14/09/2020

TASK

JAVASCRIPT CONCEPTS

While Loop:

- The while loop, loops through a block of code as long as a specified condition is true.
- The loop in this example uses a while loop to collect the car names from the cars array:

```
<!DOCTYPE html>

<html>

<body>

<script>

var cars = ["Audi", "Benz", "Alpha", "Ferrari"];

var i = 0;

var text = "";

while (cars[i]) {

  text += cars[i] + "<br>";

  i++;

}

document.write(text);
```

```
</script>
</body>
</html>
```

For loop:

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript For Loop</h2>
<script>
var cars = ["Audi", "Ferrari", "Suzuki", "Ford"];
var i, len, text;
for (i = 0, len = cars.length, text = ""; i < len; i++) {
  text += cars[i] + "<br>";
}
document.write(text);
</script>
</body>
</html>
```

For/in loop:

- The for/in statement loops through the properties of an object.

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript For/In Loop</h2>
<script>
var txt = "";
var person = {fname:"Sandeep", lname:"M", age:22};
var x;
for (x in person) {
  txt += person[x] + " ";
}
document.write(txt);
</script>
</body>
</html>
```

For/Of Loop

- The JavaScript for/of statement loops through the values of an iterable objects.

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript For/Of Loop</h2>
<script>
var cars = ['audi', 'ferrari', 'Mcclaren'];
var x;
for (x of cars) {
  document.write(x + "<br>");
}
</script>
</body>
</html>
```

The Do/While Loop:

- The do/while loop is a variant of the while loop. This loop will execute the code block once, before checking if the condition is true, then it will repeat the loop as long as the condition is true.

```
<!DOCTYPE html>

<html>
```

```
<body>
<h2>JavaScript Do/While Loop</h2>
<script>
var text = ""
var i = 0;
do {
  text += "<br>The number is " + i;
  i++;
}
while (i < 10);
document.write(text);
</script>
</body>
</html>
```

Switch case using built in functions

```
<!DOCTYPE html>
```

```
<html>

<body>

 <script>                    //getDate() will Get the day as a
number (1-31)

  var daysname = new Date().getDate() //getDay() will Get the weekday
as a number (0-6)

switch (daysname) {

  case 0:

    day = "Sunday";

    break;

  case 1:

    day = "Monday";

    break;

  case 2:

    day = "Tuesday";

    break;
```

```
  case 3:
    day = "Wednesday";
    break;
  case 4:
    day = "Thursday";
    break;
  case 5:
    day = "Friday";
    break;
  case 6:
    day = "Saturday";
}
document.write("Today  is "+ daysname);
    </script>
</body>
</html>
```

Switch statement using user defined functions:

```
<!DOCTYPE html>

<html>

<body>

<input type="text" name="text1" id="text1" />

<input type="button" value="Click me"
onclick="days(parseInt(document.getElementById('text1').value));" />

<script>

function days(dayOfTheWeek)        //switch case statements using user
defined funnctions

{

                    //The parseInt() function is used to accept the string and
convert it into an integer.

switch (dayOfTheWeek) {

case 4:

   alert("Its Monday");

      break;

case 5:

      alert("Its Tuesday");

   break;


case 6:
```

```
        alert("Its Wednesday");
    break;

case 7:
        alert("Its Thursday");
    break;

case 8:
        alert("Its Friday");
    break;

case 9:
        alert("Its Saturday");
    break;

case 10:
        alert("Its Sunday");
    break;

default:
        alert("Not a valid day");
```

```
  break;
}
}
</script>
</body>
</html>
```

JavaScript Classes:

- In JavaScript, a class is a kind of function.
- We use the keyword class, and the properties are assigned inside a constructor() method.
- Class is a blueprint from which objects are created.

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Class</h2>
<script>
class Car {
  constructor(brand) {
```

```
        this.carname = brand;
      }
    }
mycar = new Car("audi");
document.write( mycar.carname);
</script>
</body>
</html>
```

JavaScript Objects and this keyword

```
<!DOCTYPE html>
<html>
<body>

<h2>The JavaScript this Keyword</h2>
<script>
// Create an object:
var  person = {
  firstName: "Sandeep",
  lastName : "M",
```

```
//Methods  are functions stored as object properties
  fullName : function() {
    return this.firstName + " " + this.lastName;
  }
};          // The JavaScript this keyword refers to the object it belongs to
            // Display data from the object:
document.write(person.fullName());
</script>
</body>
</html>
```

JavaScript Strings and its methods:

- JavaScript strings are used for storing and manipulating text.

1.Finding string length

```
<!DOCTYPE html>
<html>
<body>

<h2>JavaScript String Properties</h2>

<script>
var txt = "Sandeep";
var result = txt.length;
```

```
document.write(result);
</script>

</body>
</html>
```

2. Finding a String in a String using IndexOf( ) and lastIndexOf( )

- The indexOf( ) method returns the position of the first occurrence of a specified text.
- The lastIndexOf( ) method returns the position of the last occurrence of a specified text.

```
<!DOCTYPE html>

<html>

<body>

<h2>JavaScript String Methods</h2>

<script>

var str = "Where we have to locate";

var pos = str.lastIndexOf("locate");

document.write(pos);

</script>

</body>

</html>
```

3.Searching for a String in a String

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript String Methods</h2>
<script>
var str = "Please locate where 'locate' occurs!";
var pos = str.search("locate");
document.write(pos);
</script>
</body>
</html>
```

difference between indexof() and search()

- The search() method cannot take a second start position argument.
- The indexOf() method cannot take powerful search values.

4. The slice( ) Method:

- The method takes 2 parameters: the start position, and the end position

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript String Methods</h2>
<script>
var str = "Apple, Banana, Kiwi";
var res = str.slice(7,13);
document.write(res);
</script>
</body>
</html>
```

5.The substr() Method

- Substr() is similar to slice().
- The difference is that the second parameter specifies the length of the extracted part.

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript String Methods</h2>
```

```
<script>

var str = "Apple, Banana, Kiwi";

var res = str.substr(7,6);

document.write(res);

</script>

</body>

</html>
```

6. Replacing String

- The replace() method replace s a specified value with another value in a string

```
<!DOCTYPE html>

<html>

<body>

<h2>JavaScript String Methods</h2>

<script>

  var str = "Sandeep";

  var txt = str.replace("Sandeep","Swengsolutions");

  document.write(txt);

</script>
```

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