Different between EM & REM

EM	REM
Is Relative to the parent element's	Is Relative to the root (HTML) font
font size, so If You wish to scale	size, so if you wish to scale the
the element's size based on Its	element's size based on Its root
parent's size use EM	size, no matter what is the parent
	size is use use REM

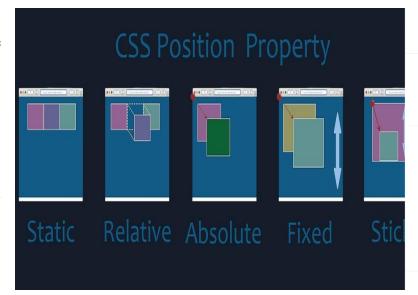
CSS position

position property specifies the type of positioning method used for an element.

STATIC: By default, HTML elements are static in position. The top, bottom, left, and right properties have no effect on static positioned elements.

RELATIVE: When an element is position relative, it stays in the flow of the document, and you can move it horizontally and vertically relative to its normal position.

Other content will not be adjusted to fit into any gap left by the element.



ABSOLUTE: This element will also be taken out of the normal flow, similar to fixed but it is affected by scroll, and you can have it be relative to the parent, unlike fixed which is relative to the document.

FIXED - This element will be taken out of the normal flow, and will be placed relative to the document and will not be affected by scrolling.

STICKY: This one behaves like relative until you scroll to a certain point and it will behave like a fixed position element.

FOR VS WHILE LOOP

FOR	WHILE
A for loop repeats until a	A while statement executes its statements as
specified condition evaluates too	long as a specified condition evaluates to true.
false.	
	while loop defined when the number of
For loop defined when the	iterative isn't know.
number of iterative is known.	
	If the condition becomes false, statement within
Absence of Condition: Goes into	the loop stops executing and control.
interaction mode for infinite	
repetitions	Absence of condition displays error.
Condition: Relational expression	Condition: An expression or non-zero value

OBJECT METHODS

The Object type represents one of data types of JavaScript. It is used to store various keyed collections and more complex entities.

- > If the value is null or undefined, it will create and return an empty object.
- > If the value is an object already, it will return the value.

STATIC METHODS

- **Object. assign()** Copies the values of all enumerable own properties from one or more source objects to a target object.
- **Object. create** () Creates a new object with the specified prototype object and properties.
- **Object.defineProperty**() Adds the named property described by a given descriptor to an object.
- **Object.defineProperties**() Adds the named properties described by the given descriptors to an object.
- *Object. entries* () Returns an array containing all of the [key, value] pairs of a given object's own enumerable string properties.
- **Object.keys**() Returns an array containing the names of all of the given object's own enumerable string properties.
- **Object.values()** Returns an array containing the values that correspond to all of a given object's own enumerable string properties.

- **Object.freeze**() Freezes an object. Other code cannot delete or change its properties.
- **Object.seal**() Prevents other code from deleting properties of an object.

OBJECT MAP

- **Sets** the value for a key in a Map.
- Gets the value for a key in a Map.
- **entries** () Returns an iterator object with the [key, value] pairs in a Map.
- **Keys** Returns an iterator object with the keys in a Map.
- Values Returns an iterator object of the values in a Map.

REGULAR VS ARROW FUNCTION JS

ARROW FUNCTION	REGULAR FUNCTION
Arrow functions don't have	The function keyword can be used to
their own bindings	define a function inside an expression.
to this, arguments and	
shouldn't be used as methods.	Function must have a return statement that
	specifies the value to return. A function
Arrow functions don't have	without a return statement will return a
access to	default value.
the new.target keyword, aren't	In the case of a constructor called with
suitable for call methods	the new keyword, the default value is the
	value of its this parameter. For all other
Arrow functions cannot be	functions, the default return value
used as constructors and yield,	is undefined.
within its body.	One of the benefits of creating a named
The main benefit is that it	function expression is that in case we
removes the several pain	encountered an error, the stack trace will
points associated with	contain the name of the function, making it
the this operator.	easier to find the origin of the error.

OBJECT VS INSTANCE OOP

OBJECT OOP

Object: means when memory location is associated with the object (is a run-time entity of the class) by using the new operator.

Once using new class, that instantiated thing becomes an object. An object is something that can adhere to encapsulation, polymorphism, abstraction principles of OOP and the real thing a program interacts with to consume the instance members defined in class. Object contains instance members (non-static members).

INSTANCE OOP

On its own, a class doesn't do anything: it's a kind of template for creating concrete objects of that type. Each concrete professor we create is called an instance of. the (CLASSNAME). The process of creating an instance is performed by a special function called a constructor. We pass values to the constructor for any internal state that we want to initialize in the new instance.

Instance refers to a unique copy of the object (same structure, different data). An instance is a specific representation of an object. An object is a generic thing while an instance is a single object that has been created in memory. Usually, an instance will have values assigned to its properties that differentiates it from other instances of the type of object.