

## **JavaScript Course Module (Level 1)**

**Total Module: 23**

**Total Class : 34 (approximate)**

**Class time (Tuesday & Thursday )**

### **Course Schedule:**

Module No	Topic
1.	<ul style="list-style-type: none"><li>• Introduction to programming (Procedural and OOP base).</li><li>• Introduce some programming language.</li><li>• Introduce about access file directory using linux command and also open VS code by using command.</li><li>• What is JavaScript.</li><li>• How JavaScript Execute.</li><li>• Why JavaScript.</li><li>• History of JavaScript.</li><li>• Environment setup for javaScript</li></ul>
2.	<ul style="list-style-type: none"><li>• Introduce to Variable</li><li>• Declaring, defining variable and value assign.</li><li>• Working with variable.</li></ul>
3.	<ul style="list-style-type: none"><li>• Operator.</li></ul>
4.	<ul style="list-style-type: none"><li>• Operator precedence.</li><li>• Comment in programming.</li><li>• Escape Notation in programming.</li><li>• Template literal.</li></ul>
5.	<ul style="list-style-type: none"><li>• Data types.</li></ul>
6.	<ul style="list-style-type: none"><li>• Type Conversion.</li></ul>
7.	<ul style="list-style-type: none"><li>• Introduce to Number system.</li><li>• Binary to all number system conversion (both way).</li><li>• Octal to all number system conversion (both way).</li><li>• Hexa to all number system conversion (both way).</li><li>• Decimal to all number system conversion (both way).</li><li>• Hexa to Decimal conversion with javaScript.</li><li>• Octal to Decimal conversion with javaScript.</li></ul>

<b>8.</b>	<ul style="list-style-type: none"> <li>• Math function.</li> <li>• Math.E</li> <li>• Math.PI</li> <li>• Math.abs</li> <li>• Math.ceil</li> <li>• Math.floor.</li> <li>• Math.round.</li> <li>• Math.max.</li> <li>• Math.min</li> <li>• Math.pow.</li> <li>• Math.sqrt.</li> <li>• Math.random.</li> </ul>
<b>9.</b>	<ul style="list-style-type: none"> <li>• Introduce to Date Methods –</li> </ul>
<b>10.</b>	<ul style="list-style-type: none"> <li>• Introduce to If else statement.</li> </ul>
<b>11</b>	<ul style="list-style-type: none"> <li>• Introduce to Switch statement.</li> </ul>
<b>12.</b>	<ul style="list-style-type: none"> <li>• Introduce to GIT.</li> <li>• What is GIT.</li> <li>• Difference between GIT and GITHUB OR GITLAB</li> <li>• GIT Architecture</li> <li>• Discuss about git command.</li> </ul>
<b>13.</b>	<ul style="list-style-type: none"> <li>• Introduce to Loop.</li> <li>• While loop.</li> <li>• Do... while loop.</li> <li>• For ... loop.</li> </ul>
<b>14.</b>	<ul style="list-style-type: none"> <li>• Introduce to Function.</li> <li>• Function expression.</li> <li>• Function expression and declaration.</li> <li>• Anonymous function.</li> <li>• Introduce to Arrow function.</li> <li>• Default argument of function.</li> <li>• Rest Parameter of function.</li> <li>• Introduce to call back function.</li> </ul>
<b>15.</b>	<ul style="list-style-type: none"> <li>• Introduce to Array.</li> <li>• Accessing array element.</li> <li>• Introduce to Array destructure.</li> <li>• Array spread operator.</li> </ul>

<p><b>16.</b></p>	<ul style="list-style-type: none"> <li>• Some Common method of array.</li> <li>• unShift().</li> <li>• shift().</li> <li>• concat ().</li> <li>• push().</li> <li>• pop().</li> <li>• join ().</li> <li>• sort().</li> <li>• isArray ().</li> <li>• copyWithin ().</li> <li>• Every ().</li> <li>• fill ().</li> <li>• filter ().</li> <li>• find ().</li> <li>• findIndex ().</li> <li>• form ().</li> <li>• reduce ().</li> <li>• flat ().</li> <li>• map ().</li> <li>• forEach ().</li> <li>• slice ().</li> <li>• delete.</li> </ul>
<p><b>17.</b></p>	<ul style="list-style-type: none"> <li>• String.</li> <li>• Lexicographic system.</li> <li>• Some String methods.</li> <li>• Concat()</li> <li>• charAt()</li> <li>• substring()</li> <li>• toUpperCase()</li> <li>• toLowerCase()</li> <li>• startWith()</li> <li>• endWith()</li> <li>• indexOf()</li> <li>• lastIndexOf()</li> <li>• subStr()</li> <li>• replace()</li> <li>• length()</li> <li>• include()</li> </ul>

<b>18.</b>	<ul style="list-style-type: none"> <li>• Introduce to Object.</li> <li>• Adding, Modifying and Delete properties.</li> <li>• Special key name and square bracket properties.</li> <li>• Property type.</li> <li>• Dynamic property access.</li> <li>• Understanding chaining (property and method)</li> </ul>
<b>19.</b>	<ul style="list-style-type: none"> <li>• Object destructure</li> <li>• Object spread operator.</li> <li>• Check property existence (hasOwnProperty or optional chaining).</li> </ul>
<b>20.</b>	<ul style="list-style-type: none"> <li>• Object Method.</li> <li>• Object.keys().</li> <li>• Object.value().</li> <li>• Object.entries().</li> <li>• Object.is().</li> </ul>
<b>21.</b>	<ul style="list-style-type: none"> <li>• Introduce to JSON.</li> <li>• Discussion about –</li> <li>• JSON.stringify()</li> <li>• JSON.parse().</li> </ul>
<b>22.</b>	<ul style="list-style-type: none"> <li>• Advance Function.</li> <li>• Pure function.</li> <li>• Impure function.</li> <li>• Impure VS Pure function.</li> <li>• Factory function.</li> <li>• First class function.</li> <li>• Higher order function.</li> <li>• Unary function.</li> <li>• Currying function.</li> <li>• Self invoked function.</li> <li>• Function pass by value and pass by refferance.</li> </ul>
<b>23.</b>	<ul style="list-style-type: none"> <li>• Advance Loop.</li> <li>• For.... In loop.</li> <li>• For .... Of loop.</li> </ul>