

OOPs concept : Object Oriented Programming

Object : object is any real world entity.

Property or state ---→ have → pid, pname, age, phonenumber etc.

Person

Behaviour -→ do/does -→ action -→ teaching(), listening(), sleeping() etc

Bank

Manager

Car

Customer

Object is a concept etc.

function or class

class : blue print of object or template of object or user defined data type which help to create the object.

In JavaScript till ES5 to create user defined object we are/were using function.

Function style object creation.

From ES6 onward we are using class concept to create the object.

Class style object creation.

In JavaScript object are divided into 2 types.

Pre defined object

JavaScript provided two pre defined object hierarchy.

BOM : Browser Object Model

DOM : Document Object Model

Object → property or state or variable

Behaviour or function

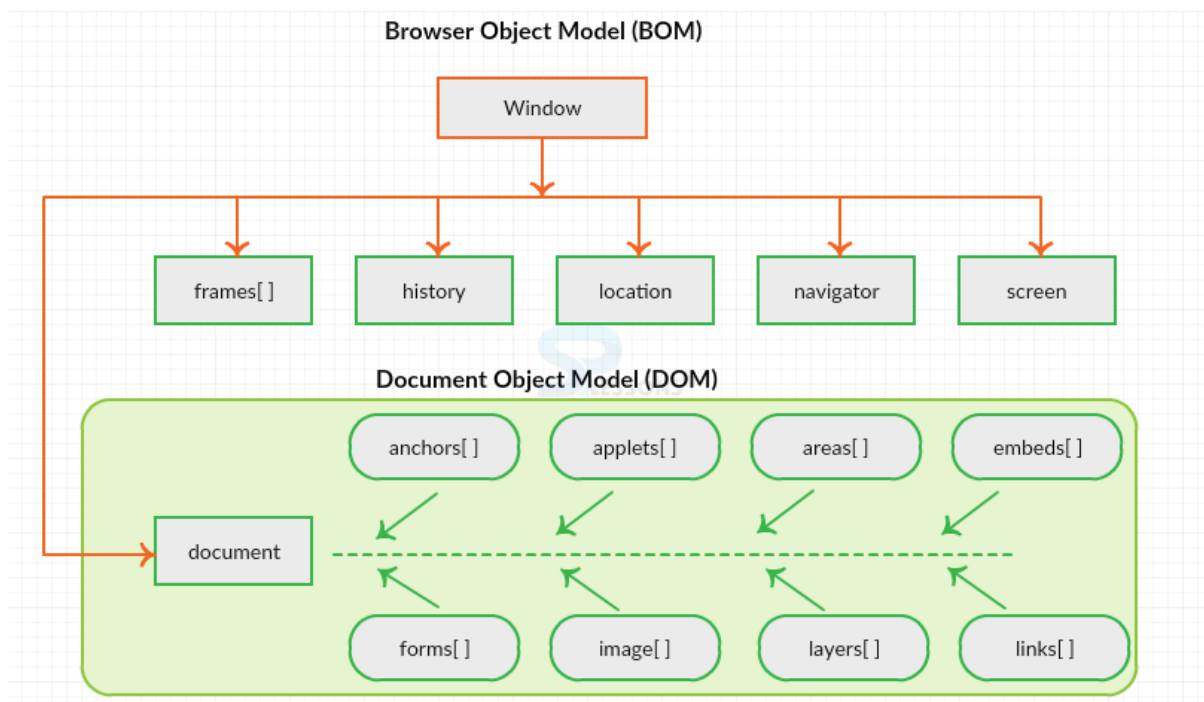
Object -----> Property

Behaviour

Object -----> property

Behaviour

Object



```
document.write("Welcome");
```

document is a pre defined object and write a d pre defined object.

`objectname.functionName();`

to access that function()

`objectname.propertyname`

to access the property value

index.html once we run any web page in browser
internally it will create DOM Hierarchy.

Html		
Head	body	
Title	div	Welcome
Style	p	
Script		
Meta		

DOM Parser : lot of programming language like Java, python, C++ or JavaScript provided

Function or methods which help to read, write and update html contents or dom contents dynamically.

1st Number	<input type="text"/>		
2nd Number	<input type="text"/>		
Result			
<input type="button" value="Add"/>	<input type="button" value="Sub"/>	<input type="button" value="Mul"/>	<input type="button" value="Div"/>

User defined object

Synchronization

ASynchronization

Statement Level Synch one by one.

```
document.write("1st Statement");  
document.write("2nd Statement");  
document.write("3rd Statement");
```

Statement Level ASynch

```
document.write("1st Statement");                      sync  
    document.write("2nd Statement");                      ASynch  
    document.write("3rd Statement");                      Asyncn  
if statement is asynch that statement execute independently
```

Function level synch

```
fun1()  
fun2()  
fun3();
```

Function level asynch

```
fun1()  
    fun2() asyn  
fun3();
```

Client and Server Communication level

Sych

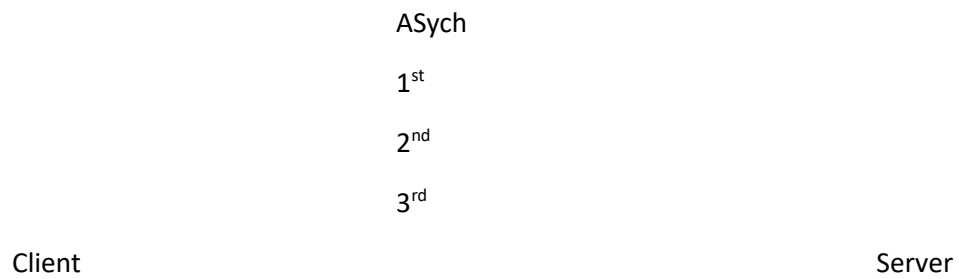
1st

2nd

3rd

Client

Server



AJAX :

Asynchronous JavaScript and XML

In JavaScript if we want to create custom asynchronous operation we can use 3 pre defined functions
le

`setTimeout` : it will execute only one after specific time.

`setInterval()` : it will execute again and again after specific time.

`clearInterval()`