APTITUDE

Topics covered ….

🡪water tank questions (input pipes and out going pipe connected to tank and input pipes fills tank in 6 hrs and out pipes takes time empty a tank 8hrs and if both pipes are left open and takes 24hrs to fill the tank and find out no of input pipes)

🡪calendar questions

🡪some mathematical questions

🡪 all blues are green and some blues are white and select the below options to which is not clear

🡪80 coins are there and 1 coin is defect, and find out the defect coin from grp in minimum ways

🡪Based some mathematical equations

🡪Train questions

🡪Aged questions

**UI TECHNICAL**

1. What is the use of doctype indication in HTML page
2. What are the Different documents modes of browsers?

Standard mode and quirks (strange behavior and browser will not behave properly with HTML pages)

In these two modes handling of CSS is different

🡪**Quircks mode**(in this mode the web page will behave in nonstandard mode & improper behavior of pages.

🡪**STANDARD MODE**(in this mode pages behave as per the CSS and HTML standards defined in the HTML pages)

3)Positioning Elements in CSS and please brief it and explain with an examples

(static,fixed,absolute and relative);

🡪if parents has relative position then the its child has absolute element wont move outside from its parent)

4)Please list out the browser compatibility issues with non-w3c and w3c browsers

Non-W3C’ browsers🡪Internet Explore

W3C 🡪Google Chrome, Fire Fox , Safari and Opera

5)Explain the inline level and block level elements with and example

6)how to convert inline elements to block elements and vice versa

7)Define basic HTML structure

<!docutype html>

<html>

<head>

<meta name=**’description’** content=’give proper page description of the page for SEO’/>

<meta name=**’keywords’** content=’give the keywords of the page (suppose page is related to some description about book so use its category like criminal, adventure or fiction and new book or old book’) />

<meta name=**’author’** content=’write page author name’ />

<meta **charset**=’UTF-8’ />

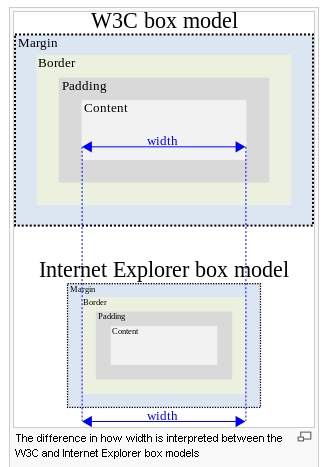
{this charset attribute is for encoding and HTML document}

</head>

</html>

8) What is DOM structure

**10)BOX MODAL CPBM(Content , Padding, Border and Margin)**



IE(content +padding+border ) == Chrome(Content)

9)What are the basic steps to increase the performance of websites

🡪proper way of coding

🡪use minimal numbers of HTTP request

🡪use CSS or Image spriting

🡪use smush image concept(reducing the property of images and keeping same resolutions)

🡪reuse the component

🡪proper usage of AJAX

🡪use CSS or CSS3 instead of images animations,do it in CSS3

🡪User proper template engines

🡪Proper inclusion of scripts in the page (include the scripts in head if which is helps in while constructing of DOM otherwise use before body tags)

10)How to access change the property(attributes) of HTML components in JS

11)What is difference between Window onload and body onload function

Window.onload🡪DOM is not yes ready,used pre settings for the pages

Body.onload🡪here is DOM is ready and u can play with those and attach any events

12)What are the different CSS selectors in JQ a

🡪id,classname,tag name and merge among all of those

13)What is JQ

14)What are the data types is JS

🡪numbers, strings ,array ,Boolean ,undefined

15)List out the basic strings built in methods of string

🡪convert to upper case,concatenate,toString,split(),toLower() and etc

16)How to convert int to string and vice a versa

Var xInt = parseInt(string)

Var xStr = int.toString();

15)What is AJAX and what are the status of AJAX

16)What are the advantage and disadvantage of AJAX

17)Difference between bind, live and on method in JQ

Bind method🡪

🡪bind method will attach event directly to HTML DOM$( "#members li a" ) structure.

And click method is shorthand operator for the bind method

🡪This method will attach the events to entire document and not for particular elements so this is very expensive and please avoid use of this method

🡪it doesn’t work for the elements which is created dynamically with same DOM str

🡪this method works fine with various browsers

🡪has some performance issues

Live method🡪

🡪this method will attach the event to its root level document along with associated selector

🡪Impact on performance because it will attaches to the root level

🡪It attaches the event handler once the document is ready

🡪It works for dynamic elements

On method🡪

🡪This method works for the elements which creates dynamically

🡪This will attach to the particular element hence it will not impact on performance

18)Differencr btw in Asynchronous and synchronous call in AJAX

🡪set asynch flag ==false if you need synchronous AJAX call

19) **Chaining in JQ**

🡪Chaining allows us to run multiple JQ methods (on the same elements) within a single statement.

$("#p1").css("color","red").slideUp(2000).slideDown(2000);

$(“#div1”).addClass(‘newClass’).removeClass(‘oldClass’);

**20)Prevent default method in JQ**

21)Callback method in calling webservice(we ll not get data in success block of data in AJAX,this call back is bit different from AJAX success method)

**22) Clone method in JQ?**

🡪if you want to repeat a DOM structure in single shot use clone method

Ex:In Add Row Button click event(it generates a DOM Structure)

**23)Which one among the CSS selectors(id,class and tag) is faster?**

🡪id is faster because it is unique parameter in the page

**24)Event bubbling in JQ?**

🡪if you attach the events to div which contains the number children and the attached event will inherit to all of its children hence this behavior called event bubbling . If you want to stop this event bubbling please use event.stopProgation() JS method

25)**event.stopPropgation()** ?

🡪 This method stops the bubbling of events to parent elements, preventing any parent event handler being executed.

Ex🡪<http://www.w3schools.com/jquery/tryit.asp?filename=tryjquery_event_stoppropagation>

Explination:Assume there are 3(span,img,p) child elements in DIV parent. If you attach events to parent div then by naturally the bubbling event will happens(means if you click on child elements if there events has been attached earlier then parent (DIV)’s event also fired because we have attached the event) so to avoid the bubbling up events we have to use event.stopPropgation() method while attaching events to childs

**26) Different types of doctype in HTML**

🡪transitional, strict, frameset

<http://www.w3schools.com/tags/tag_doctype.asp>

**27)Accessibility and Usability(website ,easily to use from end user)**

<http://www.w3.org/WAI/intro/usable>

**28)Grouping in CSS(p,a,label.span,div,footer)**

29)Less and SaaS CSS(compression technologies CSS)

**30)Symantic HTML(Standard format of HTML page,header,footer,body,left panel and right panel)**

**31)How to tune the performance of website**

**32)what is the Jquery.noconflict**

🡪if we are forced to use multiple frameworks(MOTO,Jqery,Dojo) then there should be chance of conflict to avoid this we need to use jqery.conflct file inside the HTML page to give another meaning for $ symbol of jquery

**33)Difference btw XHTML and HTML**

🡪in XTML(XML+HTML) case sensitive file(not able to use a tag and A tag simultaneously)

🡪self close tag feature is not in XHTML ,we have to close the open tag(not auto close tags like <a></a>)

🡪Doctype is different for XHTML page(same as HTML but bit change in syntax)

**34)Responsive Web Design(RWD) guidelines**

Media queries will help in this scenario.

Media Queries will not work in IE8,so please don’t forget to include respond.js file

@media(min-width:800px)

{

//write your CSS for if media min width:800px

}

@media(min-width:800px) and (min-height:600px)

{

//write your CSS for if media min width:800px and height 600px

}

@media(not min-width:600px)

{

//If media width is not equal to 600px

}

@media(width:1024px) and height(height:768px)

{

//id the media width exactly width:1024px and height:768px then apply this CSS

}

@media (min-width:768px) and (orientation:portrait)

{

//apply the CSS if min width:768ps and device(pad,smart phone) orientation is portrait

}

@media (min-height:800px) and (orientation:landscape)

{

//apply this block CSS when the device orientation is landscape and height is 800px

}

@media (min-width: 768px) {

*.navbar-static-top* {

border-radius: *0*;

}

}

To target a smart phone in landscape mode, use: @media (min-width: 321px) { ... }

To target a smart phone in portrait mode, use: @media (max-width: 320px) { ... }

To target an Apple iPad in landscape mode, use: @media (orientation: landscape) { ... }

**35)Array join method?**

🡪merge all array objects into single string.

arrayName.join(“”);

36)pseudo classes(before and after)

.myClass :before

{

//render this content to before the element which is having class called myClass

}

.myClass :after

{

//render this content to after the element which is having class called myClass

}

INDICOMME MNC

🡪JAVASCRIPT

🡪How to write class in JS and what are the possible ways

🡪Use of prototype keyword

🡪What are Javascript design patterns

🡪Self Invoking function in JS

(function(){

//do something

});

🡪Javascript closuers

🡪Have you ever used Developer tool RESOURCE TAB SQL database for web application from google chrome browser

36)**USE of CALL and APPLY methods in javascript**

🡪call() and apply

🡪call() method

**myFun.call(this,arg1,arg2,args………**)

🡪Call() method takes a list of arguments

🡪we can call anonymous function

**INTERVIEW @ THOUGHTWORKS**

🡪What is your standard of coding in UI

🡪About Javascript design patterns

🡪creation pattern, singleton pattern ,MV\* pattern, Creational Pattern, Modular pattern, Façade Pattern, Factory Pattern

🡪How do you approach the problem statement with your own skills

🡪How will you train your new colleague who joined recently in your team and what are your pre steps to make him productive

🡪What is the best practice of coding and boiler plating

🡪 Configuration of Project development code and deployment code standards

🡪If you are starting the new project and you are allocated as UI resources for that project , then what is your first line of code in CSS style sheet

🡪Without using margin, padding, top, and left ,how will you generate the space between two UI components

🡪Does parent div know the child div information, if child is floated if YES please explain it

🡪How to increase the parent height and width if child’s width and height increases(child will comes from dynamically from AJAX service)

🡪Asked many JS frameworks like D3.js, log4j.js and many

🡪What are the different way of writing the JS function(he used some terminology for this) and asked to crack the below code (expressed function and anonymous function)

myFunction(){

//code

}

myFunction();

var function = myFunction(){

//code

};

myFunction();

🡪what is the cause if you have not written semi colon(;) at the end if JS line code

🡪What is the use of clear both if the items are floated

🡪what are the different way of attaching the event in JS/JQ

🡪If you attached the event to childs through class, id or by tag and then tell me whether event is still fire from child are which added dynamically (if NOT tell me the method how to resolve the issue)

🡪About browser compatibility

🡪What is the box model and explain me clearly

🡪How any tags of HTML will differ in IE and how resolve to look same in all browser

🡪About my work and what is your current role and about project

🡪What is the syntax of Media Queries

🡪How you are going to achieve RWD without media queries

🡪Maximum on basic about CSS and parent and child relation if child floated OR not floated

🡪Why we have to write each and every CSS attributes if it is not required

🡪What is the use of relative attribute in styling

🡪what is the relation between relative and absolute

🡪Are you able to code RWD without using Bootstrap if YES tell me how will start your coding with responsive in mind and what are your pre points and thoughts

🡪 Have you written any plugins and have you gone through any JS libraries so far, how they develops and what are there mind set before starting any framework

@Delloitte

🡪What is specificity in CSS

<https://developer.mozilla.org/en-US/docs/Web/CSS/Specificity>

🡪How to generate public/private key in HTML5

🡪is CSS properties are case sensitive

🡪What are the HTML5 API you have used

🡪what are the CSS filters you have used

🡪

@@@My Own Prepared questions @@@@

#1 How to write CSS for IE 10 and its edge mode ,CSS hacks for IE10 and IE=edge

html[data-useragent\*='MSIE 10.0'] h1 {

color: blue;

}

@media all and (-ms-high-contrast: none), (-ms-high-contrast: active) {

.h1\_cls{

color:red;

}

}

#2 Tell me about HTML5 web worker concept

#3 Default template engine in ECMA 6 or recent release of JS

#4 Memory leaks in Javascript

🡪Difference between jquery live,on,delegate and bind methods

<http://www.elijahmanor.com/differences-between-jquery-bind-vs-live-vs-delegate-vs-on/>

🡪how to attach an events for dynamically created elements in JQ

$(‘parent\_selector’).on(‘event\_name’,’target\_selector’,function(){

//do something

});

For Exa

$('#left-panel-items').on('click','button#btn-clear-btn', **function**() {

alert($(**this**).attr('class'));

});

🡪What is the polyfills in Web Terminology?

🡪What is ARIA concept in HTML5

@@@@ WIPRO Technologies @@@@@@

🡪Explain me about closures

🡪Scope of variables

🡪What is the Event bubbling and how avoid this

🡪Tell me the scenario where you will use the Event Bubbling

🡪In Javascript what kind of Inheritance is able to achieve(Single Level ,Multiple Level Multi Level). If so write a code to implement Single Level Inheritance

🡪Tell me the different way of writing the object in javascript

🡪What is the use of Prototype Keyword?

🡪Given me the code to understand and asked about the about the ouput

Var a =10;

Function temp(){

Alert(a);

Var a =15

Alert(a+17);

}

🡪What is the hosting in Javascript and explain me the variable hosting and function hosting (what I have explained in above question is on the javascript variable hosting )

🡪How to attach the event in Javascript and what are the three parameters to pass to that method

Dom.addEventListner(eventName, CallBack, true or False)

True or false for event Bubbling

🡪What is event bubbling (traverse from bottom 🡪top )

🡪What is the AJAX and X=XML and where is XML coming into picture

🡪What is the scope object and where does exactly “this” will point

**PERSISTANT INTERVIEW**

**1. E**xplain me a Box Modal(CPBM)

2. CSS specificity

3. which is more priority among these div .divCls and div > .divCls and tell me a formula or number to calculate this priority (or CSS specificity )

4. Javascript method overloading and overriding

5.Javascript Call back with example and what is the use of it

🡪if a task2 has to be done after task1 completion then we have to use the call back function mechanism

Call back using JQuery

Var $fn1 = $.function(){

//line of code

}

Var $fn2 = $.function(){

//line of code

}

Var $callback = $.callback();

$callback.add($fn1);

$callback.add($fn2);

$callback.fire();

6 . Given some JS code snippet to analyze output

a. If( [ ] && undefined)

{

Alert(‘hello’)

}

b. var x= 5

function fn(){

alert(x)

var x= 10;

alert(x)

}

fn()

c. var obj = { x:vittal,xy:Kamkar,’-xy’:someVal ,2xy:’anotherVal’}

obj.x

obj[x]

obj.-xy

obj[-xy]

obj.2xy

analyze whether the object is proper or improper

d.function fn(a,b){

return a+b;

}

function fn(a,b){

return a-b

}

Function fn(a,b){

Return a-b

}

fn(2,3)

fn(4,5,X)

fn(1,2,3,4,5)

fn(x,y,z)

e. if(true % 0){

}

f.

7. Explain the concept of Clousres

8. Explain me a concept of Inheritance

9. what are the different types of doctype in HTML

10. What is the difference b/w HTML and XHTML

11. What is the difference b/w object and JSON in javascript

12. what is the media in in HTML

13 how to multi-threading in HMTL

14 Is it possible to creates threads in JS

15.What are the use of cookies

16. Explain me difference b/w canvas and SVG in HTML5

15. What is the object name to find out the browser info

16 .What are the difference types of media attributes in HTML5

17 What are the symantic tags and define it

18 What is the width of column(div) if it has following css values {width:200px,margin:10px,padding:10px:border:5px) =(200+(10x2)+(10x2)+(5x2)) 250px

This is related to BOX modal

19 How to avoid flickering in browser if we enabled scroll in the page

20. What is the margin collapse and clear both concepts

21.What is the view port

22 How to achieve chaining in JS(for ex JQ chaining ).

Ans: Using call back

23 . Regarding JS array method

Var arr =[‘a’,’e’,’i’,’o’,’u’]

I need out like this in one line of code

Arr = [‘a’,’V’,’i’,’o’,’u’]

ANS: myArr[myArr.indexOf('e')] = 'vittal'

24 .Explain me a event bubbling and how to attach a event in JS

Dom.addEventListner(‘eventName’,’functionName’,true/false)

True/false 🡪Event bubbling

25.Web Messaging and Web socket

DELL

1. How to authenticate REST API using CSRF token exchange
2. Define name space in Javascript and write reusable code
3. Class in Javascript using ECMA 6
4. How to inject a javascript in third party website or how to avoid injecting JS in our websites
5. High level design documents
6. Explain me SDLC(Software Development Life Cycle)

6.a Water fall

6.b Agile🡪Scrum

ADOBE

1. What is the difference between HTTP and HTTPS

2. What are the standards of REST API

3. How to pass value between controllers in angularJS

🡪Interceptor

4 .How HTTPS protocol secured

5 .What is the OPTIONS method while making a call to server using AJAX

6 Who will issue the HTTPS certificate and how this secured way of communication

7. What is the difference between POST and GET method and how POST is secured way of passing the credentials

🡪if you use POST method then all form values will go into embedded format with form body

And this data you cannot able to see in HTTP headers

8. How the modularity development will be done in AngularJS(module wise developement)

9.Which is more efficient way of loading the data (single shot all data to module wise data) in a page

10. What is the maximum URL length can be used if so what is the limitation

11. How to make cross domain interaction CORS(Cross Originated Resouce Sharing) in AngualrJS

12. How to maintain session in AngularJS or normal web application

13. How to pass tokens while authenticating b/w client and server using REST API or CSRF(Cross Source Resource Forge)

14 What is the use of JSONP in AJAX while making call to server using REST API

🡪if you use jsonp type while making REST API then the parameters or which you are sending to server along with REST API will send in format like , SCRIPT tag will enclose this sending data <Scriptt>your data</script> ,then the server will treat it as a some JS script .

15 What is the difference b/w null and undefined?

16 Explain me about cookies and what is the use of cookies

SAP LABS

1. Basic questions on tell me about yourself, education back ground to make comfortable
2. All analytical questions on Javascripts
3. Take an example of image and let imagine this is file and contains some pixel information in 2d matrix and rotate the image by 900, write any algorithm to rotate this image

I/p🡪 O/p🡪

|  |  |  |  |
| --- | --- | --- | --- |
| C:\Users\M1020535\Desktop\Capture.PNG |  |  | C:\Users\M1020535\Desktop\Capture.PNG |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

1. What is the use of prototype in JS and explain in detail
2. Reverse a string “SAP Labs India” without using built in string reverse method. o/p “PAS, sabL aidnI”
3. Sort an array which contains repeated items example [2,3,1,1,5,2,0,6,7,7,8]

o/p🡪0,1,2,34,5,6,7,8 with min number loop and do not use bubble sort algorithm

1. Explain architecture diagram of current project and also SOFEA architecture with block diagrams
2. Logical Reasoning: Consider a car with 4 tires and 1 stepney and each tire can run for 20K kmts and tell me how maximum car can travel.

Ans: 25K Kms 20Kms+20Kms/4(no wheels each can be replaced with stepney for every 7.5Kms by each tire)

1. Assume we have given a string which contains JS code, single line comments and multiline comments. Write an algorithm to return on only JS code. Ex: given string

Input string

“//single line comment document.getElementById(‘id’); var i=0; for(var i=0;i<=str.length;i++){ // write some logic here} /\*I am entering multi line comments, this code snippet is used for reverse a string \*/”

Output string:

document.getElementById(‘id’);

var i=0; for(var i=0;i<=str.length;i++){ };

1. Puzzle: There is circle and 100 members are standing and one person in that circle has sward in his hand. He started killing next to him and passed sword to next person. Finally how many persons will be alive in a circle
2. Explain about closures in JS

GENERAL HR QUESTIONS

<http://javahungry.blogspot.com/2014/04/top-15-must-prepare-behavioral-interview-questions-and-answers-hr-round-non-technical.html>

**GE**

1. Write a program for ladder snake game or tic tac toe or lift management program
2. Write fizzbuzz program
3. Write car model to implement multi level and multiple inheritance
4. How to analyze the performance of table or grid painting in the UI
5. Given sample code and asked to write UTC
6. How to implement observable in JS not that how to use the observable
7. How to write e2e test cases
8. Explain about data structures like linked list, queue and stacks
9. Which data structure you use for lift management problem
10. Write detail code for logging component (for DEBUG,ERROR,INFO)and send the same object to service and analyze the payload and display it in UI or log level monitoring tool
11. ON what parameters or for what solution how select the software component
12. How NodeJS works internally and how it is single threaded
13. How to handle callback hell in nodeJS
14. How to write UTC for promises
15. What are the design patterns you know JS
16. Explain me in detail about MVS,MVVP patterns with end to end flow