Phase 1

Core java and data structure, git and agile

Phase 2

Jdbc, hibernate, servlet and jsp

Phase 3

Spring framework and spring boot, rest full web service and junit

Phase 4 : frontend technologies.

Html, css, Java using ES5 and ES6, Bootstrap

Typescript

Angular framework

Html, css and Basic JS : Self learning

Live session

Adv Js

Typescript

Angular Framework

Day 1 :

10/01/2022

https://[www.google.com](http://www.google.com) --🡪 URL

http/https(req)----------------------🡪 Server

Client Server

🡨---------------http/https(res) HTML / HTML5

CSS / CSS3

JS

HTML : Hyper text mark up language which help to create the web pages. Web page can be static or dynamic

Html 1, 2, 3, 4, and 5.0

Cascading style sheet : CSS provided lot of pre defined properties which help to apply formatting style for web page.

Separation of concern. With help of CSS actual concept and formatting style can be write in different file.

JavaScript is/was use to do validation on client side.

HTML :HTML provided lot of pre defined tags

<tagName> opening tag

</tagName> closing tag

Html

Head

Body

Title

P

Heading tags like h1 to h6

H1 largest

H6 smallest

VS Code (Visual Basic Code)

Attribute : attribute is known as properties of tags. For every html tags contains one or more than one attribute. Attribute we have to write in key-value or name-value pairs. Attribute we have to use in opening tags.

<tagName name1=”value1” name2=”value2”></tagName>

Hyperlink : this tag is use to connect one page to another page.

<a href=”pagename.html”>Text</a>

1, 2, 3, 4, 5

In HTML 4

<!DOCTYPE html url=<http://www.sssafafsafasfsdd.dtd>/> document type definition

This file contains the rules for html file ie root tag name ie html, which contains two tags head and body, inside a head we can write title, style, script, meta etc. inside body we can write more than one paragraph or any tags.

In html5 they remove this rules and added more tags to make html dynamic web page with help of tags.

<!DOCTYPE html >

Header

Footer

Section

Main

Audio

Video

Etc

List tags : These tags help use to display the content in proper format.

UnOrder List

Order List

Definition list

Day 2 :

10/02/2022

CSS : Cascading Style sheet :

CSS provided lot of pre defined attribute which help apply formatting style for web page.

With help of css we can achieve separation of concern.

Types of CSS

1. Inline CSS
2. Internal CSS or embedded CSS
3. External CSS

Inline CSS :

Syntax

<tagName style=”property:value;property:value;”> </tagName>

<p></p>

<h1></h1>

<div></div> : container tag which contains more than one tags.

Internal CSS or embedded CSS

Syntax this tag we have to use in head tag of html page.

<style type=”text/css”>

Selector {property:value}

</style>

Types of selector

1. Universal selector : \* {color:red} \* mean all tags, p, h1, div, table etc.
2. Specific selector : tagName {color:red}
3. Class selector :
   1. Local class selector tagName.className(property:value}
   2. Global class selector .className{property:value
4. Id selector : #idName{property:value}
5. Child selector : parentTagName childTagName{property:value}

Id selector and Class selector

Id must be unique for each tag. Don’t repeat same id value for tag it may be tag can be same or different.

Class : class is a collection or group of tags which have same name or different name.

<p id=”p1” class=”abc”>This is first para</p>

<p id=”p2” class=”xyz”>This is second para</p>

<p id=”p3” class=”xyz”>This is third para</p>

<p id=”p4” class=”abc”>This is fourth para</p>

<div id=”p5”>This is first div tag </div>

<div id=”p6” class=”xyz”> This second div tag </div>

<h1 id=”p7 ” class=”abc”>This is h1 first tag</h1>

<h1 id=”p8” class=”xyz”>This is h1 second tag</h1>

External CSS

JavaScript

JavaScript was known as Object based or prototype base interpreter scripting language till ES5 version JS.

But from ES6 onward we can say JavaScript is object oriented interpreter scripting language.

ES : ECMA (European Computer Manufacture Association)

ECMA is a concept. JS is a one of the implementation of ES or ECMA.

In Old Version JS till ES5 there was no class keyword. That JavaScript provided lot of pre-defined object as well as we can create user defined object but not class keyword or class concept. That JavaScript also known as Vanilla JS.

Complier convert whole code into another format at time

Interpreter check the code line by line

From ES6 onward we can use class keyword So from ES6 onwards we can say JS is object oriented interpreter scripting language.

<script type=”text/JavaScript”> opening tag

document.write(“Welcome to JS”);

</script> closing tag

We have to write this code in between head or body tag.

Variable : In JS to declare the variable we use var keyword till JS5 from ES6 onward we can use let and const keyword.

var variableName;

Data types

JS is known as loosely type data type. Means in JS doesn’t support static data type declaration. Base upon value it behave the variable is that type of data types.

Operator :

1. Arithmetic Operator : +, -, \*, /, %
2. Conditional operator : >, >=, <, <=, ==, !=, ===
3. Logical operator : &&, ||, !
4. Assignment operator =
5. Increment and decrement : ++, --
6. Ternary operator : condition ? true : false;
7. Short cut operator : +=, -=, \*=, /=
8. Type of function or operator : typeof

If statement

1. If statement
2. If else
3. If else if
4. Switch statement

Looping

while loop

do while loop

for loop

functions :

function is use to write a set of instruction to perform a specific task.

2 types

1. Pre defined function
2. User defined function

Pre defined function

1. alert : alert is use to display pop up message

alert(“msg”)

1. prompt() : This function is use to take the value through keyboards.
2. parseInt(); it help to convert string to integer,
3. parseFloat() it help to covert string to float
4. eval(): it help to convert string to number (int or float)
5. confirm() : it contains two button if user click ok it return true and if user click cancel it return false.

do {

using alert 1: Addition 2 : subtraction

plz enter your choice

using prompt take the choice

switch

case 1: ask the value a and b and display sum convert using eval

break

case 2: ask the value a and b and display sub convert using eval

break

default wrong option

using confirm : ask do you want to continue

}while() : if yes then continue

Using alert : Display Thank you

Day 3 :

10/08/2022

User defined function

1. Normal style syntax

function functionName(parameter) {

function body;

}

1. Function no passing parameter and no return type

function info() {

alert(“Welcome to user defined function”);

}

1. Function passing parameter but not return type
2. Function passing parameter and return type
3. Function no passing parameter but return value.

Events : event provide bridge between html and JavaScript code. Event is interact between user and html tags(html components).

Types of events

In JS all event start with pre-fix on followed by event name.

onClick : button single click

onDblClick : button double click

onMouseOver : when cursor move on image make image big

onMouseOut : when cursor come out from image original size.

onKeyUp : textfield, when release the key after types.

onKeyDown : chatting application she or he is typing

onChange : drop down

onSubmit : mainly we use while doing form validation

onFocus : when we enter in text field

onBlur : when we exist from text field.

DOM and BOM

Document object model

Browser object model

object : object is any real world entity. Person, Bank, Custom, Car, Account

Every object has two things

One properties and behavior

Properties is known as variable or fields.

Behavior is known as function or methods.

In JavaScript object mainly divided into 2 types.

Pre defined object

User defined object.

Pre defined object

JavaScript provided two pre defined object hierarchy ie BOM and DOM

Object 🡪 property

Behavior

Object ----🡪 property

Behavior

Object ---🡪 property

Behavior

Object ----🡪 property

Behavior

BOM hierarchy window is top most object.

Which contains set of properties and behavior as well as another object like history, location, navigator, document etc.

DOM is a property of BOM.

If we want to learn more about browser then we have to work on BOM hierarchy

If we want to learn content of web page then we have to work on DOM hierarchy

Index.html

Html

Head body

Title p Hello (TextNode)

Meta div welcome (TextNode)

Script

Style

When we run the web page on browser internally it will create DOM hierarchy.

DOM : document object model : DOM is api (application programming interface).

Lot of programming language like java, python, C# as well as JS provided lot of pre-defined function or methods or classes which help read, write and update html content dynamically.

Now we will create the new tag and dynamic values

ES6 JS features

From ES6 onwards to declare a variable we can use let and const keyword.

var a=10; int a=10;

a=20; a=20;

var a=30; int a=30; error in java

using var keyword we can re declare same variable once again with same value or different values.

let b = 10;

b =20;

let b =30; error in JS from ES6 onwards.

Using var we can declare global scope but using let we can declare block scope ie can be if or loop etc.

Using const we can declare constant variable like final keyword in java.

const c=100;

c=200; error in JS

function style

1. Normal style function
2. Expression style function
3. Arrow style : arrow function also known as anonymous function. Then arrow function , function keyword replace by =>.
4. Callback function : passing the function name or function body to another function as a parameter is known as callback function.

Day 4 :

10/08/2022

Array : array is one of the pre defined object which help to store the collection of elements of any types and it provided lot of pre defined method which help to do some operation very easily on these elements.

Creating user defined object

In JS we can create user defined object 3 ways

1. Literal style using ES5
2. Function style using ES5
3. Class style using ES6

JavaScript provided pre defined object ie JSON which help to convert string to json and vice versa.

According to JSON key must in double quote and value can be any types means number, string, boolean, array, complex object type.

JSON :JavaScript Object Notation.