

### Meter.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>Sensor Value</title>
5 </head>
6 <body>
7   <h1>Sensor Value</h1>
8   <meter id="meterBar" value="0" min="-10" max="10"
9   style="height:50px; width:300px">Meter Value</meter>
10  <p>Sensor Value is <span id="sensorValTxt"> 0 </span></p>
11
12  <script src="Lab10_Meter_Bennett.js"></script>
13 </body>
14 </html>
```

### Lab10\_Meter\_Bennett.js

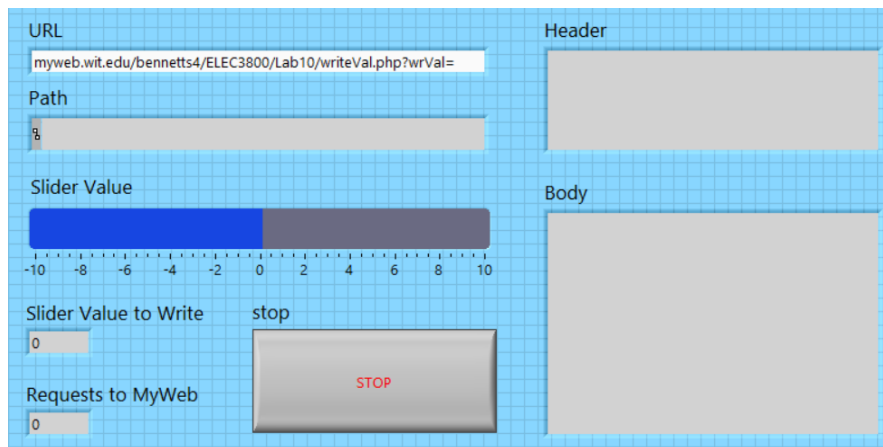
```
1 // Global Variables
2 var URL_strg = "http://myweb.wit.edu/bennetts4/ELEC3800/Lab10/readVal.php";
3 var timerDuration = 10; // How long to wait before refresh value (in ms)
4 var intervalTimer; // handle pointer to timer
5
6 // HTML DOM Element Variables
7 var meterBar;
8 var sensorValTxt;
9
10 // Functions
11 function init(){
12   meterBar = document.getElementById("meterBar");
13   sensorValTxt = document.getElementById("sensorValTxt");
14   // Call doHttpRequestForSensorVal after every timerDuration number of ms
15   intervalTimer = setInterval( doHttpRequestForSensorVal, timerDuration );
16 }
17
18 function doHttpRequestForSensorVal (){
19   console.log("Timer done. Callback function called. Now prepare to send HTTP Get\n" );
20   var reqW = new XMLHttpRequest(); // Make object to do this HTTP request
21   reqW.onreadystatechange = cbHttpReqListenerGetSensorValAndDisplay;
22   reqW.open("get", URL_strg, true); // Open HTTP Get for URL_strg
23   reqW.send(); // Send HTTP Request
24 }
25
26 function cbHttpReqListenerGetSensorValAndDisplay () {
27   // Wait until HTTP request is completed
28   if( (this.readyState == 4) ){
29     console.log("HTTP request completed. Status is " + this.status );
30     var newValAsStrg = findValueInResponseXML(this.responseText);
31     var newSensorVal = Number( newValAsStrg );
32     console.log(" New Sensor Value is " + newSensorVal );
33     meterBar.value = newSensorVal;
34     sensorValTxt.innerHTML = newValAsStrg;
35   }
36 }
37
```

```

38- function findValueInResponseXML(msg){
39     var sV0 = "<Value>";
40     var sV1 = "</Value>";
41     return( msg.slice( (msg.indexOf(sV0)) + (sV0.length), msg.indexOf(sV1) ) );
42 }
43
44 // Function Calls
45 window.onload = init;

```

### Front Panel



### Block Diagram

