PSP0 Project Plan Summary

Student	1702861 - Sergio Osvaldo Magaña González	Date	14-Sept-2020
Program	Calculo de la Media y la desviación estándar	Program #	01
Instructor	Dr. Felipe de Jesús Rodríguez García	Language	Java script

Time in Phase (min.)	**Plan**	**Actual**	**To Date**	**To Date %**
Planning		17	17	7.6%
Design		21	21	9.5%
Code		44	44	19.9%
Compile		92	92	41.6%
Test		35	35	15.83%
Postmortem		12	12	5.4%
Total	480	221	221	100%

Defects Injected	**Actual**	**To Date**	**To Date %**
Planning	1	1	25 %
Design			
Code	3	3	75 %
Compile			
Test			
Total Development	4	4	100 %

Defects Removed	**Actual**	**To Date**	**To Date %**
Planning	1	1	25 %
Design			
Code			
Compile	2	2	50 %
Test	1	1	25 %
Total Development	4	4	100 %
After Development			

PSP Time Recording Log

Student	1702861 – Sergio Osvaldo Magaña Gonzalez	Date	14 – Sept - 2020
Program	Calculo de la media y la desviacion estandar	Program #	01
Instructor	Dr. Felipe de Jesus Rodriguez García	Language	JavaScript

Project	Phase	Start Date and Time	Int. Time	Stop Date and Time	Delta Time	Comments
Programa 1	Planeacion	13 Septiembre 2020 -12:00		13 Septiembre 2020 -12:17	17	
Programa 1	Diseño	13 Septiembre 2020 -12:17		13 Septiembre 2020 -12-38	21	
Programa 1	Codigo	13 Septiembre 2020 -12:38	30	13 Septiembre 2020 -13:52	44	Tiempo interrumpido por la hora de comida.
Programa 1	Compilar	13 Septiembre 2020 -13:52		13 Septiembre 2020 -15:24	92	
Programa 1	Pruebas	14 Septiembre 2020 -15:37		14 Septiembre 2020 -16:12	35	
Programa 1	Postmortem	14 Septiembre 2020 -16:13		14 Septiembre 2020 -16:25	12	

PSP Defect Recording Log

Defect Types	
10 Documentation	60 Checking
20 Syntax	70 Data
30 Build, Package	80 Function
40 Assignment	90 System
50 Interface	100 Environment

Student	1702861 – Sergio Osvaldo Magaña Gonzalez	Date	14 – Sept - 2020
Program	Calculo de la media y la desviacion estandar	Program #	01
Instructor	Dr. Felipe de Jesus Rodriguez García	Language	javaScript

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.
Programa 1	13.Sept	01	10	Planeacion	Planeacion	10	x

Description: Comprender la documentacion, asignar un orden

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.
Programa 1	13.Sept	02	80	Codigo	Compilacion	34	X

Description: Leer las variables y guardar en la lista

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.
Programa 1	13.Sept	03	80	Codigo	Compilacion	40	X

Description: Defecto en la logica de leer y resolver el problema, primero me hacia la operacion y despues leia los datos capturados

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.
Programa 1	14-Sept	04	60	Codigo	Test	15	

Description: Defecto en imprimir los resultados

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.

Description:

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.

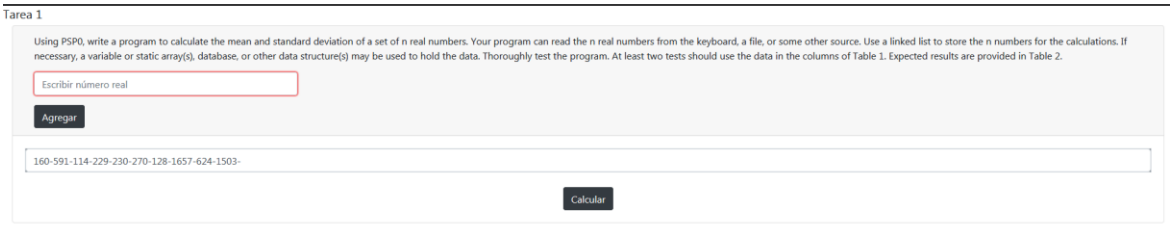
Description:

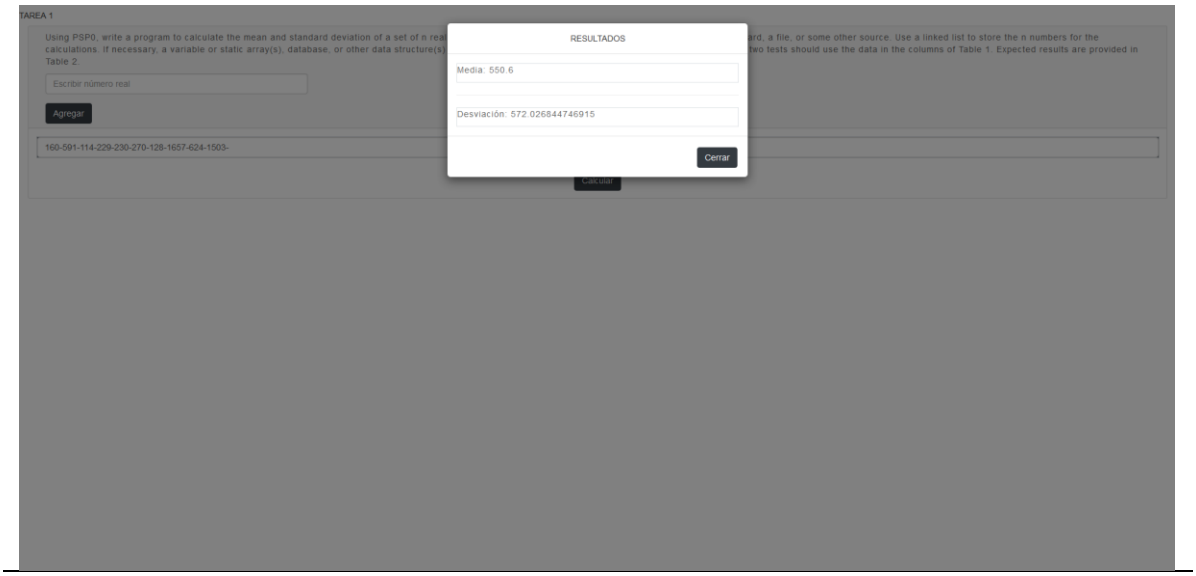
Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.

Description:

Project	Date	Number	Type	Inject	Remove	Fix Time	Fix Ref.

Description:






```
<!DOCTYPE html>
<html>

<head>
  <meta charset="utf-8">
  <meta http-equiv="x-ua-compatible" content="ie=edge">
  <title>
    ESTIMACIÓN Y PLANEACION DE SOL. COMP. B ING. DE S.
  </title>
  <meta name="description" content="">
  <meta name="viewport" content="width=device-width, initial-scale=1">

<!-- Boostrap 4-->
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/
4.4.1/css/bootstrap.min.css" integrity="sha384-
Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh" crossori
gin="anonymous">
<!-- iconos -->
<script src="https://kit.fontawesome.com/86322b1947.js" crossorigin="anony
mous"></script>
<!-- Barra -->
<link href="https://fonts.googleapis.com/css?family=Raleway:400,300,600,80
0,900" rel="stylesheet" type="text/css">
```

```
<!------ JQUERY PARA USAR AJAX ----->
<script
src="https://code.jquery.com/jquery-3.3.1.min.js"
integrity="sha256-FgpCb/KJQlLNfOu91ta32o/NMZxltwRo8QtmkMRdAu8="
crossorigin="anonymous"></script>

<link rel="stylesheet" href="css/style.css">

<!-- CSS only -->
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/
4.5.0/css/bootstrap.min.css" integrity="sha384-
9aIt2nRpC12Uk9gS9baDl411NQApFmC26EwAOH8WgZl5MYYxFfc+NcPb1dKGj7Sk" crossori
gin="anonymous">

<!-- JS, Popper.js, and jQuery -->
<script src="https://code.jquery.com/jquery-
3.5.1.slim.min.js" integrity="sha384-
DfXdz2htPH0lsSSs5nCTpuj/zy4C+OGpamoFVy38MVBnE+IbbVYUew+OrCXaRkfj" crossori
gin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.16.0/dist/umd/popper
.min.js" integrity="sha384-
Q6E9RHvbIyZFJoft+2mJbHaEWldlvI9IOYy5n3zV9zzTtmI3UksdQRVvoxMfooAo" crossori
gin="anonymous"></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/js/bootstr
ap.min.js" integrity="sha384-
OgVRvuATP1z7JjHLkuOU7Xw704+h835Lr+6QL9UvYjZE3Ipu6Tp75j7Bh/kR0JKI" crossori
gin="anonymous"></script>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4
.1/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min
.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.
min.js"></script>
<script type="text/javascript" src="js/Lista.js"></script>
</head>

<body">
  <h5 >Tarea 1</h5>

  <div class="container-fluid">

    <div class="card">
      <div class="card-header">
```

```
        <section class="col-md-12">
          <section class="row">
            <div class="col-md-12">
              <p>Using PSP0, write a program to calculate the mean and sta
ndard deviation of a set of n real numbers.
                Your program can read the n real numbers from the keyboard
,
                a file, or some other source. Use a linked list to store t
he n numbers for the calculations. If
                necessary, a variable or static array(s),
                database, or other data structure(s) may be used to hold t
he data. Thoroughly test the program. At
                least two tests should use the data in the columns of Tabl
e 1.
                Expected results are provided in Table 2.</p>
            </div>

            <div class="col-md-3">
              <div class="form-group">
                <input type="text" class="form-
control" id="Dato" name="Dato" maxlength="128"
                  placeholder="Escribir número real" required>
              </div>
            </div>

            <div class="col-12">
              <button type="submit" class="btn btn-
dark" onclick="Agregar()">Agregar</button>
            </div>
          </section>
        </section>
      </div>
      <div class="card-body">
        <!--==== SECCION DE Lista =====-->
        <div class="border bg-secondary text-white">
          <input type="text" class="form-
control" id="Lista" name="Dato" maxlength="128"
            placeholder="Escribir número real">
        </div>
        <br>
        <!--==== Button =====-->
        <div class="form-row text-center">
          <div class="col-12">
            <button type="submit" class="btn btn-
dark" onclick="Calcular()">Calcular</button>
```

```
          </div>
        </div>
      </div>
    </div>

  </div>


  <!-- Modal Encuesta Vacia-->
  <div class="modal fade" id="myModalVacio" tabindex="-
1" role="dialog" aria-labelledby="exampleModalLabel"
    aria-hidden="true">
    <div class="modal-dialog" role="document">
      <div class="modal-content">
        <div class="modal-header">
          <h5 class="modal-title">Resultados</h5>
        </div>
        <div class="modal-body">
          <div class="border  ">
            <p>Media: <span id="Media"></span></p>
          </div>
          <hr>
          <!--==== SECCION DE Desviacion ====-->
          <div class="border ">
            <p>Desviación: <span id="Desviacion"></span></p>
          </div>
        </div>
        <div class="modal-footer">
          <button type="button" class="btn btn-dark" data-
dismiss="modal">Cerrar</button>
        </div>
      </div>
    </div>
  </div>
  </body>

</html>
```

```
function list() {
    this.head = null;
    this.tail = null;
    this.long = null;
```

```
    this.createNode = function (data) { //Constructor
        return {
            data: data,
            next: null
        }
    };

    this.addNode = function (data) { //Agregar nodo
        if (this.head == null) {
            this.tail = this.createNode(data);
            this.head = this.tail;
            this.long++;
        } else {
            this.tail.next = this.createNode(data);
            this.tail = this.tail.next;
            this.long++;
        }
        this.MostrarLista();
    };

    this.printNode = function () { //Imprimir cada nodo
        var x = this.head;
        var dato="";
        while (x != null) {
            dato += x.data+"-";
            x = x.next;
        }
        return dato;
    };

    this.getMedia = function () { //Calcular la media con todos los nodos
        var x = this.head;
        let resultado = 0;

        while (x != null) {
            resultado = resultado + parseInt(x.data);
            x = x.next;
        }
        resultado = resultado / this.long;
        return resultado;
    }

    this.getDesviacionST = function () { //Calcula la desviacion estandar
        var Media = this.getMedia();
        var x = this.head;
```

```
        let Sumatoria = 0;
        let Desviacion = 0;
        while (x != null) {
            Sumatoria = Sumatoria + Math.pow((x.data - Media), 2);
            x = x.next;
        }
        Desviacion = Math.sqrt((Sumatoria / (this.long - 1)));
        return Desviacion;
    }

    this.MostrarLista = function () {//Imprime la lista en el div
        var x = this.printNode();//Trae los valores de la lista
        document.getElementById("Lista").value = x;

    }

    this.MostrarMedia = function () {
        var x = this.getMedia();
        var N_Nodo = document.getElementById("Media");
        var newText = document.createTextNode(x);
        N_Nodo.textContent = "";
        N_Nodo.appendChild(newText);
    }

    this.MostrarDesviacion = function () {
        var x = this.getDesviacionST();//Muestra resultado de Desviacion
        var N_Nodo = document.getElementById("Desviacion");
        var newText = document.createTextNode(x);
        N_Nodo.textContent = "";
        N_Nodo.appendChild(newText);
    }
}

const linkedList = new list();

function Agregar() {
    var dato = document.getElementById("Dato").value;
    linkedList.addNode(dato);
    document.getElementById("Dato").value = "";
}

function Calcular() {
    linkedList.MostrarMedia();
    linkedList.MostrarDesviacion();
```

```
    $("#myModalVacio").modal();
}
```