkbox"&gt; will be a checkbox.</p> <p>&lt;INPUT TYPE = "radio"&gt; will be a radio button.</p> <p>&lt;INPUT TYPE = "reset"&gt; will be a reset button.</p> <p>&lt;INPUT TYPE = "submit"&gt; will be a submit button.</p> |
|   | SIZE   | This attribute defines how big the element will be.   |
|   | VALUE  | <p>This attribute defines what the element will be set to. For example:</p> <p>&lt;INPUT TYPE = "text" NAME="email" SIZE=15 VALUE="type name here"&gt;</p> <p>Will create a text field with the words "type name here" in it by default.</p>  |
| <p><b>&lt;SCRIPT&gt;&lt;/SCRIPT&gt;</b></p> <p><i>The LANGUAGE attribute is mandatory</i></p> | <p>The Script tag lets you use scripting languages such as Javascript in a web page. In our case LANGUAGE will always be set equal to "Javascript."</p> <p>&lt;SCRIPT LANGUAGE="Javascript"&gt;The Script Goes Here&lt;/SCRIPT&gt;</p> <p>The contents of the script must go between these two tags.</p> |   |

|  |   |   |
|--|---|---|
| <b>&lt;SELECT&gt;&lt;/SELECT&gt;</b>                               | <p>The SELECT tag will create a selection box within a form. The SELECT element must have at least one OPTION tag within it:</p> <pre> &lt;SELECT NAME="gender"&gt;  &lt;OPTION&gt; Male  &lt;OPTION&gt; Female  &lt;OPTION&gt; Undecided  &lt;/SELECT&gt; </pre> |   |
| <b>&lt;TABLE&gt;</b><br><i>All attributes are optional</i>         | <p>The TABLE tag must surround an entire table. It's attributes determine how the table looks.</p>  |   |
|  | BORDER  | This defines how big the borders of a table will be.  |
|  | CELLPADDING   | This defines how far from the edge of a cell the content in that cell will be   |
|  | CELLSPACING   | This defines how far apart the cells of the table will be.  |
|  | WIDTH   | This defines the width of the table   |
|  | BGCOLOR   | This defines the background color of the table. If a color is specified in the TR or TD tags BGCOLOR is ignored for that row, or cell respectively. |
| <b>&lt;TD&gt;&lt;/TD&gt;</b><br><i>All attributes are optional</i> | <p>The TD tag surrounds the contents of a cell within a table. Every TD tag must be within the &lt;TABLE&gt; and &lt;/TABLE&gt; tags.</p>   |   |

|                       |  |   |
|-----------------------|--|---|
|                       | ALIGN  | <p>This determines how the content in the cell is aligned.</p> <p>&lt;TD ALIGN=RIGHT&gt; will make the cell right justified</p> <p>&lt;TD ALIGN=CENTER&gt; will make the cell centered</p> <p>&lt;TD ALIGN=LEFT&gt; will make the cell left justified</p>   |
|                       | BGCOLOR  | The BGCOLOR attribute controls the background color of this cell.   |
|                       | ROWSPAN  | <p>ROWSPAN controls how many rows the cell occupies, allowing you to merge the cells of three rows into one tall cell. The default is 1, but you can increase this attribute to be anything up to the number of remaining rows. For example, ROWSPAN=3 will cause the cell to be 3 rows high.</p> <p>When you have set a cell to occupy more than one row, you will usually be filling fewer cells in the next few rows. If, for example, you set ROWSPAN=4 on one cell in a table that is 5 columns wide, the next 3 rows would have 4 columns to fill instead of 5.</p> |
|                       | COLSPAN  | COLSPAN controls how many columns the cell occupies, allowing you to merge the cells of three columns into one long cell. The default is 1, but you can increase this attribute to be anything (if you raise it above the number of remaining columns, it will create new ones on the right). For example, COLSPAN=3 will cause the cell to be 3 columns long.  |
| <TEXTAREA></TEXTAREA> | The TEXTAREA tag creates a text area within a form |   |

|                 |  |   |
|-----------------|--|---|
|                 | NAME   | The NAME attribute is used to determine what information came from what form element.   |
|                 | ROWS   | This defines how many rows of text will fit in the text area.   |
|                 | COLS   | This defines how many columns of text will fit into the text area.  |
| <TITLE></TITLE> | The TITLE tag must go between the <HEAD> and </HEAD> tags. The title of the page is placed between the <TITLE> and </TITLE> tags:<TITLE> THE TITLE GOES HERE</TITLE> |   |
| <TR></TR>       | The <tr> HTML element defines a row of cells in a table  |   |
|                 | ALIGN  | This determines how the content in all the cells in this row is aligned. It is used the same way the TD ALIGN attribute is.             |
|                 | VALIGN   | This determines how the content in all the cells in this row is vertically aligned. It is used the same way the TD VALIGN attribute is. |
| <UL></UL>       | The UL tags start and end an unordered list. All of the elements in the list must be inside these two tags.  |   |

# **CHAPTER 4**

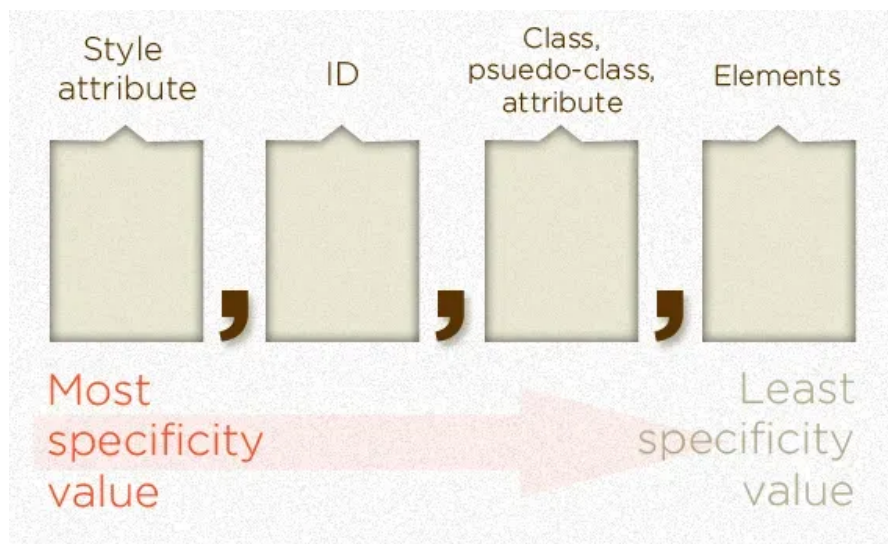
## **CSS**

### **4.1 What is CSS?**

CSS stands for Cascading Style Sheets. CSS is a style sheet language that is used for styling and formatting to documents written in a markup language like HTML. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

### **4.2 Specificity**



#### **4.1 Specificity**

Specificity in CSS in browsers determine the importance, relevance, and “seniority” of CSS styles. That means when one or more CSS styles indicate the same element then the browser will follow some rules to determine the appropriate selector, these rules are known as specificity.

To understand specificity we need to first know about common CSS selectors, some of them are:

1. **Type Selectors**: Select your intended element by using its element type.
2. **Class Selectors**: Elements can have multiple classes set on them to be selected in your CSS style sheet.
3. **Pseudo-Classes**: Select elements based on the CSS state they're in. For example, style the hovered state of a button with `button:hover`.
4. **ID Selectors**: Select a specific element with its unique ID. There can only be one element with each ID, whereas classes can be applied to multiple elements. For example, select `<h1 id='main'>` with `#main`.
5. **Inline Styles**: Inline styles are applied to elements directly with the `style` attribute so you don't actually use any CSS selectors. For example, you can make your header font color blue directly with `<h1 style='color: blue;'>`

Each type of selector listed above has a weight. All of these can be divided into four main groups:

- **Lowest weight**: type and pseudo-element selectors.
- **Low weight**: class, attribute, and pseudo-class selectors.
- **Medium weight**: ID selectors.
- **High weight**: inline styling.

If styles of differing weights are applied to the same element, the styling with the higher weight will be applied. If styles of even weights are applied, the styles that come last (nearest to the end of your style sheet) will be applied.



## **4.3 Basic CSS Properties**

### **4.1 Backgrounds**

| Property  | Values  | Example                            |
|---|---|------------------------------------|
| background-size   | auto/cover/?px/?%   | background-size:<br>cover          |
| background-image  | url/none  | background-image:<br>none          |
| background-repeat   | no-repeat/repeat-x/repeat-y/repeat  | background-repeat:<br>repeat       |
| background-attachment   | fixed/scroll  | background-attach<br>ment: fixed   |
| background-color  | color/transparent   | background-color:<br>white         |
| background-position   | can be any position from different combinations like top left, top right, top center. Same with the bottom. can be mentioned in terms of position x-% and y-% | background-positio<br>n: top-left; |
| background-clip - lets you control how much of the background image should extend beyond the element's content or padding | content-box/padding-box/border-box/no-clip /?%/?px  | background-clip:<br>no-clip        |

## 4.2 Margin

| Property      | Values        | Example              |
|---------------|---------------|----------------------|
| margin-bottom | auto/length % | margin-bottom : 20px |
| margin-left   | auto/height % | margin-left : auto   |
| margin-right  | auto/height % | margin-right : 30%   |
| margin-top    | auto/length % | margin-top : 40mm    |

## 4.3 Positioning

| Property              | Values                         | Example   |
|-----------------------|--------------------------------|---|
| bottom/right/top/left | auto/%/length                  | bottom: 20% top : auto left : 40px right : 25px |
| z-index               | auto/number                    | z-index : 2                                     |
| clip                  | shape/auto                     | clip : auto                                     |
| position              | fixed/static/relative/absolute | position : static                               |

## 4.4 Table

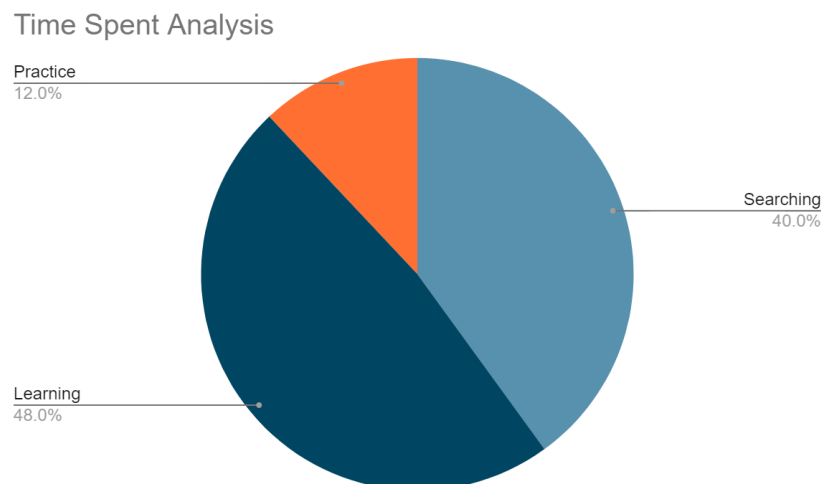
| Property        | Possible values       |
|-----------------|-----------------------|
| border-collapse | collapse/separate     |
| empty-cells     | show/hide             |
| table-layout    | auto/fixed            |
| caption-side    | top/bottom/left/right |

# **CHAPTER 5**

## **Resource Curator Website**

### **5.1 Introduction**

As technology advances, internet is becoming even more popular. More and more suites of applications are being introduced to meet the user requirements, therefore in order to build them large number of languages, frameworks and libraries are being invented. As a result of this, day by day plentiful resources are created by many instructors or institutions around the globe. People who are relatively new to these find it overwhelming to choose the best possible resource according to their experience level, among the abundance of content. People waste their substantial amount of time searching content suitable for them, and even if they find it, most of the time the course/resource they choose has limited or isn't up-to-date, which impedes their learning. There's not even proper guidance about how and what are the prerequisites for learning a technology. Added to that, people couldn't determine where to apply the things they learned.



**5.1 Time Spent Pie Chart**

The above Pie chart depicts the amount of time spent by a single person when they try to learn some new technologies.

Our project is aimed to solve the above shortcomings. We have designed our website in such a way that, even newbies, can easily find the required resources. Our Resource Curator Website has been developed by those students who had faced the similar issues and found their way out to solve them. So, the content available on the website has been put up after several iterations of research and discussion. The need of such a website is to facilitate the audience to consume the relevant and concise content otherwise lost in ocean of information available over the internet.

## **5.2 Tools and Technology used**

1. **Figma**- Used to design the layout of the website and creating wireframes.
2. **HTML** - To implement the basic structure of the website using div, section tags, etc.
3. **CSS**- Used to style the HTML file created.
  - a. **Flex Box** - It helped in placing the div tags and section tags in proper layout.
  - b. **Grid**- It helped in placing the course div tags in responsive manner.
4. **JavaScript**- The active link element is dynamically added and removed using JavaScript, moreover the display property of course div and table element has been set accordingly using JavaScript.

## 5.3 Screenshots

### Home page

Resourceuz

HomeAbout UsCoursesContact Us

# e-Learning Platforms

Resourceuz is an online learning platform, here you will get right resources for you. Choose from many topics, skills levels, and languages. Start learning form today..

[Get Started](#)



## Courses



**Data Structure**

A data structure is a named location that can be used to store and organize data. And, an algorithm is a collection of steps to solve a particular problem.



**C++**

C++ is a case-sensitive, free-form programming language that supports procedural, object-oriented, and generic programming



**DBMS**

A Database Management System (DBMS) is software designed to store, retrieve, define, and manage data in a database.



**Java**

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible.

[Discover →](#)

## Need some Help

If you feel there is anything else to be modified or have any questions please feel free to contact us..

[Contact Us](#)





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- Privacy Policy
- Terms and Conditions
- Terms of Sale
- Community Guidelines
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**Get in Touch**

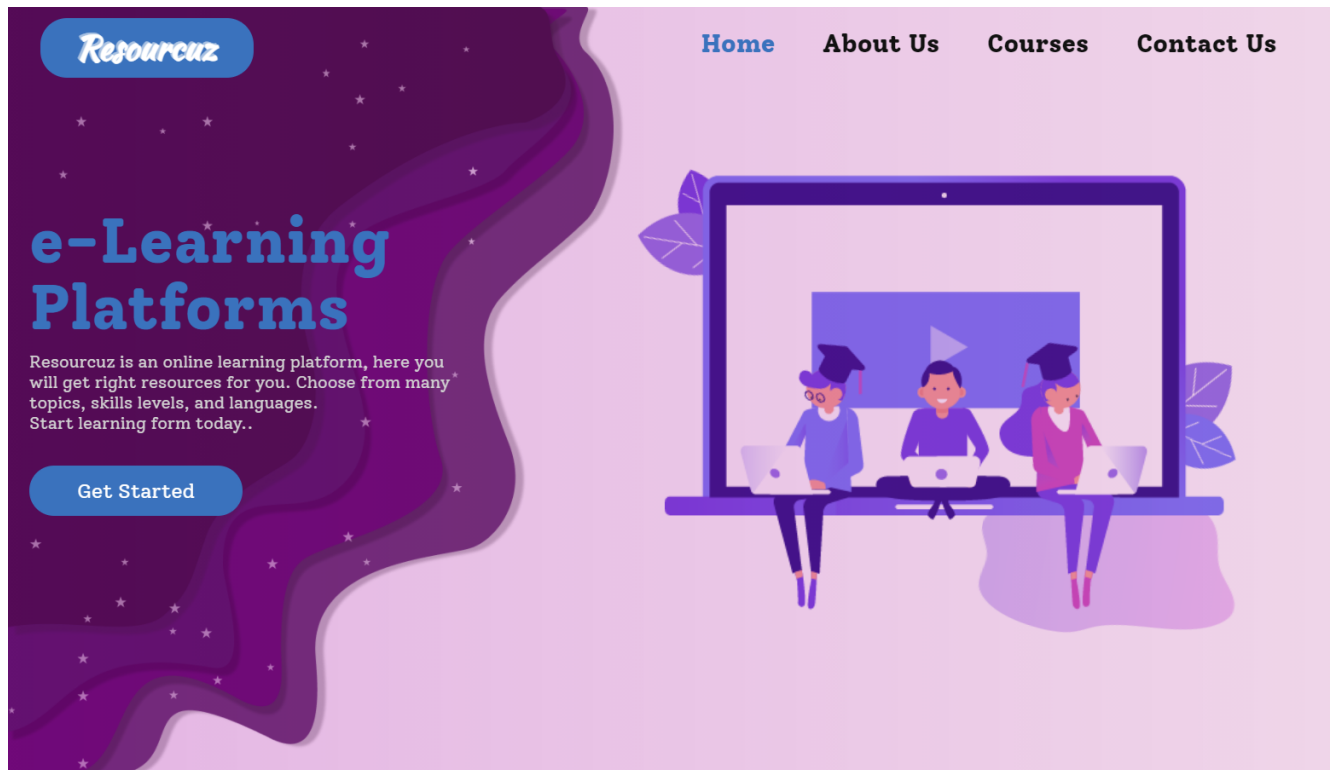
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## Home page(1<sup>st</sup> Section)



## Home page(2<sup>nd</sup> Section)



## Home page(Footer Section)

### Need some Help

If you feel there is anything else to be modified or have any questions please feel free to contact us..

Contact Us



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UDACITY

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# About Us page

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## About Us

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### Our Vision

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### Our Approach

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### Our Process

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# Courses page



## All Online Courses

Your all courses are available here related to Computer Science. We have provided resources from many popular platforms. please check out once.

Get Started



## All Courses

Search Courses...



Mathematics includes the study of such topics as quantity (number theory), structure (algebra), space (geometry), and change (analysis).



Python is an interpreted, object-oriented programming language similar to PERL, that has gained popularity because of its clear syntax and readability.



Physics, science that deals with the structure of matter and the interactions between the fundamental constituents of the observable universe.



A data structure is a named location that can be used to store and organize data. And, an algorithm is a collection of steps to solve a particular problem.



C++ is a compiled, case-sensitive, free-form programming language that supports procedural, object-oriented, and generic programming



A Database Management System (DBMS) is software designed to store, retrieve, define, and manage data in a database.



Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible.



Computer System architecture deals with the design of computers, data storage devices, and networking components that store and run programs, transmit data.



An operating system is system software that manages computer hardware, software resources, and provides common services for computer programs.



C is one of the most powerful programming language, in that it allows direct access to memory and many "low level" computer operations.



PHP is a server side scripting language, that is used to develop Static websites or Dynamic websites or Web applications.

### Menu

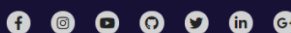
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## Contact Us

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## Resources page(Data Structure)

### Topics

Array

Matrix

String

BST

Linked List

Dynamic  
Programming

Backtracking

Greedy

Search Resources...



| Questions   | Resources                 |
|---|---------------------------|
| Reverse the array 3   | Introduction              |
| Find the maximum and minimum element in an array  | Array Rotations           |
| Find the "Kth" max and min element of an array  | Arrangement Rearrangement |
| Given an array which consists of only 0, 1 and 2. Sort the array without using any sorting algo | Order Statistics          |
| Move all the negative elements to one side of the array   | Range Queries             |
| Find the Union and Intersection of the two sorted arrays.                                       | Searching and Sorting     |
| Write a program to cyclically rotate an array by one.   |                           |
| Find Largest sum contiguous Subarray [V. IMP]   |                           |
| Merge 2 sorted arrays without using Extra space.  |                           |
| Kadane's Algo [V.V.V.V.V IMP]   |                           |
| Best time to buy and Sell stock   |                           |
| find all pairs on integer array whose sum is equal to given number                              |                           |
| find common elements In 3 sorted arrays   |                           |
| Reverse the array in alternating positive and negative items                                    |                           |

### Topics

Array

Matrix

String

BST

Linked List

Dynamic  
Programming

Backtracking

Greedy

Search Resources...



| Questions   | Resources                     |
|---|-------------------------------|
| Reverse a String  | String                        |
| Check whether a String is Palindrome or not   | Youtube(TUF)                  |
| Find Duplicate characters in a string   | Youtube placement series(TUF) |
| Why strings are immutable in Java?  |                               |
| Write a Code to check whether one string is a rotation of another                           |                               |
| Write a Program to check whether a string is a valid shuffle of two strings or not          |                               |
| Count and Say problem   |                               |
| Write a program to find the longest Palindrome in a string.[ Longest palindromic Substring] |                               |
| Find Longest Recurring Subsequence in String  |                               |
| Print all Subsequences of a string.   |                               |
| Print all the permutations of the given string  |                               |
| Split the Binary string into two substring with equal 0's and 1's                           |                               |
| Word Wrap Problem [VERY IMP]  |                               |

## **5.4 Deliverables**

| Sr No. | Deliverable Name           | Description   | Assigned to   |
|--------|----------------------------|---|---|
| 1      | Ideate and prepare plan    | Come up with a project that will be helpful to the end-users and project milestones and timelines.            | B Rahul,<br>Nishan Kumar Mondal ,<br>Pallavi Solday |
| 2      | Design Wireframes          | Design the layout of the website using Figma.   | Nishan Kumar Mondal                                 |
| 3      | HTML and CSS               | Create the structure of the website and style the page.   | Pallavi Solday                                      |
| 4      | Refactoring and JavaScript | Refactor the code, remove redundant CSS styles etc., and add JavaScript to enhance the accessibility of user. | B Rahul   |
| 5      | Content Writing            | Prepare all the content and to be added on to the website and collect resources for relevant topics.          | Vartika Sariwan                                     |

## **5.5 Conclusion**

The project entitled **Resource Curator Website** was completed successfully. The system has been developed with much care and free of errors. The purpose of this project was to develop a web application for students who are new to Computer Science and find it difficult to find the relevant resources for learning a specific technology.

Through this project we gained valuable information and practical knowledge on several topics like designing web pages using Figma, HTML & CSS, usage of responsive templates, we used JavaScript to make the webpages dynamic. Also, the project helped us about the development phases of a project and software development life cycle.

There is a scope for further development in our project to a great extent. A number of features can be added to this system in the future, like providing tracking system based on user credentials using session and cookies. Another feature we wished to implement was providing more practice questions and resources based on his/her score in previous questions.

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- CSS Properties- <https://hackr.io/blog/css-cheat-sheet>

# **WEEKLY OVERVIEW OF ACTIVITIES**

## **Week 1**

| <b>DATE</b> | <b>DAY</b> | <b>NAME OF THE TOPIC/MODULE COMPLETED</b>              |
|-------------|------------|--|
| 07/08/2021  | Saturday   | Introduction To Web and Web development                |
| 09/08/2021  | Monday     | Structure of HTML,Attributes, Images                   |
| 10/08/2021  | Tuesday    | Heading, paragraphs and comments                       |
| 11/08/2021  | Wednesday  | Colors   |
| 12/08/2021  | Thursday   | Fonts  |
| 13/08/2021  | Friday     | Tables and Forms                                       |
| 14/08/2021  | Saturday   | Ideate and prepare plan for project, Design Wireframes |

## **Week 2**

| <b>DATE</b> | <b>DAY</b> | <b>NAME OF THE TOPIC/MODULE COMPLETED</b>            |
|-------------|------------|--|
| 16/08/2021  | Monday     | Classes and IDs                                      |
| 17/08/2021  | Tuesday    | Selectors and Combinators                            |
| 18/08/2021  | Wednesday  | Overflow, Colors and Background                      |
| 19/08/2021  | Thursday   | Box Model- Border, Margin and padding                |
| 20/08/2021  | Friday     | Formatting with CSS,Positions- Relative/ Absolute    |
| 21/08/2021  | Saturday   | Initial Implementation of Project using HTML and CSS |

### **Week 3**

| <b>DATE</b> | <b>DAY</b> | <b>NAME OF THE TOPIC/MODULE COMPLETED</b>                         |
|-------------|------------|---|
| 23/08/2021  | Monday     | Introduction and Understanding Colors                             |
| 24/08/2021  | Tuesday    | Backgrounds and colors  |
| 25/08/2021  | Wednesday  | Gradient and shadows  |
| 26/08/2021  | Thursday   | Animations and transitions  |
| 27/08/2021  | Friday     | Basic 2D and 3D animations  |
| 28/08/2021  | Saturday   | Refactoring Code and use to of JavaScript to enable accessibility |

### **Week 4**

| <b>DATE</b> | <b>DAY</b> | <b>NAME OF THE TOPIC/MODULE COMPLETED</b>                         |
|-------------|------------|---|
| 30/08/2021  | Monday     | Editing and enhancing of Home Page                                |
| 31/08/2021  | Tuesday    | Editing and enhancing of About Us and Contact Us page             |
| 01/09/2021  | Wednesday  | Editing and enhancing of Courses page                             |
| 02/09/2021  | Thursday   | Editing and enhancing of Resources Page                           |
| 03/09/2021  | Friday     | Making the Website Responsive and making final changes to website |
| 04/09/2021  | Saturday   | Final Project Completion  |



# **Feedback from company**

## **Techgyan Technologies**

Unit No.1273-74,12th Floor Aggarwal Millianiam  
Tower II Pitampura, New Delhi 110034



## **Summer Project Appreciation**

Date: 04-Sep-2021

KTPL-2021-TG-ST-787

### **To Whom So Ever It May Concern**

This letter clarifies that **Mr. B Rahul** from **Chouksey Engineering College** has completed his Summer Project with our organization on **Web Development** in association of our technology partner **Techgyan Technologies** from **07-Aug** to **04-Sep 2021**.

During the project span with us, he was actively and diligently involved in the projects and tasks assigned. He developed the project **“Resource Curator Website”**, which implicated the practical execution of the courseware.

Our organization thanks him and wish him all the best for his future.

Sincerely,

**Ms. Sonam Sherwal**

**Program Coordinator**

**Techgyan Technologies**

**Address:** Unit 1273-74, 12<sup>th</sup> Floor Aggarwal Millianiam Tower II Pitampura, New Delh 110034

**Email:** techgyan.technologies@gmail.in **Website:** www.tech-gyan.in

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**Regd. Address:** Unit No.1273-74,12th Floor Aggarwal Millianiam Tower II  
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**Website:** tech-gyan.in **Email:** hello@techgyan.in