Session 1

We know what we have to be when we grow up, so before we start learning HTML and all that, first tell me what you want to be when you grow up.

Answer

(Talk to them). Now the easiest way to find out what it is really like to be a >>>> or Astronaut or professor is to talk to them. But we might not know them or they may not always be free to talk when we want to, so we can check out their websites. (Open websites related to>>)

As you can see, there is a website for every profession! Even actors, musicians have their own websites.

If you want to get your work across to a large audience, websites are the most useful way. In fact, a website is a fundamental aspect of every business.

Now,

Open any one of the websites and right click – View page source.

Kids, what do you see on the first line?

<doctype! html> <html>

Okay, let’s see what happens with another websites (repeat the process)

You can see, the basic framework of every website is html.

All the websites in the world are made using html.

It stands for Hypertext Markup Language (Ask the kids to repeat it/ write it down in their notebooks)

Hypertext is a text which contains links to other texts. In web-pages, you are linked to various pages.

Markup languages are designed for the processing, definition and presentation of text. The language specifies code for formatting.

Why you should learn HTML/CSS

So what are we going to learn in this program?

Ans: To create our first website!

And what languages are we going to use to make these websites?

Ans: HTML

So, what do you think? Apart from making websites, does learning to write HTML help in any other way?

So apart from actually making websites, learning HTML/CSS has a few more advantages.

Let’s actually look at them?

1. Making websites
2. Simple to learn, good way to start programming.
3. Because a simple statement like Hello world looks like this is different programming Languages.
4. But HTML Uses very understandable 4 lines

<html>

<body>

Hello World!

</body>

</html>

This is the much simpler for you to start learning to type Languages!

1. Lets understand the web much better (and edit it temporarily!)

Did you know you could read any web page and understand how they are made?

Ask the students to open any webpage of their choice.

1. Highlight a text and right click
2. Click on view source

Explain to them that this is how the basic structure of the web page looks like, made up of HTML tags.

Did you also know you could edit a web page temporarily!?

Ask the students to open any webpage of their choice.

1. Highlight a text and right click
2. Click on Inspect
3. When the inspect Element Developer Box shows up, double click on the selected text and start editing.

Classroom fun: TRY EDITING A WEBPAGE LIKE GOOGLE TO GOOGLE YOUR NAME. OR CHANGE THE SCORE OF SOME CRICKET/FOOTBALL MATCH USING ABOVE METHOD AND SHOW THE KIDS ON CRICBUZZ!

Kids will get excited/inquisitive. After which you can introduce them to this concept of temporary website editing using inspect!

~~For safari, you have to open preferences from safari tab- Go to advanced and enable the develop button. In which you will be able to see the page source and ONLY THEN shall the inspect button work.~~

Explain to them that this helps them understand websites better, that if they want ti implement a particular functionality of a website they see, they can see the inspect element and understand how it works.

Show them Video

<https://www.youtube.com/watch?v=HrOnrephOlE>

Server: You use a notebook to write a story. And can keep the notebook inside a certain section of the cupboard with other books. When you want to read this story again, you can ask your mom/dad to take it out of this particular cupboard section.

Similarly, coders write their code of websites in a file and store it in a server. Each time you want to access the website, the internet goes and fetches the file form the server, websites stay in.

After explaining, if time permits, show the video as revision –

<https://www.youtube.com/watch?v=SwLdKeC8scE>

You: Now, open your laptops and open a notepad file.

Ok now tell me what are the parts of the human body? (Arrive at head and body)

When we had seen the page source of websites, what was the file line?

<DOCTYPE! Html> <html>

Okay, so you also type the same thing.

The <>brackets along with the text that was written between them are together called tags. Most tags have an ending tag which is denoted with a /before the word. So we end the <html> tag with </html>

Coming back to the parts of the body, what comes first?

Head!

We write everything in HTML between the <html> and </html> tags. So the next tag would be the <head> tag.

Again, coming back to the arts of the body, what comes next?

Ans: Body!

Write the body tag and write “Hello” and close it.

All that you want to see in the web-page is written in the body tag. So go ahead and write whatever you want!

Minimize your notepad and create a folder on your desktop called “MINDCHAMP HTML”

Always save Html files and images in the folder

Now, something magical would have happened in your folder (Open the browser file and see their website)

To open the notepad file now you will have to right click and open with notepad

Now, ask them to try the following tags.

<h1>,<h6>,<b>,<i>,<s>

This class will be all about practical. You will have to keep trying the various tags and tell me what formatting are they used for.

MFW1 - Session 1

Topics done in today’s class:

* Importance of Programming Languages
* Understanding HTML
* Uses of HTML
* Created a HTML page using basic tags.

Homework

Go through the Session - 1 of student interface.

Try the following tags:

<h1>, <h6>, <b>, <i>, <s>

Next class Friday at 4.00pm. Have a great day ahead!

Session 2

Hypertext: - Hypertext is a text which contains links to other texts. In web-pages, you are linked to various pages.

Markup languages are designed for the processing, definition and presentation of text. The language specifies code for formatting, both the layout and style, within a text file.

Tags :- The code used to specify the formatting are called tags.

Attributes:- An attributes is used to describe the functionality of a tag more specially.

(A font has different qualities like color, type, size etc. The text in a tag can be described better used the attributes of that tag)

Global Attribute: An attribute which can be used with all elements.

Create a basic page of html with a big paragraph.

Now, if you carefully see the notepad file and your webpage, you will notice that the code is typed on different lines but the output is on the same line.

Now try putting

1. <br> tag (Single)

Like I mentioned earlier, most tags in HTML have a closing tag. But <Br> doesn’t. It can be used alone. Now you know pizzas and burgers, right? Burger have two breads, whereas a pizza is open. We will use the same analogy for our tags.

Make them try out the followings tags and write the output in a separate notepad file where they can save all the tags learnt.

1. <u> tag (double) underline
2. <em> tag(double) It emphasis the text like italic
3. <strong> tag(double) It makes the text bold
4. <mark> tag (double) It makes the text like an high lighter
5. <hr> tag (single) It gives horizontal rule line
6. <pre> tag(double) it looks same like written in html file.
7. <s> tag(Double) it give stirck
8. <center> tag (Double) It brings text in center
9. <marquee> tag (Double)

Ok so all these tags we learned that were used to beautify the text are called FORMATTING TAGS Eg <em><strong><i><b><small> as they change font format.

Send this in chat:

1. Rainy
2. Sunny
3. Cloudy
4. Winter
5. Summer

Tell him to write it

Send this in chat:

* Rainy
* Sunny
* Cloudy
* Winter
* Summer

In order to list items we use unordered lists and ordered list.

The difference is simple – Ordered lists have numbers/sequence and unordered lists are bullets/shapes.

<ul>

<li>Rainy</li>

<li> Sunny</li>

</ul>

Try the different types of lists one can get in <ol> theres numbers, roman numbers, alphabets(capital and small)

What are the kinds of lists you use in Word instead of bullets?

Answer is arrow/circle/square etc. We will learn in some time as per how to get that.

Now, you are going to do somethings fun!! I will give you a word and in 20 seconds you have to make branches and write the words you will use to describe that. For example:

Light

Sharp Oval Green

Leaf

Arc Size soft

You have to use words that describe the leaf.

So, I will give you a few words and set a timer of 30 seconds for each word!!

Now, in the leaf example that we saw,

what is green?

A : Colour

What is soft?

A : texture

What is Sharp Oval?

A : shape

What is Light?

A : weight

What is arc sizes?

A : size

Some other examples are such Apple – colour – red,

Apple - taste - sweet etc.

Just like an object has a feature/quality/characteristic/adjectives, tags in HTML also have attributes.

Attributes are used to describe the tags better. For eg.:

Send this in chat

<h1 align=”Center”>ABC</h1>

This basically means that the alignment of the text in the h1 tag is in the center. Here, h1 is the tag and align is the attribute.

Send this also in chat

<h1> start tag

Align attribute

Center value

ABC content

</h1> end tag

Send this chat and tell to open and share the screen

<Https://docs.google.com/presentation/d/19zQCX4bCS43zj7GpS6008-P0M-x8449nxIRZwe72oFU/edit#slide=id.g1e56704a65_0_19>

Now we have learnt attributes, let’s get back at img tag.

It has a must attribute, which specifies where to pick up the file from: ‘src’

So we write as

<img src=””>

By self closing tag, I mean we can write <img src=””/>

Try it now

What if, I want a smaller image, what will I do then?

There are multiple attributes for the img tag. We can change the height, width of the image as well with these attributes. Do add multiple attributes, you need to simply put a space bar.

Eg:- <img src=”” height=”100” width=”300”>hi</img>

Now find the attributes for tags they had previously searched and implement them.

Try finding how to get other than bullets in<ul> or roman numbers in <ol>

What are the default attributes of<ol><ul>?

Answer(1 and bullet)

Teach them anchor tag

<a href=””> Click here </a> and ask to identify attribute and tag here.

So now how to change the background color to black and font color to white

<body text=”white” bgcolor=”black”>

If you want to change the font color of only one particular sentence use:

<font color=”blue”>hi</font>

MFW1 - Session 2

Topics done in today’s class:

* Understanding HTML tags
* Uses of tags
* Understanding Attributes
* Uses of Attributes

Tags with attributes demonstrated today : - br, u, em, strong, mark, hr, pre, s, center, marquee, img, ol, ul, a.

Homework

Go through the Session - 2 of student interface.

Try to make the use of all the above tags and make a web page.

Task - Find out the attributes of Ol and Ul, img tags. Find out how to change the Background color, and font color, font size.

Next class Monday at 4.00pm. Have a great day ahead!

Session 3

Do the revision of Image tag and a tag

Marquee tag attributes

Scrollamount- Determines the number of time the text/image scrolls

Delay – Amount of time it waits before starting to scroll again.

Behavior- alternate, scrolls from left to right and then right to left.

MFW1 - Session 3

Topics done in today’s class:

* Used all the tags learned in the Previous class and started making web page.
* Demonstrated the attributes of marquee tag, Font tag, attribute of body tag.

Homework

Go through the Session - 3 of student interface.

Try creating a car race using Marquee tag.

Complete the webpage.

Task - Find out the attributes of Ol and Ul, img tags.

Mithil is having exam so as per the discussion held with him we will be having our next class on Monday(28th Sept’20) at 4.00pm. Have a great day ahead!

Session 4

Attributes of Ol list is start and type 1 a A I

Attributes of UL list is type disc, square and circle.

Ok, so what is the smallest table that you know?

So, wat are the tables made up of?

Rows and Columns

So how many rows and columns will the smallest table have?

1

Share your screen

<https://photos.google.com/share/AF1QipPYGf4LCGal8v78pVqyKEu8ff8bafKE2RinlRzATv-ufJq176s6dV0zuYkogvggRA/photo/AF1QipMKFG_uGFq-OrhBWxQj9X7Kv8gkgc446g8Q0VwZ?key=ektRQzhKVXJLUjhCSjh1VlI0SmZxcHJDdjhJelNB>

Tags used to draw a table.

Make a table of 2 by 2

<table></table>

<tr></tr>Table Row: To mark every row(No of <tr>=No of rows)

<td></td>Table Data : To define every data inside the cell

<th></th>Table Header: To define every data inside the cell in bold: Usually used in first row itself

Create a table of 2 col and 2 rows

Use attribute table border=”1”

Number of rows in the table = number of <tr></tr>;

Number of columns = number of <td></td>

Cell Spacing, Cell padding, bgcolor etc

Cellspacing : Spacing between cells

Cellpadding : is space inside the cell around the text

In excel, have you learnt merge cells?

OK so now, we will learn in Html how it works.

Colspan : If you wish to combine two columns together. Show example of how it looks like.

Rowspan : If you wish to combine two rows together show example of how it looks like.

|  |  |  |
| --- | --- | --- |
| Rowspan | | Colspan |
|  |  |
|  |  |  |

Rowspan

<table border="1">

<tr>

<th>Name:</th>

<td>Bill Gates</td>

</tr>

<tr>

<th rowspan="2">Telephone:</th>

<td>55577854</td>

</tr>

<tr>

<td>55577855</td>

</tr>

</table>

Colspan

<table border="1">

<tr>

<th>Name</th>

<th colspan="2">Telephone</th>

</tr>

<tr>

<td>Bill Gates</td>

<td>55577854</td>

<td>55577855</td>

</tr>

</table>

MFW1 - Session 4

Topics done in today’s class:

* Demonstrated the table tag in HTML
* Attributes of Table tag like border, cellpadding, cellspacing, rowspan, colspan. Bgcolcor.

Homework

Go through the Session - 4 of student interface.

Try creating a table using the above attribute.

Next class will be on Wednesday at 4.00pm. Have a great day ahead!

Note:- Any changes in scheduled day and time will be conveyed to you well in advance.

Mithil is having exam so as per the discussion held with him we will be having our next class on Monday (28th Sept’20) at 4.00pm. Have a great day ahead!

Session 5

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a mark-up language.

Open website <https://www.mindchamp.in/>

Think on how many tags and which tags we have used to make the first page using HTML. Ask them one by one.

To make the tabs on top right corner (Table).

For slideshow<img>+<marquee>

<center>;<h1>;<u>;<b>;<i>;<table>

What about the last section of contact us? How to make that (Student might say<table>)

To make it simpler, we have something called a <form> (Form Tag).

It consists of multiple form elements depending on what you need.

Need not explain Action/Get/Target/Method attributes (In detail for next level)

Explain only the below form elements: Write on notepad or of W3 schools in front of kids. Make sure they understand it thoroughly.

Make a form.

Show S5

Share this click:

<https://docs.google.com/presentation/d/14ozNt8ISthh0Qqcdw0snaQzC54ocld0trGMJySs3wCY/edit#slide=id.g23c496ff26_0_106>

Now there is an easy way to remember how to write CSS. If I Have a sentence My name is Mindchamp and I want to change the colour of Mindchamp to blue, how would I do it?

Font.

Simple isn’t it? Similarly, in CSS we have learnt that we change the styling of your HTML page. So, you first select the section/part to be styled. This is called selector. Let’s say we are changing the text in h1 tag to blue. So, we first write the selector.

H1 Followed by curly brackets

H1{}

Inside this we write what we want to change, which in this case is the colour to the value which is blue. So

H1{Color:Blue}

For the sake of remembering, in CSS the full stop inside the curly brackets is; So simply add that H1{Color:Blue} You can add multiple properties like font, size etc. too

So, selector {property;value;}

Remember we learnt to change font color. I mentioned <font> is not used in Html5. Then in such a case how to change the color?

Yes. CSS. Check your worksheets and change the color of your font using css.

<style>

Body{color;blue};

</style>

This is using internal CSS.

Explain internal / external CSS. In internal, explain inline css as well. <body style=color:blue>:: inline CSS is best used when you want to change only one line or restricted areas.

We will not be using external CSS for now. But do explain the meaning of it.

Used as a separate file of css, in case where css is used in abundance and can be used by multiple pages.

Let them try if time permits.

In the next class they have to start using github. The email id need to be verified. Inform parents on the group they will need to verify the account in the class. This is in case the kids don’t have their own email ids.

MFW1 - Session 5

Topics done in today’s class:

* Demonstrated the Form tag and its elements in HTML
* Learned Basics of CSS.

Homework

Go through the Session - 5 of student interface.

Create a table having merged cells

Create a form using all the elements did in the class.

Next class will be on Monday at 4.00pm. Have a great day ahead!

Session 6

Revision of everything till now specially CSS.

and Introduction to Hosting.

Ask the students what they remember about web hosting and servers from the first class and gauge their understanding. Hereafter show and discuss

<https://www.youtube.com/watch?v=mkILJ1Hs8Wo>

Important: Kids have a LOT of questions regarding the video on hosting: Make sure you solve the doubts and are thoroughly cleared with the concepts. If you are not sure of something, you could contact Mindchamp helpline OR search on google and get back to student next class.

Explain them the meaning of DNS/HTTP/SLS layer

Use the example –

SSL Certificate : Like students are given certificates for clearing Olympiads or participating in a race, website are given secure certificates if they have the cyber safety measures in place.

(HTTP + secure TLS Layer = HTTPS)

DNS: Domain Name Server (or system) – For <https://www.mindchamp.in/> ,

Domain name is Mindchamp. This system is the helper who helps convert and search the file from the server and return it to the user.

HTTP

Show this video

<https://www.youtube.com/watch?v=kBXQZMmiA4s&t=317s>

(stop and show and try to gauge their understanding) Ask them if its getting too much theory for them, if yes, move to creating github account from session 8 using

<https://photos.google.com/share/AF1QipOnW3V7uP3mGt0yQAfcM3hOhYzvdDUgg2TrZY_xOinrQQ72lJoxIIygJgxjDnawow?key=dWJEdjV3VVRzeEtDb01MQmhaT1d1RmV1VTFUZEJR>

Go on Github.com and simply sign up and keep. In case, they are using parents email id- make sure they inform the parents and get it verified before next class.

Think of the topic you want to make as your website.

Session 7

Ask kids to get colour pens/keep colour pens/crayons/rulers ready for the kids for this class.

If you had not finished he video yesterday, try to finish it today:

Discuss their website topics that they have chosen.

Today, we will bring your ideas on the website you are going to make onto the paper.

Have you thought what website you want to make?

Okay since you all know, we will do a small rapid fire.

What is the name of your website?

How many pages does your website have?

What are the colours you are going to use in your website?

Whenever you visit a website, all these things are in place. We do not go and buy the cylinder, or rush to the shop before the milk boils to buy tea leaves and sugar. With a little pre-planning and thinking, the answers to all these questions and more in the next 30 min.

In a big company, the guy who designs the page is never the coder! But they need to create the design and give it in such a way that looking at it, the coder can make the exact website designer would have drawn.

Share this link on chat:

<https://docs.google.com/document/d/1kCuYWNV9bCe-15kXOWM00bZv0clqpjx1QhQW0kkfvUc/edit>

Explain the meaning of wireframes.

Ask students to present their website ideas and provide feedback.

Now that we know what we want to make, we will start putting ur ideas in drawing. There are two advantages:

1. When you make a website, you will save time in figuring out where you want to place your text, images, or other elements.
2. You will know where to give links.

Show this Prototype Flow by sharing your screen.

<https://www.youtube.com/watch?v=X1pb4zXRA3Y>

This needs to be made at least for the homepage so kids get a better understanding of how they are going to proceed. Use colours if needed.

Quest:- Difference between wireframes and paper prototypes.

Answer: Wireframes are static. Whereas prototypes are dynamic – you will know, if you click on something, a box should appear or a new page should appear.

Ask student to remove a sheet or book, sketch pens if possible and paper prototype your website.

Visit this link to explore the colour combinations for their website.

<https://manasik21.github.io/HTML/>

After they are done, let them know what they just did is called wireframing.

Make sure they have all done at least one homepage in front of you.

Start working on the website project.

Homework:

1. Complete the paper prototyping with the second type.

Session 8

So, we can open google. com/ youtube.com form anywhere? Why can’t you opne your HTML program.

Because it is on your computer notepad file. For it to be visible to all. We need to host it online on a sever. For web hosting, we will use a web platform called as GUTHUB next class.

Professionals/developers in the IT industry use this and we will learn to use it as well so that the website you have made is visible to everyone in the world.

Go on Github.com and signup. In case, they are using parent’s email id- make sure they inform the parents and get it verified.

This is the session where students make Github accounts. Refer video (for educators understanding) – Github Tutorial.

<https://photos.google.com/share/AF1QipOnW3V7uP3mGt0yQAfcM3hOhYzvdDUgg2TrZY_xOinrQQ72lJoxIIygJgxjDnawow?key=dWJEdjV3VVRzeEtDb01MQmhaT1d1RmV1VTFUZEJR>

Kindly go through it thoroughly and make 2 or 3 repositories of your won.

They should have a GITHUB login and password by now.

Let them explore GITHUB. Teach them the basics of how to use it.

Session 9 and 10

Guide for Educators:

Make sure every students website is user friendly.

Every webpage has links to the Homepage and other relevant pages- Minimum 3 webpages should be there.

Encourage the use of images, marquee, hover animation, image maps for link and CSS

Shorten their Github URL using <https://tinyurl.com/>

If they want to discover and attribute in HTML or tag is CSS, encourage the use of google to discovers, understand, and implement.

For CSS, refer [www.tinyurl.com/mindchampcss](http://www.tinyurl.com/mindchampcss)

Even if the website is not heavy on content, make sure it is complete and comprehensive and looks appealing.

<https://tejast10.github.io/tejtt.github.io/>

<https://reeth07.github.io/CookingWithTeens/>

Ask them to start creating their first website

Make sure the homepage is named Index.html else it may not run.

Guide them while they create the website. Ask them to refer notepad/booklet where they have written all their tags.

Show students to create repository.

Sometimes github changes take a couple of minutes to reflect on the website once the code is pout in (esp with images). So keep refreshing.