

UNIVERSITY PARTNER



# Internet Software Architecture

## (4CS017)

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Submission Date : June 9, 2023

## Question

Make a simple interest calculator using javascript.

# Simple Interest Calculator Using HTML, CSS and Javascript

### Objective:

1. Download the project folder.
2. Modify the HTML file as per the requirements.
3. Modify the CSS file as per the requirements.
4. Modify the JavaScript file as per the requirements.
5. Verify that the webpage is working properly.

# Code

```
1 <html>
2 <head>
3   <script src="script.js"></script>
4   <link rel="stylesheet" href="style.css">
5 </head>
6 <body>
7   <div class="container">
8     <h1>Simple Interest Calculator</h1>
9
10    <div class="row">
11      <div class="left">
12        Amount
13      </div>
14      <div class="right">
15        <input type="number" id="principal" onchange="checkPrincipal()">
16      </div>
17    </div>
18
19    <div class="row">
20      <div class="left">
21        Rate
22      </div>
23      <div class="right">
24        <input type="range" id="rate" min="0" max="20" step="0.25" oninput="updateRate()" default="10">
25        <span id="rate_val">10%/span>
26      </div>
27    </div>
28
29    <div class="row">
30      <div class="left">
31        No. of Years
32      </div>
33      <div class="right">
34        <div class="input">
35          <input value="" type="display none"/><input
36            value="1" type="option"
37            value="2" type="option"
38            value="3" type="option"
39            value="4" type="option"
40            value="5" type="option"
41            value="6" type="option"
42            value="7" type="option"
43            value="8" type="option"
44            value="9" type="option"
45            value="10" type="option"
46          </div>
47        </div>
48      </div>
49    </div>
50
51    <div class="row">
52      <button id="calc" onclick="compute()">Compute</button>
53    </div>
54
55    <div class="footer">
56      <p>Know This belongs to Prajal</p>
57    </div>
58    <div class="hide" id="overlay" onclick="hide()">
59
60    </div>
61    <div id="result" class="hide" onclick="hide()">
62      <p>If you deposit <span id="p"></span> for <span id="t"></span> years at a rate of <span id="r"></span> resulting to a total amount of <span id="a"></span> by the end of <span id="t"></span></p>
63    </div>
64  </body>
65 </html>
```

```

1  body {background-color:black;}
2  h1{color:black;}
3  .container{
4      width:30%;
5      margin:auto;
6      padding:20px;
7      background-color:rgb(181, 181, 181);
8      border-radius: 20px;
9      color:black;
10 }
11 .footer{
12     width:30%;
13     margin:auto;
14     padding:20px;
15     color:white;
16 }
17
18 .row{
19     width:100%;
20     padding:5 20px;
21     margin-top:40px;
22 }
23
24 .left {
25     float: left;
26     width: 25%;
27     margin-top: 6px;
28     vertical-align: auto;
29 }
30
31 .right {
32     float: left;
33     width: 75%;
34     margin-top: 6px;
35     resize: vertical;
36 }
37
38 input[type=number], select {
39     width: 90%;
40     padding: 6px;
41     border: 1px solid #ccc;
42     border-radius: 4px;
43     resize: vertical;
44 }
45
46 input[type=range]{
47     width:75%;
48     margin-right:5px;
49     padding: 6px;
50     resize: vertical;
51 }
52
53 #calc{
54     border: 0px;
55     border-radius: 5px;
56     padding:15px;
57 }
58 #calc:hover{
59     background-color: #001aff8e;
60 }
61
62 .hide{
63     display:none;
64 }
65
66 #results{
67     position:absolute;
68     top:30%;
69     left:0;
70     right:0;
71     margin:auto;
72     z-index:9;
73     background-color: grey;
74     padding:100px;
75     border-radius: 10px;
76     opacity: 100%;
77     width: 30%;
78     font-size: 20px;
79     line-height: 40px;
80 }
81
82 #overlay{
83     position:absolute;
84     top: 0;
85     left:0;
86     width: 100vw;
87     height: 100vh;
88     z-index:5;
89     background-color: rgb(255, 255, 255);
90     opacity: 80%;
91 }

```

```
1  function compute()
2  {
3      let d = parseFloat(new Date().getFullYear());
4      let p = parseFloat(document.getElementById("principal").value);
5      let t = parseFloat(document.getElementById('time').value);
6      let r = parseFloat(document.getElementById('rate').value);
7      let s=(p*t*r)/100;
8      let y=d+t;
9      console.log(y)
10     document.getElementById('p').innerHTML = p;
11     document.getElementById('t').innerHTML = t;
12     document.getElementById('r').innerHTML = r;
13     document.getElementById('result').innerHTML = s;
14     document.getElementById('amt').innerHTML = s+p;
15     document.getElementById('date').innerHTML= y;
16     document.getElementById('results').classList.toggle('hide');
17     document.getElementById('overlay').classList.toggle('hide');
18 }
19 function updateRate()
20 {
21     rateval=document.getElementById("rate").value;
22     document.getElementById("rate_val").innerHTML=rateval+"%";
23 }
24 function checkPrincipal()
25 {
26     p=document.getElementById("principal").value;
27     if (p<0){
28         window.alert("Enter a positive value");
29         document.getElementById("principal").value="";
30         document.getElementById("principal").focus();
31     }
32 }
33 function hide()
34 {
35     document.getElementById('results').classList.toggle('hide');
36     document.getElementById('overlay').classList.toggle('hide');
37 }
38
```

## Output

### Simple Interest Calculator

Amount

Rate

10%

No. of Years

Compute

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### Simple Interest Calculator

Amount

10000

Rate

10%

No. of Years

If you deposit 10000 for 5 years at a rate of 10, you will get an interest of 5000 resulting to a total amount of 15000 by the end of 2028.

## **Learning outcomes and Conclusion**

In this program I learned to use toggle class. I also learned to use different element selectors in JavaScript and learned to manipulate different elements of the function. I also learned how to get the current date and manipulate the data accordingly. In addition to that, I learned about the different data types in JavaScript and how it reacts to different data types. I also learned about z-index and overlays which allowed me to create a better design for my code.

Hence, this was a fun program to do, and it helped me refresh my knowledge about JavaScript and also helped me learn new things. I enjoyed doing the project overall.