

**Dawid Wozniak:**

OK, so let's start. I prepared some information on the board. I think that is easier for this stage. So, there was the first iteration of the product that was based of the product. Today, we have a second iteration. So, there would be third and fourth iteration, where fourth would be the final. In this iteration, I focus on the UI part how it should be displayed and gather more feedback about it. In the third, I will implement functionality around that, so something that is more like a backend. I hope it makes sense. The fourth iteration would be fixing bugs from this and comparison between 1st and 4th version. What change? What do you think is better or not better? So, in that particular sense that is the most important yeah, because I will get some reasons that I would actually put in my master thesis. As I mentioned at the beginning, during the first session we had the problem with the scalability, so we decided to solve it partially for second release to give the commit limit that we analyse up to 5000. That means that only latest 5000 comments are taken into this product. When I will show the visualisation, I hope in the third iteration when I focus more on the functionality how it works then there would be no limit. Today, we will talk about the repository that you work in and you can use your repo within this product by yourself. So, if you have NPM, you can just run this comment. I will also send it to you: `npx -y git-truck-beta@latest`. So, then it's the product that you can use and you can use it like out-of-the-box, when I'm not here, maybe you want to test it or just want to play with your own project, and so let's start with that. So, here when you run the product, you will see the list of the repositories and here in the bottom you have just simple footer. If you click on it, then you can see the version. Two means that it is the 2nd iteration, and one means that it's actually the first bug fixing. So here I have a few repositories. I analyse some of them because otherwise it will take like 5 minutes when we just look at the screen when it's analyzing. So, which one do you want to see?

**Monica:**

Let's see the NAV.

**Dawid Wozniak:**

OK, so let's see that now. I will present the changes that I made. Now, I also would like to address one change that you mention and that it is kind of out of the scope. You mentioned the integration with some IDE or with the place when you have your account, some visualization of the git control system, but here for this project, it is actually not that much related. I think that is good that you said that because then I will have the section "future work" and I will put it there. I got this feedback, but I'm not going to actively actually solve this problem. OK, so the first thing that I will do, I will just disable the animation. It's already slow so we don't need any animation. So now when I select any bubble, I can click on the biggest bubble. Then I have the general tab, it used to be there, but I also have the new tab that is called "commit details". Here, you can see that all commits. All are expanded. You can search for particular part of the message of the commit. So, if you have something that should be related to the permission, you can put just "permission" there and then you can see all the comment that includes this word. If there is more than ten such commits, you can expand it here. But then the list might be very long. So even if I have this filter active, I sett this to see commits that include "permission" in their commit messages. Then I need to scroll quite a bit here. There is another filter that was requested. I would say it is more designed for GitHub for now. So, in GitHub when you merge, you have particular commit message structure. If you don't change it, it is like "Merge from Branch XXX to something" so you can exclude those commits or show them. So here, it will not make any effect. You can also search for authors and for now there is no autocomplete. So, you need to know what the name of the author is. You go here to choose, let's say, top contributor metric then you can see all the names. Here it means that this particular user is

the most active user in the latest 5000 commits. Finally, you have dates, so here there is no straight information from which date to which date we analyse commits. When you have just 5000 commits for now. So, you can actually see that it is from some day in February until now when I analysed it. It works not just for the main branch but some files, you can switch them and then we can come back here since the UI is reflecting the right dates. Now these are the commits with "permission" in the commit message and their dates. You can say all filters that I will apply here, they apply just to this view. So, there is no direct connection between the visualisation here and the visualisation and general tab but it's something that I would like to establish. So, if you have any ideas how we can link that maybe it will enrich visualisation like we should reflect more filters that you have applied there.

**Monica:**

Yeah. I would expect that. Right? Now I'm really focused on what was changed related to permissions on this repo, right. So, I would want to know where the files are to do with that.

**Dawid Wozniak:**

Ohh so that could be one improvement. That's good. So, at the beginning, let's start just with the UI and then we will talk more about the functionality. So, what do you think about this new tab view? Is it tabs much better than it used to be previously?

**Monica:**

It didn't feel comfortable in doing the search with only limited small box that you had on the right hand side. Now it's much better now. It's actually looking like I'm focused on analysing my commits like this is separate space dedicated to it which is nice. I personally feel it improved. But I think I would also like... I see top contributor and... can I select one of those commit and you could show my details now?

**Dawid Wozniak:**

For now, you cannot. Also when you have this top contributors metric, now they reflect to the whole repository. So, whatever you filters you put here they not reflect to this commits view that you have there.

**Monica:**

OK, so that is why I said that for now it is like this comments detail and there is the top contributor part. Then you can expand it, but you cannot actually hide them because they are connected to this metrics there. If I change the metrics like say file extension then I have the colour coding for the file extension, but maybe it's a good idea to actually be able to hide this. Yeah, more. Yeah, it will give me more space. Be nice if I'm focusing on or... maybe it makes sense. It depends, right? If you reflect the main UI with the filters, that we have applied, then maybe it makes sense to have that, but I think still an ability to hide these would be all always nice no matter what because, as a user, I would like to choose what kind of layouts I want on my UI when I want to focus. So, it won't be a good improvement to fix that, I believe, but it's already improved a lot. So, like let's say from functionality point of view, I know you're really focusing on UI, but I just want to understand. So now I've looked into it, and I want to see what the changes on it or who should I contact next? So, what is the plan from here on?

**Dawid Wozniak:**

Yeah. Now we can talk about the plan. So, I had this idea when I was doing this version that I can use the colour coding from those colours here. So instead of this icon here that's just a commit icon

like the bullet in the bullet point list. I use those colours, but then it was very colourful and as you can see, you have many authors there. The colours are very similar, so I'm looking for some solution how to do it. There are a few ideas if you have an idea, you can suggest something. There is another improvement idea how I can get more information about commits and here maybe I should ask this question now. So now, we use just the titles of the commit. So, when you have a pull request, in our case, it is like the title of the pull request, but I have all information about the commit. I also have a description. So, for now I just put word "permission" and I can clearly see that all commits have „permission" in the commit title, but maybe we should use this description for it as well. Would you think that it would be beneficial for you?

**Monica:**

I think so, yes. Why not? Maybe you can somehow so sort it by relevance, so you can say, if it is in the title then it's more relevant than when it's in the description. It's probably kinda still relevant, but maybe less. You can also go another level and look for the file names, if you have access to that information.

**Dawid Wozniak:**

This is also available.

**Monica:**

So, if you think about the commit, you go to the commit, and it tells you in the browser exactly where you have all this. Then I understand what you've changed. So, you can have a relevance matrix saying title is the most relevant, followed by description, followed by file names. You choose the relevant guidance and then you can somehow display sort by relevance. So. there should be also sort feature like in any other combination of search I would say. And then you can always filter out. So, for example, if I know Dawid was the person who had done the changes, but I don't know where. But maybe I remember you were working on this feature last time and I wanna know what you did so then related to permissions. So then maybe, I should also be able to filter out by it because you already have the top contributors there. So, if there is a search in the contributors where I can say Dawid and then all the comments related to permissions that are top relevant. That will make sense.

**Dawid Wozniak:**

There is already there. Right?

**Monica:**

OK. Yeah.

**Dawid Wozniak:**

So, coming back to the filtering you think that filtering by dates, authors and this search for a message and maybe description in the future. Do we need anything else? Something more sophisticated.

**Monica:**

No, I think this is a good. Anything more sophisticated probably will not be really useful because, at that time, I will just start looking into the code instead of the commit history. So, I think this is good enough for me, at least from the beginner's point of view. And then you can always have future work later. Yeah.

**Dawid Wozniak:**

So there is one more feature that I also would like to discuss. So now when I have this „permission” filter, I have some commit messages that have some words that are not this particular word. Based on this, I will be able to build like a tag cloud. So, if you have it, all those commits have like add or remove then I can make the tag cloud saying ok if you have a permission in the commit. You also have these words. Such a thing, is that something useful or it's not for this particular product? So, do you do you know, the idea of the type clouds?

**Monica:**

Yeah. Yeah. Maybe it will be useful, but not for me, I think from the first iteration. I would rather prefer for me to be able to open the commit once I've found the relevant commit from here. And I would want to see number of commits there. I can see there's only the PR number. Yep. So, if I can't open it from there... the first ideal I would want to open it from here. Right? And quickly see on the left side what would change. But if I can't do that then, the bare minimum is, I want to commit hash there so I can search somewhere else.

**Dawid Wozniak:**

OK, that's a good suggestion. So, the last question is about the general product. Now you can see the repository that you usually work in and acknowledge this stuff that we talk about. Maybe you have some general suggestion about the product.

**Monica:**

Definitely, the filters should apply to the whole product here, because when I look at this graph, these are too many files. I think this is too much information. Yeah. And maybe when it becomes too much information is such small, maybe I don't know. Maybe it's the choice of the graph. I know you have another chart type. Can you switch?

**Dawid Wozniak:**

There is tree map, it will take some time to regenerate.

**Monica:**

Yeah. But almost all real projects tend to have a lot of files, right? So, a better representation chart would be... maybe list? I know this project in and out and I still can't figure out what does that small circle is what that adds.

**Dawid Wozniak:**

I can explain it a little more. So, the problem now is that we don't have any depth. Ohh yeah, this is another view, if you want to see but what I wanted to say about the bubbles and charts. We don't have like any limit, so here we don't have any limitation how deep we look. So, if you have like 10 levels and on each level, you have a lot of files then we make it smaller, smaller and smaller. So yeah that's a very good point.

**Monica:**

So then, a filter on the levels is what you need.

**Dawid Wozniak:**

Yeah, that's what I am going to implement in the next further integration.

**Monica:**

Yeah. I think that would be very good. So like, for example, for somebody who is new, they would want to know the overview first, right? How is this repository divided? For example, this is divided into layers and how many layers are there per country or something like that. Yeah. And you can also be able to select how much you want to see. So, you want to see all the layers that you can. Yeah.

**Dawid Wozniak:**

Exactly.

**Monica:**

I think it's progressing.

**Dawid Wozniak:**

That's good. So just a quick comment, what I wrote here, so there is a third iteration, it is what I'm planning to do after Easter. So during the Easter, I will probably play with it and try to release, when I release, then you use this immediately, you will also get the latest version through NPM. Here, fourth iteration will be probably at the beginning of May or end of April when I have the final version and here probably, I will bring some chocolates for you for glorification, or I will donate some charity. That's the end for today and thank you one more time for showing up and hopefully we'll see each other two more times.