

Completing the website for the student representation

Why did you pick this particular organization, institution or individual?

I picked the student-representation of my school (GSV) for several reasons.

The first one is, that I loved being part of it myself.

It gave me a good first practical impression on how democracy works and most importantly what kind of direct impact democratic institutions can have on my life. Groups and councils that I was a part of initiated projects like a Christmas-bazaar or decided whether future class trips should include a more intensive educational background, for example.

I also experienced what it feels like to get voted into a tenure and what kind of responsibilities come with it. Those experiences are invaluable for me and have showed me, how much of an impact a single person can have if he participates in democratic processes.

By giving students experiences like I have made them and enabling them to get into positions in which they can take a certain control over their own lives as a student, the institution actively pursues political education early on. This is something that we can not take serious enough, I believe, because it teaches kids and teenagers early on that they have the power to fuel change in this world and that all problems are solvable without violence.

Because I believe this work to be so important I sincerely want to support this institution and looking forward possibly even similar ones in other schools.

How did you identify the problem to solve and why did you pick this problem over others?

To understand the full process of how I identified this problem and why I picked it I will first have to explain the process of how I got to develop a website for the student-representation originally. The then problem of the GSV was very simple and got clear to me from the first days of my work there on. It just did not sell and promote what it was offering.

The possibilities that students have as a part of the representation and of councils that they could get voted into from it were never obvious to me before I became part of it. In the years before my participation, that means up to the tenth grade, I always saw the GSV as something quite unnecessary, mostly because it seemed so unproductive to me. Our class representatives always told us that there really was nothing going on there and the number one motivation to get voted representative was to get off the eight to ten hours of classes that the GSV took itself to meet every year. What nobody really realised was, that being part of the GSV and similar councils could give one the possibility to influence school-changing decisions or simpler put, that the GSV and its members have power. As I got into it, I quickly realised this disparity between reality and the look from outside and wanted to do something about it.

In a student-representation workshop in which I and the vice-head-representative discussed the public relations work of the GSV, I came up with the idea to develop a website for it. The idea was, that a website could enable the representation to direct more attention to the work of it and its members and that it would make it possible, not only for members but also for outsiders with interest in it, to get information about the institution and its schedules more easily. Project progresses, appointments or council reports could easier be disseminated through it, for example. My group partner loved the idea and together with some other minor impactful suggestions and ideas we presented it. After another positive response I, together with some friends of mine, consequently started the development. It took us quite long, especially because we were all just getting into web-development and because we were all in our last year of school, which logically ruled our priorities, but in the summer after our graduation, I completed the front-end of the website. I did it solely by myself, because my friends by then had stopped their pursue of the project.

The solution that I/we had developed was not ideal for the GSV however.

If they had started to use the website, they would have completely been dependent on me to implement possible changes or just to publish a new post. This was not the best solution for both sides, because I did not want to be involved in this extreme way in the project forever and I guess the GSV did not want that either.

After my graduation, I travelled and worked a lot however and therefore never found the time to take on the project again. The GSV consequently never deployed the website and the original problem never had been solved.

A quick chat at the beginning of my challenge with the current vice-head-representative confirmed that they still have this issue to date.

Since the GSV and the solution of this issue are very dear to me, I therefore did not have to think very hard about what project to deploy when I received the challenge.

Bringing the website, aka the solution, at least into a state in which it would really be handy to use, both for representatives and site visitors was what I already wanted to do this summer anyway. The CODE challenge now gave me a perfect reason to begin doing it.

I also figured that the completion of this project was the best opportunity of all the projects that I could come up with, to showcase my mentality, ambition and motivation. The GSV's problem is one of the few that I thought of which's solution could have a real positive impact and this is what I want to develop digital products for. This is also why I picked this problem over possible others.

Describe your approach. How did you come up with it? Is it the best possible solution? Why?

I really did not have to be very creative to think of a solution for the existing problem. Every blog on the internet that is not run by geeks nowadays has a content management system (cms) which enables the website-admins, which in my case would be the student-representatives, to manage the website's content, as the name suggests. This is exactly what I wanted to develop for the website. I did not want to implement a ready-to-deploy solution however but rather wanted to develop the cms completely by myself with only one additional premise.

When I started to develop the website user-end originally, I wanted to build it on the fundamentals of every website out there: HTML, CSS and (to a certain extent) javascript. This is because it was a project that I wanted to learn web-development from and I figured that I first wanted to deeply understand these fundamentals before implementing frameworks like bootstrap e.g. that ease the whole development.

For the content-management system, I wanted to do just the same. I wanted it to be based on basic php and SQL and only use frameworks or other packages if I really had to.

Is the result that I got by following this approach the best that I could have got? That depends on what one was looking for, I think.

To really learn and understand php and SQL, phpMyAdmin and how to create databases for example, I must absolutely say yes. If I had only deployed already finished packages I would have never understood what went on in the background of a cms and what software has to run on servers to get websites like mine working. I still only know a small piece of what there is to know after completing the challenge, I suppose, but it has already helped me a lot.

To get the best result for the GSV, my approach was only partially ideal I think.

Positive is, that the website, in this way, is very lightweight and not much dependent from other software companies. Developers like me have nearly everything completely under their control and unexpected problems that originate from external software are less likely to come up.

Negative is, that the development probably took way longer than it could have taken when external frameworks were used. The website is probably also a lot less secure, because there was basically no time in which I could focus on this part. It first has to work, before I can then think about how to make it safe, I said to myself.

All in all, for me, the positives clearly outweigh the negatives though which means that it has been the ideal solution for me. You could clearly get other answers from other people however.

Describe your previous skillset. Did you learn anything new in the past three weeks?

As you will see in the inventory of the website that I did at the beginning of the challenge, I had already implemented/copied most of the most fundamental functions and principles of a cms into a test cms and therefore kind of already knew how php and SQL are used. I also already knew how to implement websites in HTML and how to style them with CSS.

I already knew git but had only made sporadic use of it so far, I knew the principles of agile software development with methods like kanban and scrum from my computer science courses in school, I had already implemented a completely external software package once before in the development of the user-end (fullcalendar) and I knew what my main research resources would be (YouTube, StackOverflow, MDN web docs & w3schools) already.

As for what I have learned new in the past three weeks, I would like to cheat a little and include my learning of php and SQL in here as well. Before I started to deploy my own cms in the challenge, I, as I already said, had watched a full course on how to do so and copied the code that was used there into a test cms. I had, however, not fully understood what I had recoded there and therefore, I kind of had to learn it all again when I started the challenge. The result is, that I feel like I can now confidently say that I am able to code software in php which is something that I would not have done before the challenge. SQL, despite being quite basic in what I and most of its users will use it for, is also something, that I really only now learned to utilize “in the field”.

The same goes for git (for version control) and kanban boards. I am not really satisfied with my use of git because I know that I should have committed way more frequently but I now also know how to do it, at least. Using the kanban boards is something that I also had never done before. They have really helped me and using this method, especially in teams, in which they are even more valuable I believe, is something that I will definitely do in future projects as well.

A new soft skill that I tried to utilise for the first time in a project like this has been the planning of my development. While there is still a lot of room to improve, doing the inventory and writing down what needs to be done before doing all the coding has helped me a lot overall.

Without a doubt the biggest learning for me has been the experience of intensely working on a software project like this though. While I have already deployed some projects in the past, the development process has never been this intense for me. It feels like I, for one of the first times in my life, really had to and wanted to work, even if it sometimes meant spending a part of my night doing so. This has been an experience that I do not want to miss and one that I thoroughly enjoyed.

It increased my confidence in me, my skills and my ability to learn enormously.