



Universidad de las Fuerzas Armadas ESPE

Departamento de Ciencias de la Computación

Programación Integrativa de Componentes Web

Tarea 2

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Fecha de entrega: 20/06/2024

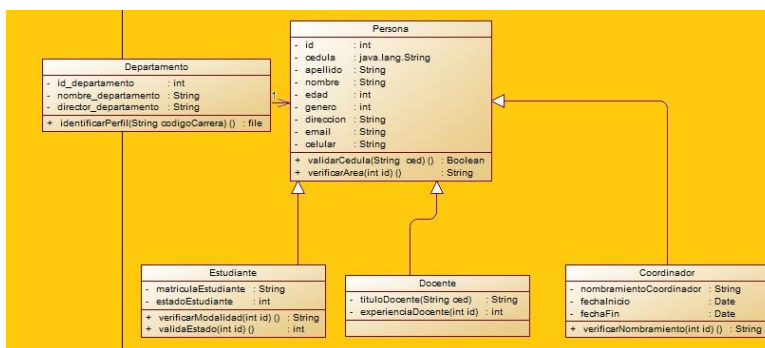
Tarea 1.1: realizar una aplicación web en javascript implementando Oriented Object Programming

OBJETIVO: aplicar los fundamentos y principios del paradigma Oriented Object Programming OOP en JavaScript, para resolver ejercicios de las esferas de actuación profesional.

OBJETO DE APRENDIZAJE: esquemas OOP-JS

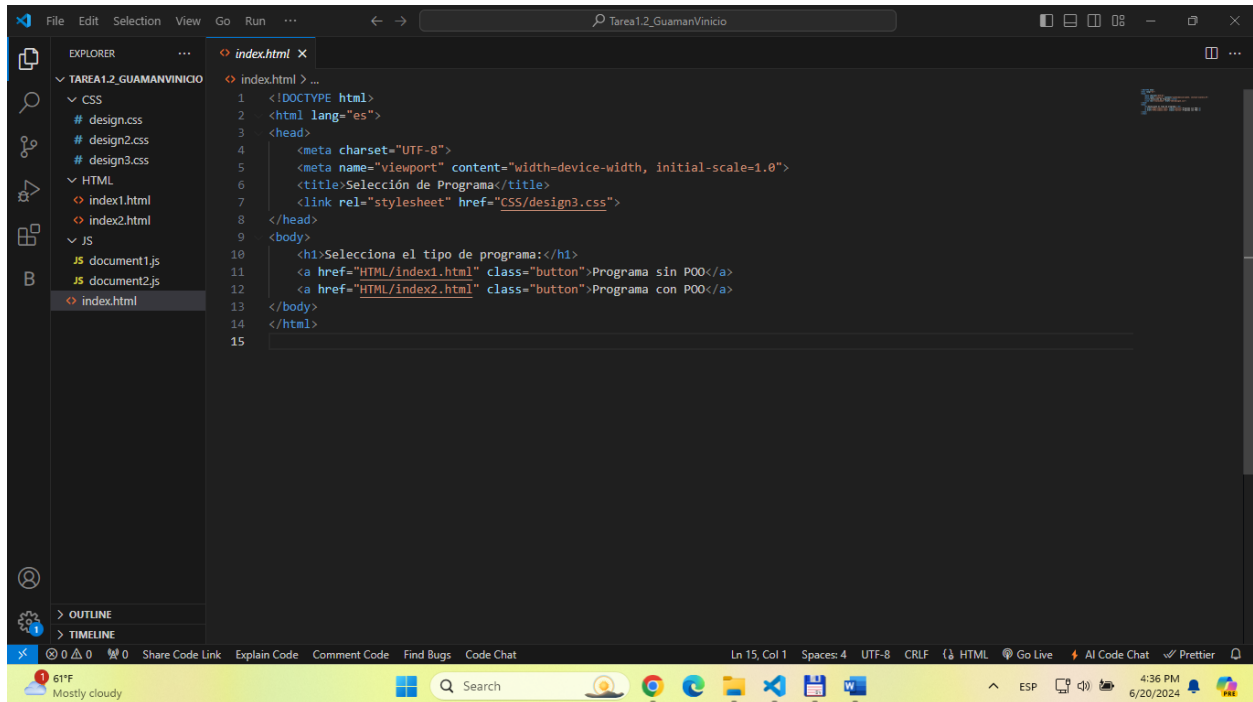
ACTIVIDADES DE APRENDIZAJE

- Revisar el material propuesto por el docente Tutor y otras fuentes de repositorios web 2.0 adecuadas
- Generar una aplicación web que evidencie el desarrollo de aplicaciones web desde un esquema de modelo de clases con generalización, asociación, agregación, composición.



- El estudiante propondrá su propio modelo de clases para su aplicación, que es INDIVIDUAL, y orientado el desarrollo por Problemas y Desarrollo por proyectos. ABP. (caso del mundo real)

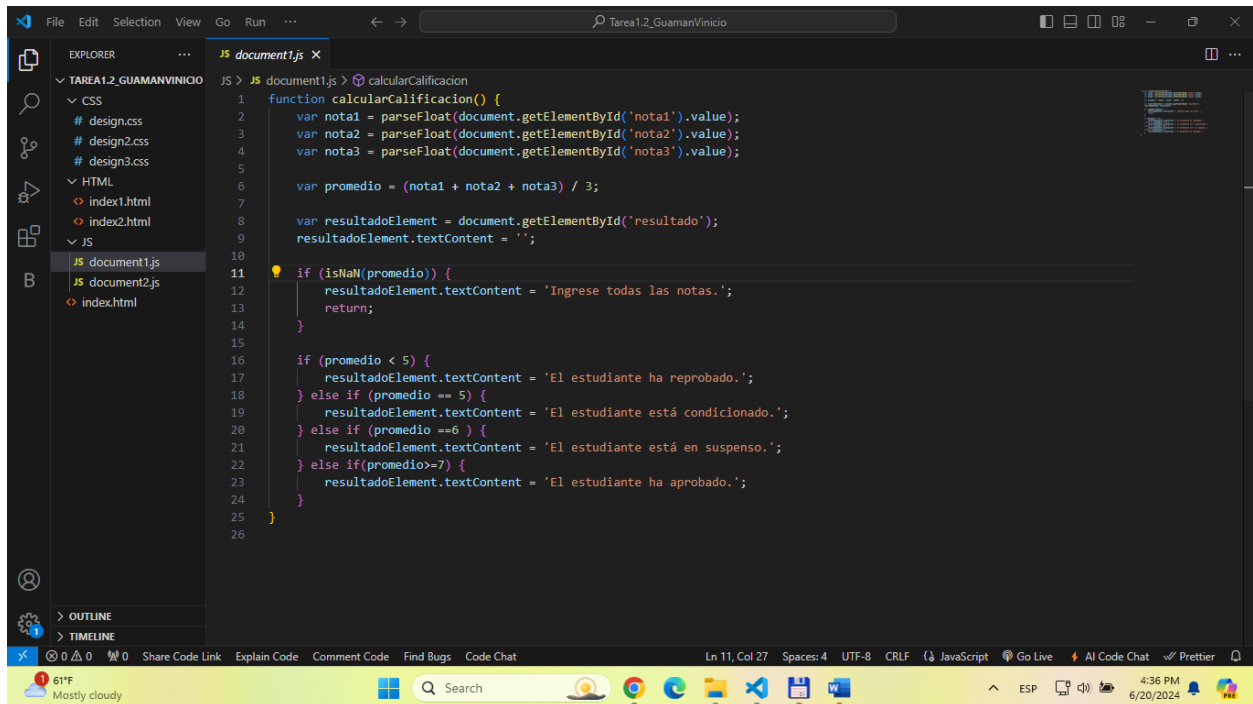
Index.html



The screenshot shows the Visual Studio Code editor with the file explorer on the left displaying a project named 'TAREA1.2_GUAMANVINICIO'. The 'index.html' file is selected and open in the main editor. The code is an HTML document with a title 'Selección de Programa' and two buttons: 'Programa sin P00' and 'Programa con P00'. The status bar at the bottom indicates the file is at line 15, column 1, using UTF-8 encoding and CRLF line endings.

```
1 <!DOCTYPE html>
2 <html lang="es">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Selección de Programa</title>
7   <link rel="stylesheet" href="CSS/design3.css">
8 </head>
9 <body>
10  <h1>Selecciona el tipo de programa:</h1>
11  <a href="HTML/index1.html" class="button">Programa sin P00</a>
12  <a href="HTML/index2.html" class="button">Programa con P00</a>
13 </body>
14 </html>
15
```

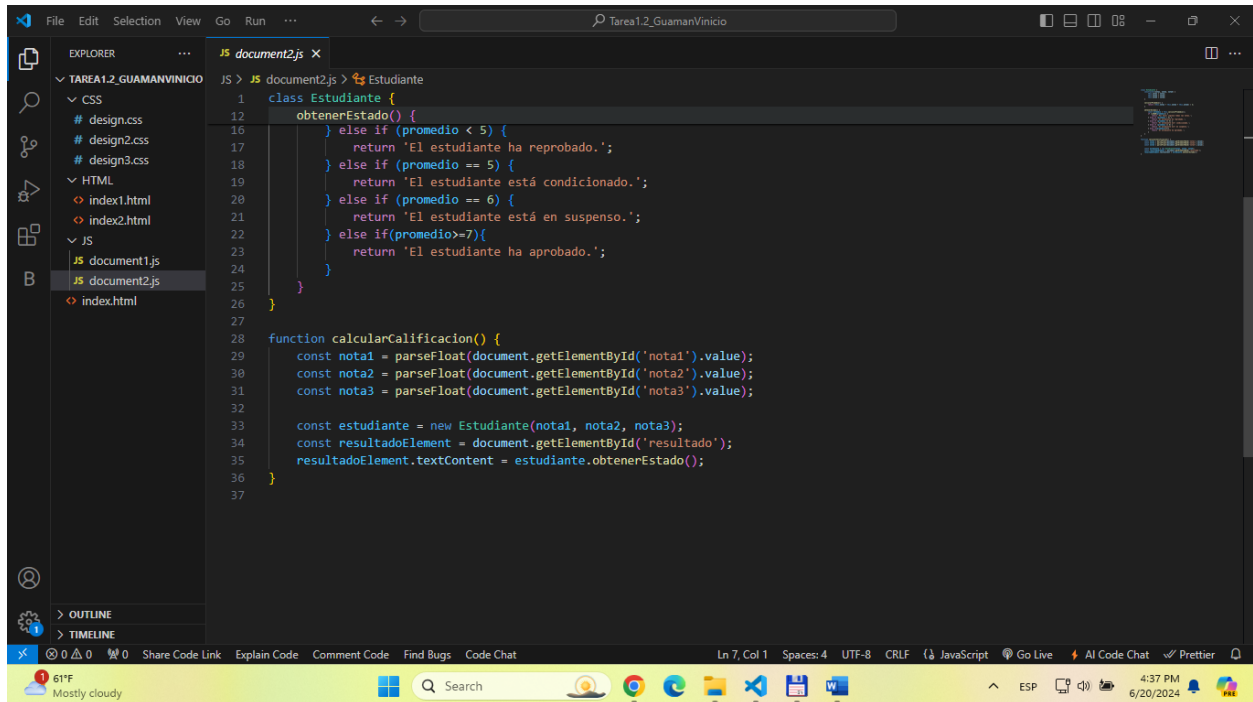
Document1.js



The screenshot shows the Visual Studio Code editor with the file explorer on the left displaying the same project. The 'document1.js' file is selected and open in the main editor. The code is a JavaScript function 'calcularCalificacion' that calculates the average of three grades and displays the result. The status bar at the bottom indicates the file is at line 11, column 27, using UTF-8 encoding and CRLF line endings.

```
1 function calcularCalificacion() {
2   var nota1 = parseFloat(document.getElementById('nota1').value);
3   var nota2 = parseFloat(document.getElementById('nota2').value);
4   var nota3 = parseFloat(document.getElementById('nota3').value);
5
6   var promedio = (nota1 + nota2 + nota3) / 3;
7
8   var resultadoElement = document.getElementById('resultado');
9   resultadoElement.textContent = '';
10
11   if (isNaN(promedio)) {
12     resultadoElement.textContent = 'Ingrese todas las notas.';
13     return;
14   }
15
16   if (promedio < 5) {
17     resultadoElement.textContent = 'El estudiante ha reprobado.';
18   } else if (promedio == 5) {
19     resultadoElement.textContent = 'El estudiante está condicionado.';
20   } else if (promedio == 6) {
21     resultadoElement.textContent = 'El estudiante está en suspenso.';
22   } else if (promedio >= 7) {
23     resultadoElement.textContent = 'El estudiante ha aprobado.';
24   }
25 }
26
```

Document2.js

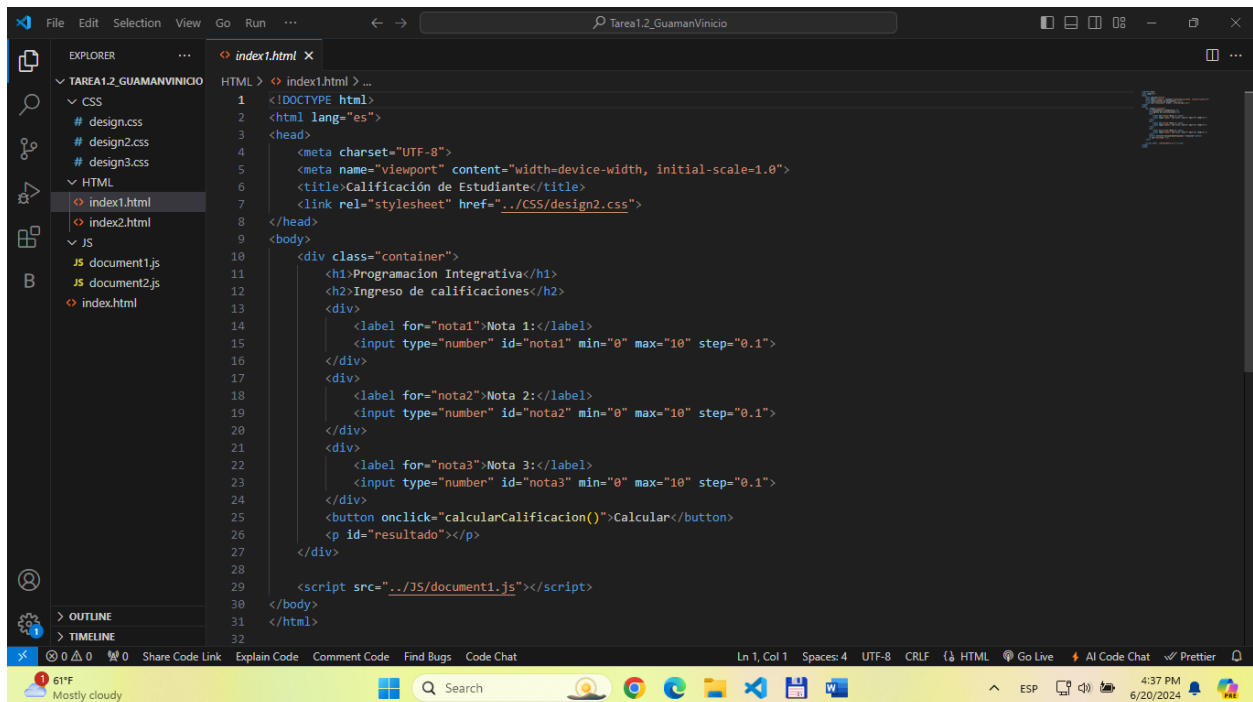


The screenshot shows the Visual Studio Code editor with the file 'document2.js' open. The Explorer sidebar on the left shows a project named 'TAREA1.2_GUAMANVINICIO' with subfolders for CSS, HTML, and JS. The JS folder contains 'document1.js', 'document2.js' (selected), and 'index.html'. The main editor area displays the following JavaScript code:

```
1 class Estudiante {
2   obtenerEstado() {
3     if (promedio < 5) {
4       return 'El estudiante ha reprobado.';
5     } else if (promedio == 5) {
6       return 'El estudiante está condicionado.';
7     } else if (promedio == 6) {
8       return 'El estudiante está en suspenso.';
9     } else if (promedio >= 7) {
10      return 'El estudiante ha aprobado.';
11    }
12  }
13 }
14
15 function calcularCalificacion() {
16   const nota1 = parseFloat(document.getElementById('nota1').value);
17   const nota2 = parseFloat(document.getElementById('nota2').value);
18   const nota3 = parseFloat(document.getElementById('nota3').value);
19
20   const estudiante = new Estudiante(nota1, nota2, nota3);
21   const resultadoElement = document.getElementById('resultado');
22   resultadoElement.textContent = estudiante.obtenerEstado();
23 }
24
25
26
27
28
29
30
31
32
33
34
35
36
37
```

The status bar at the bottom indicates the file is at line 7, column 1, with 4 spaces, UTF-8 encoding, and CRLF line endings. It also shows various extensions like JavaScript, Go Live, AI Code Chat, and Prettier.

Index1.html

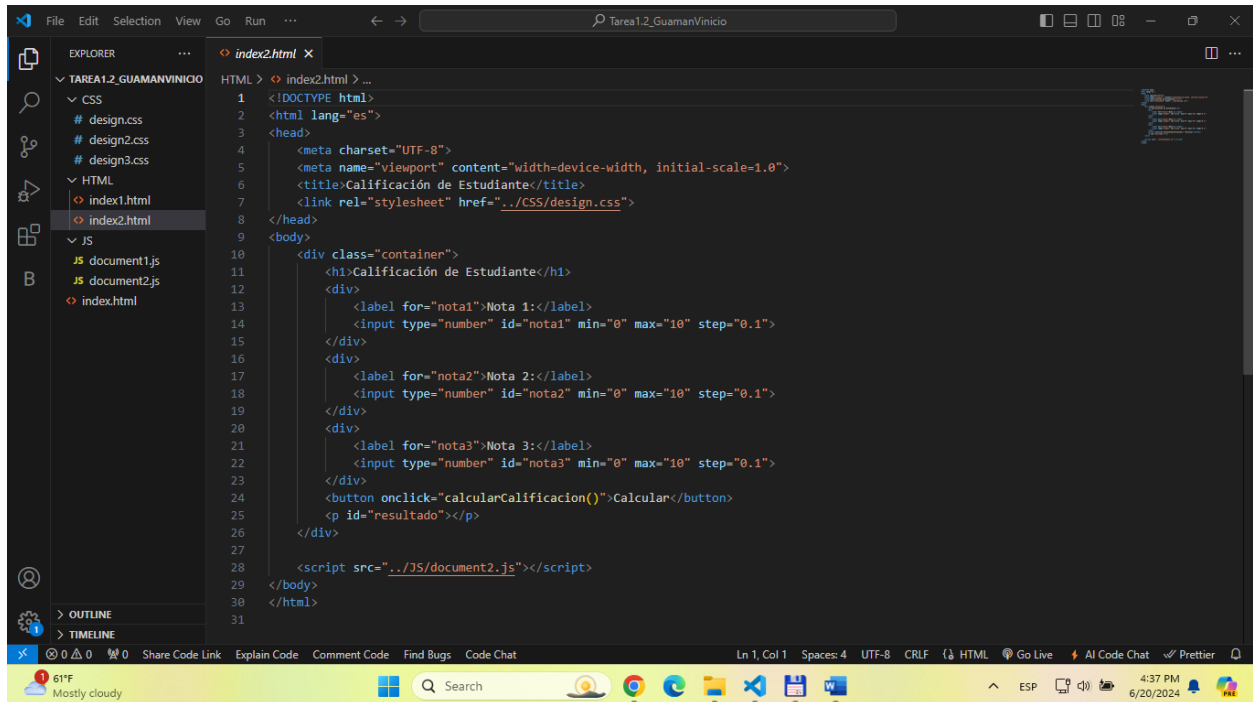


The screenshot shows the Visual Studio Code editor with the file 'index1.html' open. The Explorer sidebar on the left shows the same project structure as the previous image. The main editor area displays the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="es">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Calificación de Estudiante</title>
7   <link rel="stylesheet" href="../CSS/design2.css">
8 </head>
9 <body>
10   <div class="container">
11     <h1>Programación Integrativa</h1>
12     <h2>Ingreso de calificaciones</h2>
13     <div>
14       <label for="nota1">Nota 1:</label>
15       <input type="number" id="nota1" min="0" max="10" step="0.1">
16     </div>
17     <div>
18       <label for="nota2">Nota 2:</label>
19       <input type="number" id="nota2" min="0" max="10" step="0.1">
20     </div>
21     <div>
22       <label for="nota3">Nota 3:</label>
23       <input type="number" id="nota3" min="0" max="10" step="0.1">
24     </div>
25     <button onclick="calcularCalificacion()">Calcular</button>
26     <p id="resultado"></p>
27   </div>
28   <script src="../JS/document1.js"></script>
29 </body>
30 </html>
```

The status bar at the bottom indicates the file is at line 1, column 1, with 4 spaces, UTF-8 encoding, and CRLF line endings. It also shows various extensions like HTML, Go Live, AI Code Chat, and Prettier.

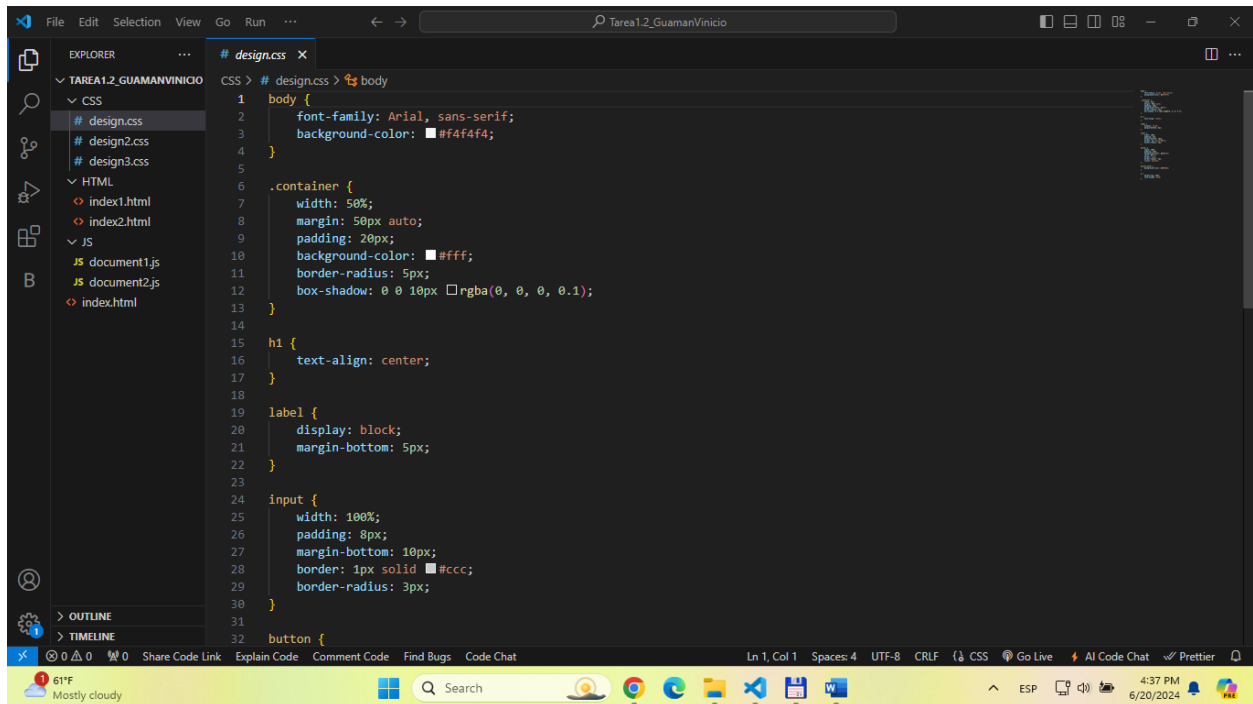
Index2.html



The screenshot shows the VS Code editor with the file explorer on the left. The 'index2.html' file is selected and its content is displayed in the main editor. The code is an HTML document with a head section containing meta tags for charset, viewport, and title, and a link to 'design.css'. The body section contains a container with three labels, each followed by a number input field, and a button labeled 'Calcular' that triggers a JavaScript function 'calcularCalificacion()'. The status bar at the bottom shows the file is at line 1, column 1, with 4 spaces, UTF-8 encoding, and CRLF line endings.

```
1 <!DOCTYPE html>
2 <html lang="es">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Calificación de Estudiante</title>
7   <link rel="stylesheet" href="../CSS/design.css">
8 </head>
9 <body>
10   <div class="container">
11     <h1>Calificación de Estudiante</h1>
12     <div>
13       <label for="nota1">Nota 1:</label>
14       <input type="number" id="nota1" min="0" max="10" step="0.1">
15     </div>
16     <div>
17       <label for="nota2">Nota 2:</label>
18       <input type="number" id="nota2" min="0" max="10" step="0.1">
19     </div>
20     <div>
21       <label for="nota3">Nota 3:</label>
22       <input type="number" id="nota3" min="0" max="10" step="0.1">
23     </div>
24     <button onclick="calcularCalificacion()">Calcular</button>
25     <p id="resultado"></p>
26   </div>
27   <script src="../JS/document2.js"></script>
28 </body>
29 </html>
30
```

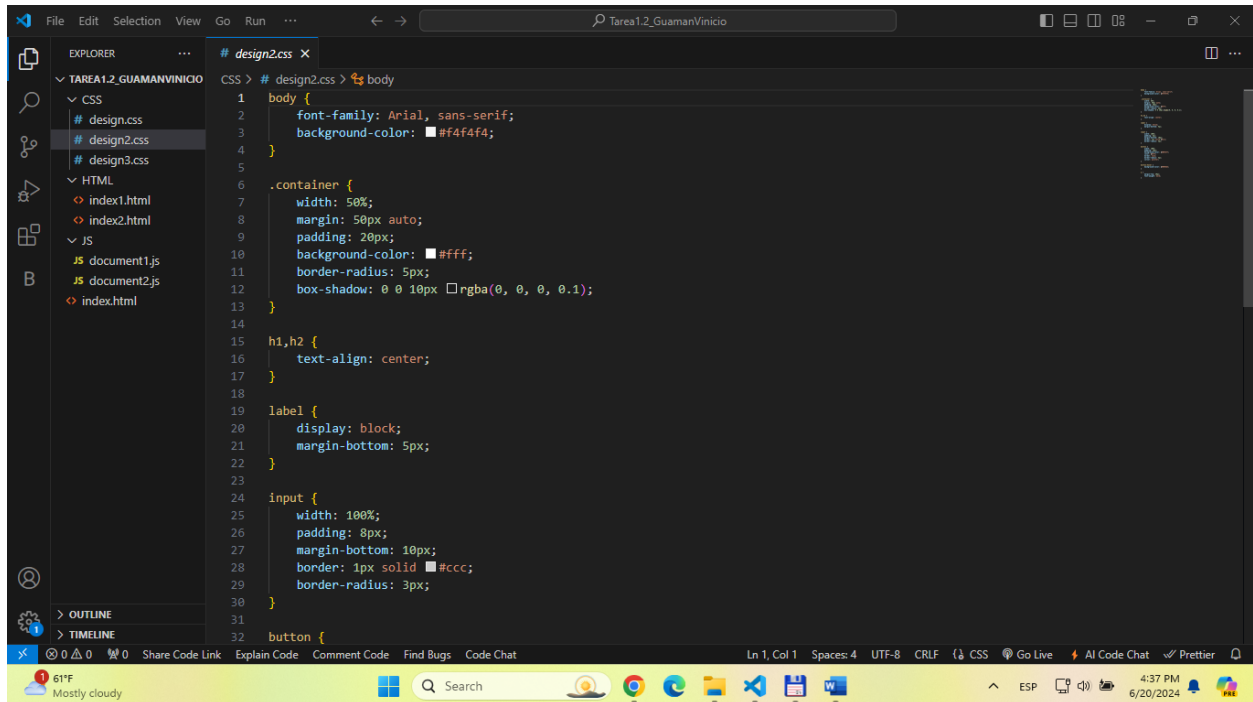
Design.css



The screenshot shows the VS Code editor with the file explorer on the left. The 'design.css' file is selected and its content is displayed in the main editor. The code defines styles for the body, container, h1, label, input, and button. The body has a font-family of Arial, sans-serif, and a background-color of #f4f4f4. The container has a width of 50%, margin of 50px auto, padding of 20px, background-color of #fff, border-radius of 5px, and a box-shadow. The h1 is centered. The label is block and has a margin-bottom of 5px. The input has a width of 100%, padding of 8px, margin-bottom of 10px, border of 1px solid #ccc, and border-radius of 3px. The button is not styled in this file.

```
1 body {
2   font-family: Arial, sans-serif;
3   background-color: #f4f4f4;
4 }
5
6 .container {
7   width: 50%;
8   margin: 50px auto;
9   padding: 20px;
10  background-color: #fff;
11  border-radius: 5px;
12  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
13 }
14
15 h1 {
16   text-align: center;
17 }
18
19 label {
20   display: block;
21   margin-bottom: 5px;
22 }
23
24 input {
25   width: 100%;
26   padding: 8px;
27   margin-bottom: 10px;
28   border: 1px solid #ccc;
29   border-radius: 3px;
30 }
31
32 button {
```

Design2.css

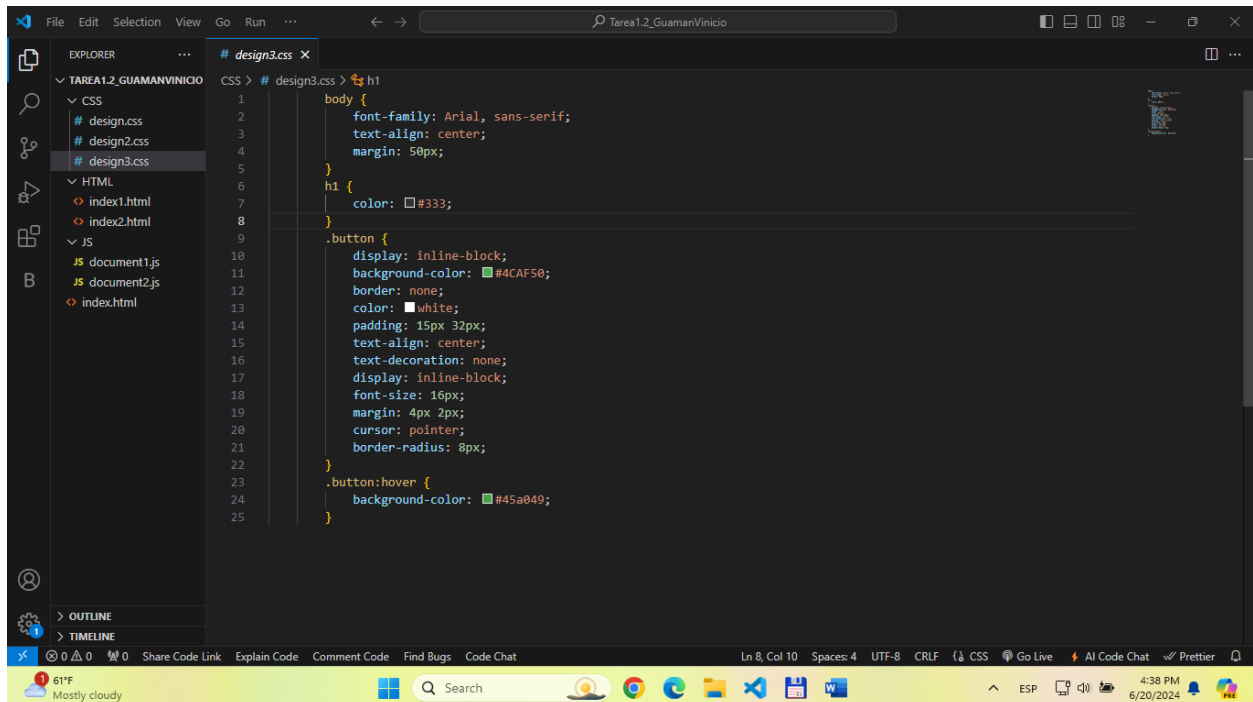


The screenshot shows the Visual Studio Code editor with the file explorer on the left displaying a project named 'TAREA1-2_GUAMANVINICIO'. The 'CSS' folder is expanded, showing 'design2.css' as the active file. The main editor area displays the CSS code for 'design2.css'.

```
1 body {  
2   font-family: Arial, sans-serif;  
3   background-color: #f4f4f4;  
4 }  
5  
6 .container {  
7   width: 50%;  
8   margin: 50px auto;  
9   padding: 20px;  
10  background-color: #fff;  
11  border-radius: 5px;  
12  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);  
13 }  
14  
15 h1, h2 {  
16   text-align: center;  
17 }  
18  
19 label {  
20   display: block;  
21   margin-bottom: 5px;  
22 }  
23  
24 input {  
25   width: 100%;  
26   padding: 8px;  
27   margin-bottom: 10px;  
28   border: 1px solid #ccc;  
29   border-radius: 3px;  
30 }  
31  
32 button {
```

The status bar at the bottom indicates the current position is 'Ln 1, Col 1' with 'Spaces: 4' and 'UTF-8' encoding. The system tray shows the date and time as '6/20/2024 4:37 PM'.

Design3.css



The screenshot shows the Visual Studio Code editor with the file explorer on the left displaying the same project. The 'CSS' folder is expanded, and 'design3.css' is the active file. The main editor area displays the CSS code for 'design3.css'.

```
1 h1  
2   font-family: Arial, sans-serif;  
3   text-align: center;  
4   margin: 50px;  
5 }  
6  
7 h1 {  
8   color: #333;  
9 }  
10  
11 .button {  
12   display: inline-block;  
13   background-color: #4CAF50;  
14   border: none;  
15   color: white;  
16   padding: 15px 32px;  
17   text-align: center;  
18   text-decoration: none;  
19   display: inline-block;  
20   font-size: 16px;  
21   margin: 4px 2px;  
22   cursor: pointer;  
23   border-radius: 8px;  
24 }  
25 .button:hover {  
26   background-color: #45a049;  
27 }
```

The status bar at the bottom indicates the current position is 'Ln 8, Col 10' with 'Spaces: 4' and 'UTF-8' encoding. The system tray shows the date and time as '6/20/2024 4:38 PM'.

Salida del programa

← → ↻ ⓘ localhost:81/INTEGRATIVA_PROJECTS/Tarea1.2_GuamanVinicio/ ☆ 🔍 📄

Selecciona el tipo de programa:

Programa sin POO

Programa con POO

← → ↻ ⓘ localhost:81/INTEGRATIVA_PROJECTS/Tarea1.2_GuamanVinicio/HTML/index1.html ☆ 🔍 📄

Programacion Integrativa

Ingreso de calificaciones

Nota 1:

Nota 2:

Nota 3:

Calcular

Calificación de Estudiante

Nota 1:

Nota 2:

Nota 3:

Calcular