Hello, As part of my Game Design University Year 3 studies, I have made a goal for myself to make a Portfolio Website using HTML, CSS and JavaScript. Therefore, I would like to share my experience of doing this for other beginners that might attempt to do something similar and potentially learn from my mistakes. (I am a beginner myself)

As someone who has never learned or even touched programming in HTML, it was a challenge, I had to do a lot of research, understand why things weren't working (Most of the times they didn't work) and trial and error until things started working.

When I first started, as one can imagine, like any true beginner, I have started programming my website in Notepad (I know, insane), however as time progressed, I noticed I cannot find the information I needed, I cannot collapse anything to make the information easier to read… so I have decided to move to Microsoft Visual Studio, after trying it out, and even getting a few friends to help me out, we could not get it to work. (Issue is still unsolved, I don't know what is the problem). However, after the Programs I was most comfortable with no longer were a possibility, I have started doing research, and found about DreamWeaver from Adobe, that software had everything I ever needed: Live Preview, Collapsable elements, Auto Commenting….

Since then Life has become so much easier. However that wasn't very long lived, because once I have finished implementing a version of my website that looked good (On my monitor), I have realized that I need to make it for Mobile, Tablets, 720p, 1080p, 1440p, 4k and even ultrawide. That was where my understanding of CSS stopped. I copy pasted everything I made so far, and simply adjusted what I needed. (Still kept every single line that existed previously). Eventually the CSS started to have 5000+ lines of code (for a 4 page HTML).

One more issue, was that I was doing [everything into 1 single HTML file](), therefore all the Youtube Videos, Images, Javascirpts… were all running at the same time on load (Even with the Lazy Tag). Therefore, my website started to load in 2-3 seconds.

Which wouldn't be the end of the world, however I have implemented a Sidebar that calculates how far it would need to push the content when open. As you can imagine, it did not go well, when you would hover over the sidebar, it would not push the content at all when the page wasn't fully loaded and created many many many bugs. Such as The user being forced to the top of the page even if he started to scroll.

After I have made the first version of my portfolio, even though it had those bugs, you wouldn't notice them since you only loaded the page once per usage (since it's 1 HTML only).

But at that point, I had a better understanding of how things work, so I have started refactoring the code. It was a tedious job, however from 1 HTML I have made 7 HTMLs and from 5000 Lines of CSS I have narrowed it down to 2000 Lines. Still a lot but my page has many styles and elements. (And has accounted for all possible resolutions).

The first thing I did however was split the HTML into 6, it was difficult to do to say the least, I had issues, now styles wouldn't work, the content of the page would not appear but the top side

would, these kind of problems. Eventually, I have searched a few places, but I could not find information on how to do it properly, however I have found this tutorial which worked. Eventually it worked.

then I spent the time to Unify all the font sizes, so instead of each element having it's own different font size, I have made a font size for each P, H1, H2, H3. Making sure that regardless of what I add, the font size will always be the same, especially for new resolutions.

Then I have decided to unify the Margins, everything should be at the same distance from the left and right edges, since everything was at "Eye measurement" distance from the side, I never had a singular value that I used to determine it.

But the most importantly, in my CSS, I have looked at every element, searched where it's being used, deleted unused elements, deleted duplicates (In some Media Queries I had the same Element 4-5 times [Even I don't know why]), once that was done, I had around 1500 Lines, quite an improvement I would say.

Once I got the hang of it even more, I have started to customize everything, made custom Scrollbars, Added feedback Sections that send information to a Google SpeadSheet. Things that I didn't think I would add when I first started this project.

After that, it finally worked as intended, it had a much more manageable line count and html size with none of the pre-existing bugs. Here is the link if you would like to look at it, or even give me some feedback on what you would like to see more.

However, if there is anything I could say to anyone that started working or wants to start working in HTML/CSS, is first take the time and plan how many pages you want to have, split each page into it's own separate HTML. Don't do it like me, don't use 1 single HTML which makes the movement very snappy but the loading time horrible.

Number 2 is in the CSS, make sure to keep only the important and relevant information, don't make duplicates of elements, in the Media Queries, if you only change the max-width of something, you don't need to include all other styles (flex, justify content…) they are already applied, it won't change anything, unless you change it.

Number 3, Keep it as small and concise as possible. If you have 10 elements which basically do the same thing (Push the margin left or right to a certain distance), combine them into 1 single element.
Ex: .info-container , . trailer-container , .skills-container
{
margin-left: 10px;
}

Thank you for reading, and I hope my experience was at least a bit helpful in making a website.