

## Phase 4

Total session 9

### Frontend technologies

HTML, CSS and Basic JavaScript: Self learning

Adv JavaScript

Into Node JS

TypeScript

Angular Framework

Using Spring boot we created Rest API

Those rest api we can call or consume using Angular Framework

IDE

**VS code** VS Code is part of micro software open source IDE generally we are using while developing frontend side technologies.

HTML : Hyper text markup language which help to create the web pages. Those pages can be static or dynamic.

Html provided lot of pre defined tags. Those tags we can write upper or lower case.

In html it is not mandatory every tag need to close properly.

Html, head, title, body, p, div, span, h1 to h6, a ol, ul, li, table form etc.

## CSS : cascading Style sheet

Which provided lot of pre defined properties which help to apply formatting style for web page.

3 types

1. Inline css

`<tagName style="property:value;property:value"></tagName>`

2. Internal or embedded css

In between head tag

`<style>`

`</style>`

a. Universal selector : \*

b. Specific selector : tagName

c. Class selector :

a. Global class selector

b. Local class selector

d. Id selector :

Class selector Vs Id selector

Id must be unique. More than one tag which have same name or different name they must have unique id.

Class : more than one tag which can have same name or different name can be part of one class. class is a group of tags.

3. External css

## JavaScript

JavaScript was object-based interpreter scripting language till ES5.

But from ES6 onward JavaScript also known as object-oriented interpreter scripting language.

Object based Vs Object oriented

The language which support minimum OOPs features like object, class Encapsulation, Polymorphism, abstraction and inheritance. That language is known as object oriented.

Till ES5 JavaScript didn't support class concept. ES5 or Vennela JavaScript provided lot of pre defined object as well as we can create user defined object but didn't provide class concept. But from ES6 onward JavaScript also support all OOPs features.

ES : ECMA (European Computer Manufacture Association). ECMA is a concept. JavaScript, typescript, vb script, action script are implementation of ES.

Using JavaScript we can on programming on web page without server on browser.

JavaScript mainly introduce to do validation on client side.



We can write JavaScript two ways

### 1. Internal JavaScript code

In html page inside body or head tag we need to write script tag

This tag we can write in between head or body. We can write more than one script tag. Type="text/JavaScript" it is optional.

Inside script tag we can do coding or programming. JavaScript is case sensitive.

```
<script type="text/JavaScript">           opening tag
```

```
        Coding ...
```

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

```
</script>
```

document is pre defined object and write a method. In JavaScript not mandatory every statement end with semi colon.

### 2. External JavaScript code

In JavaScript till ES5 we can declare the variable using **var** keyword. From ES6 onward we can use **let** and **const** keyword.

```
var variableName;
```

JavaScript is known as loosely type data types.

Base upon what type of value we stored in variable that variable behave that type of data types.

## Operator

Arithmetic operator : +, -, \*, /, %

Conditional operator : >, >=, <, <=, ==, ===

Assignment : =

Increment and decrement : ++, --

Ternary operator : condition ? trueblock : falseblock;

typeof function or operator

## if statement and switch statement

### looping

#### while loop

#### do while loop

#### for loop

can I skip

## functions

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

In JavaScript mainly function are divided into two types..

### 1. Pre-defined function

- a. alert("Msg"): it is a pre defined function it is use to display pop up message.
- b. Prompt(): it is a pre defined function which help to take the value through keyboards.
- c. parseInt() : convert string to integer without decimal
- d. parseFloat() : convert string to float with decimal

- e. eval : convert string to number (int and float)
- f. confirm() : it display pop box with 2 button ok and cancel  
if you click on ok it return true if you click cancel it  
return false.

## 2. User defined function

Do while, switch, alert, prompt, eval and confirm

do {

using alert 1 : add 2 : sub

enter your choice take value using prompt then base up on choice do the  
work

switch() {

1: add operation

2 sub operation

}

Do you want to continue if yes and do other operation

}while()

User defined functions

In JavaScript we can write User defined function lot of ways.

### 1. Normal Style User defined function

Syntax

```
function functionName(parameterList) {  
    function body;  
}
```

- a. Function no passing parameter and no return type.
- b. Function passing parameter and no return type
- c. Function passing parameter and return value.