-All external type of js are like angularjs, jquery.

-We bind the funtions to the buttons or anything.

\*Framework = combination of libraries in a structured manner (ex: maruti). Structured manner. Jquery.

Library = random functions but not in a manner.

HTML 5 is partial dynamic. = New tags + JS Api.

ES 5 (oojs)

1. Object classes
2. Constructor
3. Properties and Methods
4. Prototype
5. Inheritance
6. Abstraction
7. Encaptulation
8. Static
9. Namespace

Object oriented

-Scalability, Usefullness, Reusability, Performance

We can write the code in JS in both of the ways . Traditional and Object Oriented but the common lib is used for both the implementations.

In JS functions and class has defined in the same way but we need to follow the conventions to get defined the class with capital letter nd functions wth small letters . (Its mandatory)

\*IN js class a classname works itself as a constructor. SO no neeed to define any explicit constructor in JS.

In a javascript only a single constructor is possible . Either a default or parametrised.

3 types of properties

Private, = var

Public,= this

Priviledged poperties =no words.

There are 3 types of methods  
1. Private Methods  
2. Public methods  
3. Previledged methods

Previledge methods/functions in js if we want to expose the private functions outside the scope of the class. Then we need to define it as previdledge (Just as friend function in C)

Previledge method is itself a public method used in exposing the private stuff accessible outside the scope of the class.

STICK TO THE BASICS

**Prototype** is a special keyword in JS which are used in creating the extension of the class.  
These keywords are based on open close principle. Open(for extensions), Closed (Modifications).

Prototype wrappers are being used now a days.

Default scope of this prototype is public.

Syntax : ClassName.prototype.property = 100;  
ClassName.prototype.nameOfMethod= function() {

};

**Variables are of two types**

**-instance vars : called by objects  
-class static vars : called by class names. No need to create object.**

**Static vars**

**ClassName.varName =1000;  
ClassName.method = function(){**

**}**

**In** JS only and only single level of inheritance is possible. We can create the chaining between the objects. **We can achive the**

**9821443374**

**Refer : MDN Site**

**OOJS CALC  
-basicCal  
\_ScintificCal**

**Use all OOJS features (prototype,Static, all modifiers etc )**

**#Namespace is a global object which is representing a js library. Used to migrate the traditional JS lib with Object Oriented JS.**

**Var myapp = {**

**calcVat: function (base) {**

**return base \*1.21 ;**

**},**

**If var is inside class its private. But if added outside class it’s a global variable.**

**HTML 5 = new tags + JS API**

More Readable.  
Less loc .  
Fast.   
Most of the responsibility has shifted to container side . (Container is web browser )  
Support by most browsers . For rapid and hybrid development.

bdi tag – change of language (inter nationalisation)

Mp4, webM, ogg (only these 3 file typs are supported)

->Js API (performance related)

1. Canvas API : It is a html5 api which is used In drawing the graphics and text. This graphics are generated dynamically by the code. In canvas we can design the various transformations like 2d and 3d using the context object. We can esign the canvas using the canvas tag and JS code.  
  
**General Selector on UI**

Selectors are used in doing the manipulations on html.

. => Class  
# => ID  
[ ] => attribute  
<> => Represent element

**2. Geolocation :**

**The geolocation api is used to get the geographical location of the object. This api are using the implicit object navigator to navigate the position of the object. There are various implicit properties used to over the map to identify the position of the respective object like latitude, longitude .  
Using the geolocation api its used to get the current position method to get the user position.**

**3. App cache**

**The app cache features are used to get achieve the offline browsing in browser.   
It speeds up the cached resources to render the resources faster.   
It reduces the server load.**

**How to achieve this in HTML5 ?**

**To activate the app cache we need to create the manifest file with the extension of file.appcache**

**Refer the file in the html tag with manifest attribute.  
In this appcache there are three imp sections.   
1. Cache manifest ;> We need to put all the resources in this section which needs to be cached.  
2. Network Section :> We need to mention all the resources which needs to connect with server and will never cached.   
3.Fallback :> If a page is not accessible whatever you will show just put here.**

**4. SSE  
5. Web Worker**

**CSS3**

**CSS2 + 30% new features (new rules + new psedo classes)**

1. **Selectors**
2. **. class, #id , [] attribute, <> element**

**When we apply all selectors in the individual the preference order is.**

**# . <> 270377**

**P>i**

**{**

**Box model:  
The css box model is essentially a box that wraps around html element.  
It helps to us to define the space between the border padding margin over the browser.**

**4 imp properties  
Border,padding,margin and actual contents.**

**Pseudo classes are used as an additional feature or advance selector in css3.  
Syntax**

**Selector : pseudo-class {property:value};  
these selectors are helping in deep level DOM manipulations over the html content. They are**

**Section 2:  
In CSS 3 Various new properties are introduced:  
  
Border-shadow  
border-radius  
2D rotate  
2D Skew**

**Some new @Rule in CSS3**

1. **@Key**frame - Animation
2. @media – For responsiveness
3. @import- One CSS to another
4. @fontface- Font dependency resolution