# Department of Computing

**CS-213: Advanced Programming**

**Class: BSCS 7AB**

# Lab 2: Javascript

**Date: 12 September, 2019**

**Time: 10:00-01:00pm & 02:00-05:00pm**

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# Lab 2: Javascript

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| Solution |
| Task Code:  <head>  <script language="javascript"></script>  <style>  \* {  padding: 0;  margin: 5px;  text-align: center;  border-radius: 10px;  }  body {  background-color:white;  position: center;  position:absolute;  top:200px;  left:500px;  }  .calculator {  width: 350px;  height: 320px;  background-color: #333;  box-shadow: 0px 0px 0px 10px #666;  border: 5px solid black;  border-radius: 10px;  }  #display {  width: 320px;  height: 40px;  text-align: right;  background-color: grey;  border: 3px solid white;  font-size: 18px;  left: 2px;  top: 2px;  color: #7fff00;  }  .btnTop{  color: white;  background-color: #6f6f6f;  font-size: 14px;  margin: auto;  width: 50px;  height: 25px;  }  .btnNum {  color: white;  background-color: black;  font-size: 14px;  margin: auto;  width: 50px;  height: 25px;  }  .btnMath {  color: white;  background-color: #ff4561;  font-size: 14px;  margin: auto;  width: 50px;  height: 25px;  }  .btnOpps {  color: white;  background-color: #ff9933;  font-size: 14px;  margin: auto;  width: 50px;  height: 25px;  }  </style>  </head>  <body>  <script>  function addChar(input, character) {  if(input.value == null || input.value == "0")  input.value = character  else  input.value += character  }  function sqrt(form) {  form.value = Math.sqrt(form.display.value);  }  function exp(form) {  form.value = Math.exp(form.display.value);  }  var globe=0;  function MS() {    var output=document.getElementById("display");  globe=output.value;  }  function MR() {    form.display.value=globe;  }  function MC() {    global=null;  }  function M() {    globe=globe+form.display.value;  }  var val = 0.0;  function percent(input) {  val = input.value;  input.value = 1/input.value;  }  function changeSign(input) {  if(input.value.substring(0, 1) == "-")  input.value = input.value.substring(1, input.value.length)  else  input.value = "-" + input.value  }  function compute(form) {  //if (val !== 0.0) {  // var percent = form.display.value;  // percent = pcent.substring(percent.indexOf("%")+1);  // form.display.value = parseFloat(percent)/100 \* val;  //val = 0.0;  // } else  form.display.value = eval(form.display.value);  }  function square(form) {  form.display.value = eval(form.display.value) \* eval(form.display.value)  }  function checkNum(str) {  for (var i = 0; i < str.length; i++) {  var ch = str.charAt(i);  if (ch < "0" || ch > "9") {  if (ch != "/" && ch != "\*" && ch != "+" && ch != "-" && ch != "."  && ch != "(" && ch!= ")" && ch != "%") {  alert("invalid entry!")  return false  }  }  }  return true  }  </script>  <form name="sci-calc">  <table class="calculator" cellspacing="0" cellpadding="1">  <tr>  <td colspan="5"><input id="display" name="display" value="0" size="28" maxlength="25"></td>  </tr>  <tr>  <td><input type="button" class="btnTop" name="btnTop" value="C" onclick="this.form.display.value= 0 "></td>  <td><input type="button" class="btnTop" name="btnTop" value="MS" onclick="MS()" ></td>  <td><input type="button" class="btnTop" name="btnTop" value="=" onclick="if(checkNum(this.form.display.value)) { compute(this.form) }"></td>  <td><input type="button" class="btnOpps" name="btnOpps" value="MR" onclick="MR()"></td>  <td><input type="button" class="btnMath" name="btnMath" value="1/x" onclick=" percent(this.form.display)"></td>  </tr>  <tr>  <td><input type="button" class="btnNum" name="btnNum" value="7" onclick="addChar(this.form.display, '7')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="8" onclick="addChar(this.form.display, '8')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="9" onclick="addChar(this.form.display, '9')"></td>  <td><input type="button" class="btnOpps" name="btnOpps" value="M+";" onclick="M()"></td>  <td><input type="button" class="btnMath" name="btnMath" value="/" onclick="addChar(this.form.display, '/')"></td>  <tr>  <td><input type="button" class="btnNum" name="btnNum" value="4" onclick="addChar(this.form.display, '4')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="5" onclick="addChar(this.form.display, '5')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="6" onclick="addChar(this.form.display, '6')"></td>  <td><input type="button" class="btnOpps" name="btnOpps" value="MC" onclick="MC()"></td>  <td><input type="button" class="btnMath" name="btnMath" value="\*" onclick="addChar(this.form.display, '\*')"></td>  </tr>  <tr>  <td><input type="button" class="btnNum" name="btnNum" value="1" onclick="addChar(this.form.display, '1')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="2" onclick="addChar(this.form.display, '2')"></td>  <td><input type="button" class="btnNum" name="btnNum" value="3" onclick="addChar(this.form.display, '3')"></td>  <td><input type="button" class="btnOpps" name="btnOpps" value="&radic;" onclick="if(checkNum(this.form.display.value)) { sqrt(this.form) }"></td>  <td><input type="button" class="btnMath" name="btnMath" value="-" onclick="addChar(this.form.display, '-')"></td>  </tr>  <tr>  <td><input type="button" class="btnMath" name="btnMath" value="&#177" onclick="changeSign(this.form.display)"></td>  <td><input type="button" class="btnNum" name="btnNum" value="0" onclick="addChar(this.form.display, '0')"></td>  <td><input type="button" class="btnMath" name="btnMath" value="&#46;" onclick="addChar(this.form.display, '&#46;')"></td>  <td><input type="button" class="btnOpps" name="btnOpps" value="x&#50;" onclick="if(checkNum(this.form.display.value)) { square(this.form) }"></td>  <td><input type="button" class="btnMath" name="btnMath" value="+" onclick="addChar(this.form.display, '+')"></td>  </tr>    </tabel>  </form>  </tr>  </table>  </form>  </body>      Task Output Screenshot: |

### Deliverables

Compile a single word document by filling in the solution part and submit this Word file on LMS. This lab grading policy is as follows: The lab is graded between 0 to 10 marks. The submitted solution can get a maximum of 5 marks. At the end of each lab or in the next lab, there will be a viva related to the tasks. The viva has a weightage of 5 marks. Insert the solution/answer in this document. You must show the implementation of the tasks in the designing tool, along with your complete Word document to get your work graded. You must also submit this Word document on the LMS. In case of any problems with submissions on LMS, submit your Lab assignments by emailing it to Ms. Ayesha Asif: [ayesha.asif@seecs.edu.pk](mailto:ayesha.asif@seecs.edu.pk).