

Assignment - III

Title :- Perform validations using Javascript / JQuery.

Problem Statement :-

Perform validations using Javascript / JQuery on one of the application.

Objective :-

- i) To understand depth working of javascript & JQuery.
- ii) To use javascript & JQuery for providing validations, animation & effects to any web application.

H/W & S/W :- Eclipse IDE; 64 bit Fedora OS.

Theory :-

Javascript :- It was initially created to 'make webpages alive'.

The programs in this language are called as scripts. They can be written right in the HTML & execute automatically as the page loads.

Scripts are provided & executed as a plain text. They don't need special preparation or compilation to run. Javascript is very different from another language Java.

For instance in browser Javascript is able to

- (i) Add new HTML to page change the existing content, modify styles.
- (ii) Read the users reaction, run on mouse click pointer moments, key processor.
- (iii) Get & set cookies, ask questions to the visitor, show messages.
- (iv) Remember data on client side.
- (v) Sent request over the network to remote server, download & upload files.

JQuery :- getting started with JQuery can be easy or challenging, depending on your experience with javascript, HTML, CSS & programming concepts in general. One important thing to know is that JQuery is just a javascript library how it works as follows.

```
<!doctype HTML>
```

```
<html>
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title> Demo </title>
```

```
</head>
```

```
<body>
```

```
<a href="http://jquery.com">
```

```
jQuery </a>
```

```
<script src="jquery.js"> </script>
```

```
<script>
```

```
// your code
```

```
</script>
```

```
</body>
```

```
</html>
```


Callbacks & Functions :-

Unlike many other programming language, js enables you to freely pass function around to be executed at later time.

Callbacks without arguments

```
$ .get("myhtmlpage.html", mycallback());
```

- callback with arguments
executing callback with arguments
can be tricky

- wrong !

This one won't work.

```
$ .get("myhtmlpage.html", mycallback(param,  
param));
```

Conclusion :-

We successfully design the calculator, login validation using Javascript & JQuery.

$$1*6-3/2$$

1	2	3	+
4	5	6	-
7	8	9	/
0	C	=	*
.			

7.5

1	2	3	+
4	5	6	-
7	8	9	/
0	C	=	*
.			

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=
, initial-scale=1.0">
  <title>Document</title>
  <style>
    @import url('https://fonts.googleapis.com/css?family=Montserrat&display=swap');

    body {
      background: rgb(114, 32, 255);
      background: linear-gradient(to right, rgba(114, 32, 255, 1) 0%, rgba(30, 79, 224, 0.6895133053221288) 100
%);
    }

    input {
      border-radius: 20px;
      text-align: center;
      border: none;
      font-size: 20px;
      font-family: Montserrat, sans-serif;
    }

    button {
      margin-top: 5px;
      padding: 20px;
      font-size: 20px;
      font-family: Montserrat, sans-serif;
      border: 0.02px solid black;
    }

    .center {
      margin-top: 10%;
    }
  </style>
</head>

<body>
  <center>
    <div class="center">
      <input id="calc" type="text" placeholder="Result appears here">
      <br><br><br>

      <table>

        <tr>
          <td><button>1</button></td>
          <td><button>2</button></td>
          <td><button>3</button></td>
          <td><button>+</button></td>
        </tr>

```

```

        <tr>
            <td><button>4</button></td>
            <td><button>5</button></td>
            <td><button>6</button></td>
            <td><button>-</button></td>
        </tr>
        <tr>
            <td><button>7</button></td>
            <td><button>8</button></td>
            <td><button>9</button></td>
            <td><button>/</button></td>
        </tr>
        <tr>
            <td><button>0</button></td>
            <td><button>C</button></td>
            <td><button>=</button></td>
            <td><button>*</button></td>
        </tr>
        <tr>
            <td><button>.</button></td>
        </tr>
    </table>
    <br><br><br><br>

</div>
</center>
<script>
    var btns = document.getElementsByTagName("button");
    var calc = document.getElementById("calc");

    for (var thisBtn of btns) {
        thisBtn.addEventListener('click', function () {
            if (this.innerHTML == "=")
                calc.value = eval(calc.value);
            else if (this.innerHTML == "C")
                calc.value = "";
            else
                calc.value += this.innerHTML;
        })
    }
</script>
</body>

</html>

```