Java Script Basics

1. Write a program which consist of single line and multiline comments.

**Single Line Comment**

</DOCTYPE html>

<html>

<head>

<title>

JavaScript Comments

</title>

<script>

function add ()

{

var x, y, z;

x = Number(document.getElementById("num1").value );

y = Number(document.getElementById("num2").value );

z= x+y;

document.getElementById("sum").value = z;

}

</script>

</head>

<body>

Enter the First number: <input id="num1"><br><br>

Enter the Second number: <input id="num2"><br><br>

<button onclick="add ()">

Sum

</button>

<input id="sum">

</body>

</html>

**Multiline Comment**

<!DOCTYPE html>

<html>

<head>

    <title>

        JavaScript Comments

    </title>

    <script>

        /\* Script to get two inputs from user

        and add them \*/

        function add () {

            /\* Declare three variables \*/

            var x, y, z;

            /\* Input the two nos. num1, num2

            Input num1 and store it in x

            Input num2 and store it in y

            The sum is stored in a variable z\*/

            x = Number(document.getElementById("num1").value);

            y = Number(document.getElementById("num2").value);

            z = x + y;

            document.getElementById("sum").value = z;

        }

    </script>

</head>

<body>

    Enter the First number: <input id="num1"><br><br>

    Enter the Second number: <input id="num2"><br><br>

    <button onclick="add ()">

        Sum

    </button>

    <input id="sum">

</body>

</html>

2. Create an array consisting of fruits names and when we click on a button sort it in descending order.

<!DOCTYPE html>

<html>

<body>

<h2>JavaScript Array Sort Reverse</h2>

<p>The reverse () method reverses the elements in an array. </p>

<p>

By combining sort () and reverse () you can sort an array in descending

order:

</p>

<p id="demo1"></p>

<p id="demo2"></p>

<script>

const fruits = [

"Banana",

"Orange",

"Apple",

"Mango",

"Watermelon",

"Grapes",

"Guava",

];

document.getElementById("demo1").innerHTML = fruits;

fruits.sort();

fruits.reverse();

document.getElementById("demo2").innerHTML = fruits;

</script>

</body>

</html>

3. Write a program with FOR/IN loop.

<!DOCTYPE html>

<html>

<body>

<h2>Q3 For/In Loop</h2>

<p>The for in statement loops through the properties of an object:</p>

<p id="demo"></p>

<script>

const person = { fname: "Shashwat", lname: "Aryan", age: 21 };

let txt = "";

for (let x in person)

{

txt += person[x] + " ";

}

document.getElementById("demo").innerHTML = txt;

</script>

</body>

</html>

4. Create an object "person" with properties first name and last name. Display these properties using 2 different ways of accessing.

const person = {

firstName: "rahul",

lastName: "koppula",

};

console.log(person.firstName);

console.log(person.lastName);

console.log(person["firstName"]);

console.log(person["lastName"]);

5. Write a program with variable hoisting (initialization first then declaration).

<!DOCTYPE html>

<html>

<body>

<h2>Q5 Hoisting</h2>

<p id="demo"></p>

<script>

var x =90;

var y;

elem = document.getElementById("demo");

elem.innerHTML = x + " " + y;

y =35;

</script>

</body>

</html>

6. Use strict mode in your program and understand why variable not declared causes error.

<!DOCTYPE html>

<html>

<body>

<p>

</p>

<script>

x=33;

myFunction();

function myFunction()

{

"Use strict";

y=55;

}

</script>

</body>

</html>

Java Script Access and Properties

1. Write program using this keyword when we click on button, it should be disappeared.

<!DOCTYPE html>

<html>

<body>

<h1>Q1 Using 'this' keyword and making text disappear</h1>

<p id="demo"></p>

<button onclick="fun ()" id="btn">Click me!</button>

<script>

function fun ()

{

document.getElementById("demo").style.display = "none";

}

const person = {

firstName: "RAHUL",

lastName: "ARYAN",

id: 5566,

fullName: function ()

{

return this.firstName + " " + this.lastName;

},

};

document.getElementById("demo").innerHTML = person.fullName();

</script>

</body>

</html>

2. Invoke a function using call () and apply (). Also Spot the difference between them.

<!DOCTYPE html>

<html>

<body>

<h2>Q2 call () and apply()</h2>

<p id="demo"></p>

<script>

const person = {

fullName: function (city, country)

{

return (

this.firstName + " " + this.lastName + ", " + city + ", " + country

);

},

};

const person1 = {

firstName: "Rahul",

lastName: "K",

};

document.getElementById("demo").innerHTML = person.fullName.apply(

person1,

["Hyd", "India"]

);

document.getElementById("demo").innerHTML = person.fullName.call(

person1,

"Hyd",

"India"

);

</script>

</body>

</html>

3. Write a program for COUNTER. Whenever we click on a "Count" button, value should increment.

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />

<title>COUNTER</title>

</head>

<body>

<h4>Q3 Qounter button</h4>

<button id="btn">Click Here! </button>

<p>Button Clicked <span id="display">0</span> Times</p>

<script type="text/javascript">

var count = 0;

var btn = document.getElementById("btn");

var disp = document.getElementById("display");

btn.onclick = function ()

{

count++;

disp.innerHTML = count;

};

</script>

</body>

</html>

4. Create a Counter with the help of getter and setter accessors.

<!DOCTYPE html>

<html>

<body>

<h2>Q4 Getter and Setter Counter</h2>

<p id="demo"></p>

<script>

const obj = { counter: 0 };

Object.defineProperty(obj, "reset",

{

get: function ()

{

this.counter = 0;

},

});

Object.defineProperty(obj, "increment",

{

get: function ()

{

this.counter++;

},

});

Object.defineProperty(obj, "decrement",

{

get: function ()

{

this.counter--;

},

});

Object.defineProperty(obj, "add",

{

set: function (value)

{

this.counter += value;

},

});

Object.defineProperty(obj, "subtract",

{

set: function (value)

{

this.counter -= value;

},

});

obj.reset;

obj.add = 70;

obj.subtract = 20;

obj.increment;

obj.decrement;

document.getElementById("demo").innerHTML = obj.counter;

</script>

</body>

</html>

5. Add some more properties to an existing function using object prototypes.

<!DOCTYPE html>

<html>

<body>

<h2>Q5 Addign properties with object prototype</h2>

<p id="demo"></p>

<script>

function Person (first, last, age, eye)

{

this.firstName = first;

this.lastName = last;

this.age = age;

this.eyeColor = eye;

}

Person.prototype.nationality = "Indian";

const me = new Person("Rahul", "K", 21, "black");

document.getElementById("demo").innerHTML =

"My nationality is " + me.nationality;

</script>

</body>

</html>

Java Script Events

1. Add an event listener to a button. When we click on it should display current date and time.

<!DOCTYPE html>

<html>

<body>

<h2>Q1 Event listener to a button to show date</h2>

<button id="myBtn">Try it</button>

<p id="demo"></p>

<script>

document.getElementById("myBtn").addEventListener("click", displayDate);

function displayDate()

{

document.getElementById("demo").innerHTML = Date();

}

</script>

</body>

</html>

2. Show the java script validation. When you click submit, the text box doesn't need to be empty.

<!DOCTYPE html>

<html>

<head>

<script>

function validateForm()

{

var x = document.forms["myForm"]["fname"].value;

if (x == "" || x == null)

{

alert ("Name must be filled out");

return false;

}

}

</script>

</head>

<body>

<h2>Q2 JS validation</h2>

<form

name="myForm"

action="/action\_page.php"

onsubmit="returnvalidateForm()"

method="post"

required

>

Name: <input type="text" name="fname" />

<input type="submit" value="Submit" />

</form>

</body>

</html>

3. How console.log () can be used for Debugging.

<!DOCTYPE html>

<html>

<body>

<h2>Q3 console.log () debugging</h2>

<p>F12 or crtl+shift+i > sources</p>

<script>

a=6;

b=7;

c=a+b;

console.log(c);

</script>

</body>

</html>

4. Write functions to set a cookie, get a cookie and check a cookie in a single program.

<!DOCTYPE html>

<html>

<head>

<script>

function setCookie(cname, cvalue, exdays)

{

const d = new Date();

d.setTime(d.getTime() + exdays \* 24 \* 60 \* 60 \* 1000);

let expires = "expires=" + d.toUTCString();

document.cookie = cname + "=" + cvalue + ";" + expires + ";path=/";

}

function getCookie(cname)

{

let name = cname + "=";

let decodedCookie = decodeURIComponent(document.cookie);

let ca = decodedCookie.split(";");

for (let i = 0; i < ca.length; i++)

{

let c = ca[i];

while (c.charAt(0) == " ")

{

c = c.substring(1);

}

if (c.indexOf(name) == 0)

{

return c.substring(name.length, c.length);

}

}

return "";

}

function checkCookie()

{

let user = getCookie("username");

if (user != "")

{

alert("Welcome again " + user);

}

else

{

user = prompt("Please enter your name:", "");

if (user != "" && user != null) {

setCookie("username", user, 30);

}

}

}

</script>

</head>

<body onload="checkCookie()"></body>

</html>

5. Create a JSON object and access it is using dot notation.

<!DOCTYPE html>

<html>

<body>

<h2>Q5 Accessing JSON obj with. notation</h2>

<p id="demo"></p>

<script>

const myJSON = '{"name":"John", "age":30, "car":null}';

const myObj = JSON.parse(myJSON);

document.getElementById("demo").innerHTML = myObj.name;

</script>

</body>

</html>

HTML BASICS

1. Understand the basics.html which was already created.

<!DOCTYPE html>

<html>

<body>

<h1>Q1 HTML basics</h1>

<h2>This is heading 1</h2>

<h3>This is heading 2</h3>

<h4>This is heading 3</h4>

<p>My first paragraph. </p>

</body>

</html>

2. Develop your own web page basics.html with all the following html tags Html, head, title, body Heading, Paragraph, Italic, Bold, Anchor, Unordered List, List Item, label, Blockquote, Horizontal rule, Image, Division, Span.

<!DOCTYPE html>

<html>

<body>

<h1>Q2 Own webpage with a lot of stuff</h1>

*<! --heading-->*

<p><b>My first paragraph. </b></p>

*<! --paragraph-->*

<i>This is my second paragraph</i>

<a href="https://www.youtube.com/watch?v=dQw4w9WgXcQ"

>Super serious stuff*<! --link-->*

</a>

<hr />

<ul>

<li>This is</li>

<li>An Unordered</li>

*<! --unordered list-->*

<li>List</li>

</ul>

<ol>

<li>First we do this, </li>

<li>and then we do this, </li>

<li>and then we do this. </li>

</ol>

<blockquote>this is a blockquote</blockquote>

*<! --blockquote-->*

<div>This is div block</div>

*<! --div-->*

<img

src="https://upload.wikimedia.org/wikipedia/commons/f/f9/Phoenicopterus\_ruber\_in\_S%C3%A3o\_Paulo\_Zoo.jpg"

/>*<! --image-->*

</body>

</html>

3. Navigate within the page to a different section.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Section links</title>

<style>

\* {

margin: 0;

padding: 0;

}

body {

width: 100vw;

height: 100vh;

}

. section

{

width: 100vw;

height: 40vh;

background-colour: #ef5354;

font-size: 50px;

colour: white;

text-align: center;

margin: 10px 5px;

}

.one,

. three

{

background-colour: #e03b8b;

}

.nav

{

width: 100vw;

height: 40vh;

background-colour: #3944f7;

font-size: x-large;

colour: white;

text-align: center;

margin: 10px 5px;

display: flex;

flex-direction: row;

justify-content: space-around;

place-items: center;

}

.btn

{

colour: white;

background-colour: #38cc77;

height: 40px;

width: 90px;

padding: 2px;

border: 2px solid black;

text-decoration: none;

}

</style>

</head>

<body>

<div class="nav">

<a href="#section1" class="btn">1</a>

<a href="#section2" class="btn">2</a>

<a href="#section3" class="btn">3</a>

<a href="#section4" class="btn">4</a>

</div>

<div class="section one" id="section1">section 1</div>

<div class="section two" id="section2">section 2</div>

<div class="section three" id="section3">section 3</div>

<div class="section four" id="section4">section 4</div>

</body>

</html>

4. Use pseudo classes and elements into your webpage.

<html>  
<head>  
<style>  
q: lang(no) {  
  quotes: "~" "~";  
}  
</style>  
</head>  
<body>  
  
<p>Some text <q lang="no">A quote in a paragraph</q> Some text.</p>  
  
</body>  
</html>

Input Attributes and Restrictions

1. Design the web page using all the below input attributes type =text, password, submit, reset, radio, checkbox, button.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<h1>

Using input attributes like text, password, submit, reset, radio,

checkbox, button,

</h1>

<br>

<textarea></textarea>

<textarea rows="4"></textarea>

<textarea rows="4" cols="30"></textarea>

</br>

<br>

<form>

<label for="pwd">Password:</label>

<input type="password" id="pwd" />

</form>

</br>

<br><input type="submit" /></br>

<br> <input type="reset" /></br>

<input type="radio" name="gender" id="male" />

<label for="male">Male</label>

<input type="radio" name="gender" id="female" />

<label for="female">Female</label>

<label> <input type="checkbox" />: Bike</label>

<label> <input type="checkbox" />: Car</label>

<button>Button</button>

</body>

</html>

2. HTML5 input Types type=number, range, colour, date, file, time, month, week, email.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<h1>

Using input attributes like number, range, colour, date, file, time,

month, week, email

</h1>

<form>

<label for="quantity">Quantity (between 1 and 5):</label>

<input

type="number"

id="quantity"

name="quantity"

min="1"

max="5"

/>

</form>

<br />

<form>

<label for="vol">Volume (between 0 and 50) :</label>

<input

type="range"

id="vol"

name="vol"

min="0"

max="50"

/>

</form>

<br />

<form>

<label for="favcolor">Select your favourite colour:</label

>

<input type="colour" id="favcolor" name="favcolor" />

</form>

<br />

<form>

<label for="birthday">Birthday:</label>

<input

type="date"

id="birthday"

name="birthday"

/>

</form>

<br />

<form>

<label for="myfile">Select a file:</label>

<input type="file" id="myfile" name="myfile" />

</form>

<br />

<form>

<label for="appt">Select a time:</label>

<input type="time" id="appt" name="appt" />

</form>

<br />

<form>

<label for="bdaymonth">Birthday (month and year) :</label>

<input

type="month"

id="bdaymonth"

name="bdaymonth"

/>

</form>

<br />

<form>

<label for="week">Select a week:</label>

<input type="week" id="week" name="week" />

</form>

<br />

<form>

<label for="email">Enter your email:</label>

<input type="email" id="email" name="email" />

</form>

<br />

</body>

</html>

3. Apply all the below input restrictions disabled, max, maxlength, min, read only, required, size, value.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<h1>

Using input restrictions like disabled, max, maxlength, min, read only,

required, size, value

</h1>

<form>

<label for="fname">First name:</label><br />

<input type="text" id="fname" name="fname" value="John" disabled /><br />

<label for="lname">Last name:</label><br />

<input type="text" id="lname" name="lname" value="Doe" />

</form>

<br />

<form>

<label for="datemax">Enter a date before 1980-01-01:</label

>

<input

type="date"

id="datemax"

name="datemax"

max="1979-12-31"

/><br /><br />

<label for="datemin">Enter a date after 2000-01-01:</label

>

<input

type="date"

id="datemin"

name="datemin"

min="2000-01-02"

/><br /><br />

<label for="quantity">Quantity (between 1 and 5) :</label>

<input

type="number"

id="quantity"

name="quantity"

min="1"

max="5"

/>

</form>

<br />

<form>

<label for="fname">First name:</label

><br />

<input type="text" id="fname" name="fname" size="50" /><br />

<label for="pin">PIN:</label><br />

<input type="text" id="pin" name="pin" maxlength="4" size="4" />

</form>

<br />

<form>

<label for="fname">First name:</label><br />

<input type="text" id="fname" name="fname" value="John" read only /><br />

<label for="lname">Last name:</label><br />

<input type="text" id="lname" name="lname" value="Doe" />

</form>

<br />

<form>

<label for="username">Username:</label

>

<input type="text" id="username" name="username" required />

</form>

<br />

<form>

<label for="fname">First name:</label><br />

<input type="text" id="fname" name="fname" size="50" /><br />

<label for="pin">PIN:</label><br />

<input type="text" id="pin" name="pin" size="4" />

</form>

<br />

<form>

<label for="fname">First name:</label><br />

<input type="text" id="fname" name="fname" value="John" /><br />

<label for="lname">Last name:</label><br />

<input type="text" id="lname" name="lname" value="Doe" />

</form>

</body>

</html>

4. Develop a web page using target attribute.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<h1>Target Attribute</h1>

<body>

<a href="https://jalatechnologies.com/" target="\_blank">Visit JALA TECH</a

>

</body>

</html>

5. Use I-frames and Marquee in your webpage.

<!DOCTYPE html>

<html>

<body>

<h1>iframe and marquee</h1>

<iframe src="https://jalatechnologies.com" title="A job for everyone"

>

</iframe>

<marquee>This is a basic marquee</marquee

>

</body>

</html>

Semantic Elements

1. Develop a web page with non-semantic elements <div> and <span>.

<!DOCTYPE html>

<html>

<head>

<title>Div tag</title>

<style>

div

{

colour: white;

background-colour: #009900;

margin: 2px;

font-size: 25px;

}

</style>

</head>

<body>

<div>div tag take the whole line</div>

<div>div tag take the whole line</div>

<div>div tag take the whole line</div>

<h2>This is span tag it won't take the whole line</h2>

<p>

<span style="background-colour: light green"> Lorem, ipsum. </span> Lorem

ipsum dolour sit amet consectetur adipisicing.<span style="colour: blue"

>

Lorem</span

>

LOrem ipsum <span style="background-colour: light blue">articles</span>

Lorem ipsum dolour, sit amet consectetur adipisicing.

</p>

</body>

</html>

1. Develop a web page with the semantic elements <form>, <table> and <article>.

<!DOCTYPE html>

<html>

<body>

<h1>Article and Table semantic elements</h1>

<article>

<h2>Lorem, ipsum dolour. </h2>

<p>

Lorem ipsum dolour sit amet consectetur adipisicing elit. Saepe explicabo

option labore quisquam numquam ipsam dignissimos incidunt quis.

</p>

</article>

<article>

<h2>Lorem, ipsum. </h2>

<p>

Lorem ipsum dolour sit amet consectetur adipisicing elit. Molestiae

voluptatibus enim cumque cum quae nihil, quis fuga itaque deserunt

exercitationem!

</p>

</article>

<article>

<h2>Lorem ipsum dolor sit amet.</h2>

<p>

Lorem ipsum dolour sit, amet consectetur adipisicing elit. Similique

accusamus deserunt aspernatur qui odit eaque velit perferendis!

</p>

</article>

<table>

<tr>

<th>Company</th>

<th>Contact</th>

<th>Country</th>

</tr>

<tr>

<td>Alfreds Futterkiste</td>

<td>Maria Anders</td>

<td>Germany</td>

</tr>

<tr>

<td>Centro commercial Moctezuma</td>

<td>Francisco Chang</td>

<td>Mexico</td>

</tr>

</table>

</body>

</html>

3. Use all the HTML5 tags and develop a web page article, aside, fig caption, figure, footer, header, hgroup, mark, nav, section, time.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<section>

<p>Top Stories</p>

<section>

<p>News</p>

<article>Story 1</article>

<article>Story 2</article>

<article>Story 3</article>

</section>

<section>

<p>Sport</p>

<article>Story 1</article>

<article>Story 2</article>

<article>Story 3</article>

</section>

</section>

<br />

<aside>

<p>

This is a sidebar, for example a terminology definition or a short

background to a historical figure.

</p>

</aside>

<figure>

<img

src="https://en.wikipedia.org/wiki/File:Shadow\_of\_Mordor\_cover\_art.jpg"

alt="Shadow of Mordor"

/>

<fig caption>Cover art for Middle earth: Shadow of Mordor</fig caption>

</figure>

<footer>&copy; Company A</footer>

<header>

<h1>Company A</h1>

<ul>

<li><a href="/home">Home</a></li>

<li><a href="/about">About</a></li>

<li><a href="/contact">Contact us</a></li>

</ul>

<form target="/search">

<input name="q" type="search" />

<input type="submit" />

</form>

</header>

<hgroup>

<h1>Heading 1</h1>

<h2>Subheading 1</h2>

<h2>Subheading 2</h2>

</hgroup>

<nav>

<ul>

<li><a href="/home">Home</a></li>

<li><a href="/about">About</a></li>

<li><a href="/contact">Contact us</a></li>

</ul>

</nav>

<time datetime="2017-10-31T11:21:00+02:00">Tuesday, 31 October 2017</time>

</body>

</html>

CSS Basics

1. Add CSS comments in your CSS block.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="basics.css" />

</head>

<body>

<h1>This is a heading</h1>

<p>This is a paragraph. </p>

</body>

</html>

2. Create a page with different background-colour of a page and set an image as the background-image of a page (image should not scroll with the rest of the page and specify the size of a background image)

Top of Form

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="basics.css" />

</head>

<body>

<h1>The background-image Property</h1>

</body>

</html>

3. Create a different page with the width, style and colour of the 4 border-style (set different borders on each side with different patterns).

<!DOCTYPE html>

<html>

<head>

<style>

h1 {

border-style: groove;

border-width: 7px;

border-color: blueviolet;

}

div {

border-style: groove;

border-width: 7px;

border-colour: greenyellow;

}

</style>

</head>

<body>

<h1>A Heading with a groove border</h1>

<div>A div element with a groove border. </div>

</body>

</html>

4. Develop a page and set the height:(in pixels and %) and width:(in pixels and %) on elements.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="basics.css" />

<style></style>

</head>

<body>

<h2>Successfully set the height and width of elements in px and %</h2>

<div>This div element has a height of 200px and a width of 50%. </div>

</body>

</html>

5. Develop a page with different font-styles, font-size, font-family, colours and text-align.

<style type=”text/css”>

. custom

{

font-family: Courier;

colour: red;

font-size: 20px;

}

</style>

CSS Page Adjustments

1. A page which specify a black border for table and if hover on it, page should change its colour.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<link rel="stylesheet" href="PA.css" />

<table>

<tr style="--rowCount: 0px">

<td>One</td>

<td>Two</td>

<td>Three</td>

</tr>

<tr style="--rowCount: -1px">

<td>One</td>

<td>Two</td>

<td>Three</td>

</tr>

<tr style="--rowCount: -2px">

<td>One</td>

<td>Two</td>

<td>Three</td>

</tr>

<tr style="--rowCount: -3px">

<td>One</td>

<td>Two</td>

<td>Three</td>

</tr>

</table>

</body>

</html>

2. Apply different visibility by an element (visibility: hidden, visible, collapse) and use different types of display for an element (display: none, inline, block, contents, list-item)

<!DOCTYPE html>

<html>

<head>

<style>

h2.a {

visibility: visible;

}

h2.b {

visibility: hidden;

}

tr.collapse {

visibility: collapse;

}

table,

td {

border: 1px solid black;

}

</style>

</head>

<body>

<h1>Applying different visibility options</h1>

<h2 class="a">This heading is visible</h2>

<h2 class="b">This heading is hidden</h2>

<p>hidden heading still takes up space on the page</p>

<table>

<tr>

<td>K</td>

<td>Rahul</td>

</tr>

<tr class="collapse">

<td>Rahul</td>

<td>K</td>

</tr>

</table>

</body>

</html>

3. A long page which should have two links "click to go to bottom of page" and "click to go to top of page”. Also set their scroll-behaviour to scroll smoothly.

<!DOCTYPE html>

<html id="top">

<body>

<div id="page-wrap">

<h1 id="top">Smooth Page Scrolling</h1>

<ul>

<li><a href="#three">Scroll to Bottom</a></li>

</ul>

<h2 id="one">Section One</h2>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<h2 id="two">Section Two</h2>

<p>

quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu

libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper

pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare

sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros

ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in

turpis pulvinar facilisis. Ut felis. Praesent dapibus, neque id cursus

faucibus, tortor neque egestas augue, eu vulputate magna eros eu erat.

Aliquam erat volutpat. Nam dui mi, tincidunt quis, accumsan porttitor,

facilisis luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<h2 id="three">Section Three</h2>

<p>

quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu

libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper

pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare

sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros

ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in

turpis pulvinar facilisis. Ut felis. Praesent dapibus, neque id cursus

faucibus, tortor neque egestas augue, eu vulputate magna eros eu erat.

Aliquam erat volutpat. Nam dui mi, tincidunt quis, accumsan porttitor,

facilisis luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<p>

quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu

libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper

pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare

sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros

ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in

turpis pulvinar facilisis. Ut felis. Praesent dapibus, neque id cursus

faucibus, tortor neque egestas augue, eu vulputate magna eros eu erat.

Aliquam erat volutpat. Nam dui mi, tincidunt quis, accumsan porttitor,

facilisis luctus, metus

</p>

<p>

Pellentesque habitant morbi tristique senectus et netus et malesuada

fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae,

ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam

egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend

leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum

erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean

fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci,

sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar

facilisis. Ut felis. Praesent dapibus, neque id cursus faucibus, tortor

neque egestas augue, eu vulputate magna eros eu erat. Aliquam erat

volutpat. Nam dui mi, tincidunt quis, accumsan porttitor, facilisis

luctus, metus

</p>

<p><a href="#top">Go To Top</a></p>

</div>

</body>

</html>

1. Add padding and margin with different size and understand the difference between them.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<link rel="stylesheet" href="PA.css" />

<body>

<div id="div-0">content (padding: 20px) </div>

<br />

<div id="div-1">content (padding-top: 20px) </div>

<br />

<div class="container">

<div class="child" id="div-2"> (margin: 20px 40px 60px;)</div>

</div>

<br />

<div class="container">

<div class="child" id="div-3">(margin:)</div>

</div>

<br />

</body>

</html>

5. A page with multiple background images for a webpage or element and define their adjustable sizes.

<!DOCTYPE html>

<html>

<head>

<style>

#example1

{

background-image: url(http://static.demilked.com/wp-content/uploads/2018/03/5aaa1cb8ecce7-funny-weird-wtf-stock-photos-54-5a3bb0a19c729\_\_700.jpg),

url(https://www.pngkit.com/png/detail/174-1747550\_rainbow-light-png-grass.png);

background-position: right bottom, left top;

background-size: 300px 500px;

background-repeat: no-repeat, repeat;

padding: 250px;

}

</style>

</head>

<body>

<h1>Multiple Image Backgrounds with different sizes</h1>

<div id="example1">

<h1>Lorem Ipsum Dolour</h1>

<p>

Lorem ipsum dolour sit amet, consectetuer adipiscing elit, sed diam

nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat

volutpat.

</p>

<p>

Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper

suscipit lobortis nisl ut aliquip ex ea commodo consequat.

</p>

</div>

</body>

</html>

CSS Effects

1. Apply CSS shadow effects like for image box and hover a cursor.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="effects.css" />

</head>

<body>

<div class="pic"></div>

<p style="font-size: 500%">

When hovering the picture's opacity changes and a neon green shadow is

added

</p>

</body>

</html>

2. Use CSS animations (name, duration, iteration-count & delay) and paginations (Hover able, with and without spaces).

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<link rel="stylesheet" href="effects.css" />

<div class="box"></div>

<br />

<h2>Animations and Paginations</h2>

<p>Hovering over numbers changes the colour</p>

<div class="pagination">

<a href="#">&laquo;</a>

<a href="#">1</a>

<a class="active" href="#">2</a>

<a href="#">3</a>

<a href="#">4</a>

<a href="#">5</a>

<a href="#">6</a>

<a href="#">&raquo;</a>

</div>

</body>

</html>

3. Add positions to CSS block (static, relative, fixed, absolute and sticky).

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="effects.css" />

</head>

<body>

<h2>Static</h2>

<p>

An element with position: static; is not positioned in any special way; it

is always positioned according to the normal flow of the page:

</p>

<div class="static">This div element has position: static;</div>

<h2>Relative</h2>

<p>

An element with position: relative; is positioned relative to its normal

position:

</p>

<div class="relative">This div element has position: relative;</div>

<h2>Fixed</h2>

<p>

An element with position: fixed; is positioned relative to the viewport,

which means it always stays in the same place even if the page is

scrolled:

</p>

<div class="fixed">Fixed</div>

<h2>Absolute;</h2>

<p>

An element with position: absolute; is positioned relative to the nearest

positioned ancestor (instead of positioned relative to the viewport, like

fixed):

</p>

<div class="relative">

This div element has position: relative;

<div class="absolute">This div element has position: absolute;</div>

</div>

<p>

Try to <b>scroll</b> inside this frame to understand how sticky

positioning works.

</p>

<div class="sticky">Sticky</div>

<div style="padding-bottom: 2000px">

<p>

In this example, the sticky element sticks to the top of the page (top:

0), when you reach its scroll position.

</p>

<p>Scroll back up to remove the stickiness. </p>

<p>

Some text to enable scrolling... Lorem ipsum dolour sit amet, illum

definitiones no quo, maluisset concludaturque et eum, altera fabulas ut

quo. Atqui causae gloriatur ius te, id agam omnis evertitur eum. Affert

laboramus repudiandae nec et. Inciderint efficiantur his ad. Eum no

molestiae voluptatibus.

</p>

<p>

Some text to enable scrolling... Lorem ipsum dolour sit amet, illum

definitiones no quo, maluisset concludaturque et eum, altera fabulas ut

quo. Atqui causae gloriatur ius te, id agam omnis evertitur eum. Affert

laboramus repudiandae nec et. Inciderint efficiantur his ad. Eum no

molestiae voluptatibus.

</p>

</div>

</body>

</html>

4. Handling Overflow using scroll.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="effects.css" />

</head>

<body>

<h1>Handling overflow property by using scroll</h1>

<div id="myDIV">

<div class="ex1">

Lorem ipsum dolour sit amet, consectetuer adipiscing elit, sed diam

nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat

volutpat.

</div>

</div>

</body>

</html>

5. Adding Opacity to an image.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="effects.css" />

</head>

<body>

<h1>Adding Opacity to Images</h1>

<p>Hover over the image to make it less opaque</p>

<img

src="https://images.all-free-download.com/images/graphiclarge/cat\_cat\_face\_cats\_eyes\_240527.jpg"

alt="cat1"

width="170"

height="100"

/>

<img

src="https://developer.ridgerun.com/wiki/images/8/80/Egyptian\_cat.jpg"

alt="cats2"

width="170"

height="100"

/>

<img

src="https://cdn.pixabay.com/photo/2015/11/16/22/14/cat-1046544\_\_340.jpg"

alt="cats3"

width="170"

height="100"

/>

</body>

</html>

CSS Compatibility

1. Create a table and apply table-layout as fixed and none.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="compatibility.css" />

</head>

<body>

<h1>table-layout as fixed and none</h1>

<h2>table-layout: fixed; width: 180px:</h2>

<table class="b">

<tr>

<th>Lorem, ipsum. </th>

<th>Lorem, ipsum. </th>

<th>Lorem, ipsum. </th>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

</table>

<h2>table-layout: auto; width: 100%:</h2>

<table class="c">

<tr>

<th>Lorem, ipsum. </th>

<th>Lorem, ipsum. </th>

<th>Lorem, ipsum. </th>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

<tr>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

<td>Lorem, ipsum dolour. </td>

</tr>

</table>

</body>

</html>

2. Create a list and change its list-style-type.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="compatibility.css" />

</head>

<body>

<h1>The list-style-type: ordered and unordered</h1>

<p>unordered lists:</p>

<ul class="a">

<li>Coffee</li>

<li>Tea</li>

<li>Coca Cola</li>

</ul>

<ul class="b">

<li>Coffee</li>

<li>Tea</li>

<li>Coca Cola</li>

</ul>

<p>ordered lists:</p>

<ol class="c">

<li>Coffee</li>

<li>Tea</li>

<li>Coca Cola</li>

</ol>

<ol class="d">

<li>Coffee</li>

<li>Tea</li>

<li>Coca Cola</li>

</ol>

</body>

</html>

3. Create a grid with of different types.

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="compatibility.css" />

</head>

<body>

<h1>Grid types</h1>

<div class="grid-container">

<div class="grid-item">1</div>

<div class="grid-item">2</div>

<div class="grid-item">3</div>

<div class="grid-item">4</div>

<div class="grid-item">5</div>

<div class="grid-item">6</div>

<div class="grid-item">7</div>

<div class="grid-item">8</div>

<div class="grid-item">9</div>

</div>

</body>

</html>

4. Create a hero image.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8" />

<meta http-equiv="X-UA-Compatible" content="IE=edge" />

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<title>Document</title>

</head>

<body>

<link rel="stylesheet" href="compatibility.css" />

<div class="hero-image">

<div class="hero-text">

<h1>ASTON MARTIN</h1>

<p>F1 RACING TEAM</p>

</div>

</div>

</body>

</html>

5. Write a program of viewport for grid, media queries, image, and video.

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1.0" />

<link rel="stylesheet" href="compatibility.css" />

</head>

<body>

<div class="header">

*<! --this is header part of the page-->*

<h1>JALA TECH</h1>

</div>

<div class="row">

<div class="col-3 menu">

<ul>

<li>JAVA</li>

*<! --there are links to other pages-->*

<li>JAVASCRIPT</li>

<li>SQL</li>

<li>FRONT END</li>

</ul>

</div>

<div class="col-6">

<h1>About</h1>

<p>

Lorem ipsum dolour sit, amet consectetur adipisicing elit. Repellat eum

porro sint blanditiis nulla vero repellendus quaerat possimus

voluptate, quo itaque maiores ut in ipsa corrupti nobis amet ex cum

optio odit. Magnam expedita cum deserunt quos tenetur autem dolorum!

</p>

<img

src="https://thumbs.dreamstime.com/b/high-tech-technology-geometric-connection-system-background-digital-data-abstract-161592936.jpg"

width="460"

height="345"

/>*<! --this is the image source part-->*

</div>

<video width="400" controls>

<source

src="https://www.w3schools.com/css/mov\_bbb.mp4"

type="video/mp4"

/>

<source src="mov\_bbb.ogg" type="video/ogg" />

Your browser does not support HTML5 video. </video

>*<! --this is the video source part -->*

<div class="col-3 right">

<div class="aside">

<h2>UNLIMITED OPPORTUNITIES TO BUILD A RIGHT CAREER</h2>

<p>

We just don't focus to land you a job but strive to offer a

sustainable career.

</p>

<h2>FOR ALL EXPERIENCE PEOPLE</h2>

<p>

Yes, we help workers of all ages get a better-paying jobs, even if

they don't have higher education.

</p>

<h2>LIVING WITH A LACK OF JOB SECURITY? </h2>

<p>

Don't worry, in fact, this is an opportunity for you to see your

real potential.

</p>

</div>

</div>

</div>

<div class="footer">

*<! --this is displayed at the bottom -->*

<p>

Resize the browser window to see how the content respond to the

resizing.

</p>

</div>

</body>

</html>

|  |
| --- |
|  |