

Em vs Rem

EM is relative to the parent element's font size, so if you wish to scale the element's size based on its parent's size.

REM is relative to the root (HTML) font size, so if you wish to scale the element's size based on the root size, no matter what the parent size is.

CSS Position

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

Position different values:

- Static
- Relative
- Fixed
- Absolute
- Sticky

Position: static:

Static positioned elements are not affected by the top, bottom, left and right properties. It is always positioned according to the flow of the page

Position: relative:

Is positioned relative to its normal position. Setting the top, right, bottom and left properties of a relatively positioned element will cause it to adjust away from its normal position.

Position: Fixed:

Is positioned relative to the viewport, the element stays in the same place even if the page is scrolled. The top, right, bottom and left properties are used.

Position: Absolute:

Is positioned relative to the nearest positioned ancestor. It uses document body, and moves along with page scrolling.

Position: Sticky:

Is positioned based on the user's scroll position. Element toggles between relative and fixed, depending on the scroll position. It is positioned relative until a given offset position.

For vs While loop

For loop:

Format:

```
For (initialize; condition; iteration) {  
  
}  

```

Use:

For loops are used when we knew number of iterations

Condition:

If there is no condition it will become an infinity loop

While loop:

Format:

```
Initialize;  
While(condition) {  
  
Iteration;  

```

}

Use:

while loops are used when the number of iterations is not exactly known

Condition:

If the condition is not put up in 'while' loop it provides compilation error.

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. Else 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.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 vs Instance

Object:

Objects are the results of instantiating a class. Instantiation is the process of taking the blueprint and defining each attribute and behavior so that the resultant object represents a real-life object. Object is created with the use of new operator

Instance:

a memory block, which contains the reference to an object. the name of the instance can be used to access the start of the object memory area.

Regular vs Arrow function js

1. Syntax:

One very basic difference is that the Regular Functions uses function keyword but Arrow Functions don't inspite it uses arrow symbol (=>).

2. this keyword:

Regular function has its their own this context.

Arrow function don't have their own. Inside an Arrow function this value hold the this value of outer function.

3. Using new keyword:

Regular functions are constructible and callable. As it are constructible, they can be called using the 'new' keyword.

Arrow functions are only callable and not constructible.

4. Implicit return:

Regular functions return expression statement is used to return the result from the function. It return statement is not available inside the function then undefined is returned from the function.

Arrow functions there is one exception where return is not mandatory to return result from the functions.