Date: 04/09/2025

Project / Module: Midterm I

Goals for the documented session

- Style an index webpage with CSS.
- Code in HTML with structure.
- Use the resources we've learned in classes: div, classes, tags, modify color, background-color, fonts, position, align text, etc.
- Copy the design that was asked for in the exercise.

Tasks Completed

- Practice CSS and HTML.
- Used div to section the rectangles in the webpage.
- Used tags from HTML to give structure to the elements in the webpage.
- Arranged and styled the text with CSS properties: padding, text-align, color, margin, font size and length, line-height...
- Arranged the "divs" with CSS properties: box-sizing, background-color, borderradius, width and height, display, flex elements...

Use of Gen Al

ChatGPT

```
como agregas separación entre un h1 y un h2?

¡Muy buena! 
La separación entre elementos en HTML (como un <h1> y un <h2> ) normalmente se hace con márgenes en CSS.

Por ejemplo:

css

Copiar código

h1 {
margin-bottom: 20px; /* espacio debajo del h1 */
}

h2 {
margin-top: 10px; /* espacio arriba del h2 */
}
```

Prompt:

Edits: Added that line to my code and change the pixel value depending on what I needed.

Reflection: Helped me to know the property that separate headers.

Prompt: What's the difference between padding and margin?



- Margin → lo que separa la caja de otras cajas.
- Padding → lo que separa el contenido del borde de la caja.

Output:

Edits: I used marging to separate the text from each other and padding to separate the text from the borders.

Reflection: That allowed me to understand when to use padding and marging in the code.

Prompt: How to add line spacing?

Output: El **interlineado en un párrafo** (la separación vertical entre líneas de texto) en CSS se controla con la propiedad **line-height**. **Puedes usar diferentes formas:**

- 1. **Número relativo** → line-height: 1.5; (lo más recomendado).
- 2. **Valor absoluto** → line-height: 24px; (fijo, no importa el tamaño de la fuente).
- 3. **Porcentaje** → line-height: 150%; (igual que 1.5).

Edit: I chose the option that was better to achieve my goals. I used a fixed value (25px) because I didn't need to do any extra calculations. I only wanted to separate some texts from others.

Reflection: I found out the property line-height and understand what you can do with it.

 Prompt: "¿Por qué cuándo le pongo el padding en divprincipal el texto se acomoda, pero cuando lo pongo en div abajoderecha se hace más chiquita la div?" Output: "En un contenedor flex, cuando dices width: 50%, ese **50% es de todo el ancho de .abajoprincipal**. Luego, al aplicar padding, aunque uses borderbox, **el área del contenido disponible se reduce** porque el padding "se come" parte de ese 50%."

Prompt: "Pero también lo tengo en derechaabajo.

Output: "Sí, tanto .principal como .derechaabajo tienen box-sizing: border-box;, pero no es lo mismo aplicarlo en un contenedor fijo que en un contenedor proporcional (width: 50%)."

Edits: I edited my code based on what AI had explained.

Reflection: Thanks to the conversation I understood the problem and started to amend the code correctly. Before that I was only deleting and changing lines to see if the changes made me notice anything, but it was going to take me a long time.

Prompt: "How to set a p tag next to another instead of going down?"

Output: display: inline-block, display:inline, Flexbox.

Edits: I chose to use display:inline because I only wanted to put two short p tags next to each other.

Reflection: I didn't understand the AI explanation about the differences between the three options, so I went to the presentations, and I understood them.

Prompt: "How to center a div?"

Output: It gave me four coded options. Margin: auto, Flexbox, Grid, Position and Transform.

```
.caja {
  position: absolute;
  top: 50%;
  left: 50%;
  transform: translate(-50%, -50%);
}
```

Edit: I chose to use the last one because it looked easier to manage. It helped me to understand how to move other divs too. I changed the position to a fixed position because I wanted the element to be there always and didn't want the element to move with other objects or anything. Also, that is not the name of my class.

Reflection: This code helped me to know that you can use percentages in width and height so that it helps me to set the internal divs. I also understand better the position properties.

What I Learned

- Div Basis
- How to center an element (top and center set a point of the element to the center of the webpage and with transform you substract the 50% to center the entire element)
- Display: flex—The child of the parent (defined by the html structure) became flex and that allows it to behave different as stablished.
- Border-radious: You can round all the borders or just one or two.
- Difference between padding and marging.
- Box sizing: border box—Include padding and marging in the size.
- How to add a shadow to the element.
- Line-height
- You can put a p tag next to another one.

Challenges & Bugs

- Problem: I didn't completely understand what a div is, its structure and how changing some properties in the text to define its position could affect not only the text but the div too.
 - Solution: I read the HTML documentation to understand better the div basis and it helped because there were executable examples that allowed me to change the code and understand how values and properties changed the "div's" position and thanks to that I even found out how to add shadow to the div.
- Problem: When I created a new class, the element that was supposed to change didn't do it.
 - Solution: I asked ChatGPT to help me find the problem, it explained it to me, and I looked for solutions. Normally, the problem was that I didn't write "px" in

the size font or I wrote "10 px" instead of "10px". When I changed those things, the changes were seen in the output.

 Problem: There was a moment when a class wasn't being recognized, and the Al didn't know why.

Solution: I added inline style to the HTML code and that worked.

 Problem: I had many problems with syntaxis that didn't allow the code to run correctly.

Solution: I asked ChatGPT what those mistakes were and understood them so as not to make them again. Of course it happened again, but now I was able to identify the error on my own.

 Problem: The size of some divs was calculated based on the parent div. It was 50% of the parent div's size. The padding and border aren't considered, therefore, when I added padding to the div it got out of the principal div.

Solution: I added "box-sizing: border-box" so that the padding would start to be considered in the 50% size.

Resources Used

HTML documentation :

https://developer.mozilla.org/es/docs/Web/HTML/Reference/Elements/div



- ChatGPT IA: I asked for explanations of some elements, what the property was
 to, for example, round the edge, I asked it to explain to me what was wrong with
 my code.
- Presentations from Blackboard: "HTML the bones"- understanding divs, "CSS: The makeup" padding, marging, display, position, alignment, font properties.

Next Steps

Be more careful with HTML syntaxis.

- Use the documentation and presentations more so that I can memorize more information.
- Use the tools I've learned to practice and improve my codes.
- Try to understand the problem that doesn't allow the code to run before asking AI so that I can train myself to identify mistakes in the future.

Personal Reflection

When trying to understand the error in the code, AI helped me to think about the problem because it explained to me what it could be, therefore I can start to think about solutions since it can answer my questions. AI guided my thinking process and that helped me to find a solution faster. At the same time, since ChatGPT explained everything I asked for, now I can understand much better the usage of different CSS properties to manipulate and settle different elements withing a webpage. Finally, now I can identify errors that I didn't know that weren't allowed.