Dawid Wozniak:
OK, so this time I will not prepare the presentation before we use the tool, but I have information on the board so there was a first iteration, the basic version that you participated. Thank you one more time. Today, we are doing the second iteration when I improved base with the most focused on the UI and how we show you the information about commits. There will be further version. They would improve functionality and everything what was wanted to be included. Then there will be third version with some bug fixing here and the forth iteration where we will focus on the comparison between the old version and the new version with my changes. Will it make a difference? What is good and what is not good? It should be complete tool here, so it would be the most important for me, because then I will include this information in my final master thesis. For now, there is what I'm going to show. This tool is available to everyone. So, if you want to run this, then with the command *npx -y git-truck-beta@latest* then you will get this product and you can test it on your computer. You just need to have npm to be able to use this command but there is a commit limit because of the scalability issue. It's a huge issue and it is not the focus of my project. I'm working on this, kind of, on the side, so here we decided to put the limit, it's the 5000 latest comments. It is what we analyse and there is no more. In the next version, there should be no limit, so it is what I'm currently doing when I'm gathering feedback about the actual product. Let's start with the tool. So, it is improved product. It is what you are going to see if you use this command. Here you have some repositories, if you click on, you will see the version. So, two means that it is the second iteration and one means that it is after first bugfix. You have the repository list. It is basically what we are working on. So, which one do you want to see?

Ayrton:
Some of them have the „analysed" tag…

Dawid Wozniak:
Yeah, cause I preanalysed them. Otherwise, we need to wait like five minutes to like analyse them. We have also other ones where I need to click the analyse in order to get it to do it right now but if I click „view", we also analyse, in the sense, that we check, okay, there is some information that we already have, so we just process them to display it here, but the process is more less the same. Here it just takes less time to reanalyse data. So, which report do you want to see?

Ayrton:
Let's look at platform code, because that's the one I know.

Dawid Wozniak:
Let's start with it. So you also mentioned last time a lot of things connected with the integration. I think that it's very good that you mentioned that. So, there will be a section in my report that is called future work but because of the time limitationon, I cannot fulfil all wishes and one of them is integration with some software like GitHub or Visual Studio code. So, you don't need to install this, you can just use this command in your repo root, and it does start environment.

Ayrton:
I think it would also be difficult for us to test that, right? Because you would need to get like Microsoft to install that to our DevOps. So yeah, this just runs locally and you can point it to whatever you want, but you don't need infrastructure to approve this.

Dawid Wozniak:
Yeah, I just disable animation because it is a huge repo. So now, I present the changes. So if I click here on this folder that's called „platform" or I can click another bubble, you can also click this

bubble then there is a new tab that is called „commit details" and what do we have here? We have the search for commits and we search by part of commit messages. So, if I wanted to search for, let's say, „auto detect", you can just put anything you want then I can see all the commits that are made by some auto detected stuff and there are also other features if there are still too many of them. Here we can hide merge commits. It does not really work because it's designed for GitHub. So, in GitHub if you merge without squashing, you can just have that merge message that is like „marge from branch to" master or main. Here you can set authors here. For now, you just need to know what the name of author is. So, what you can do, you can go there and select let's say top contributor and then you can see that there are some names in the last 5000 comments. So, there is Cody, but there's no autocompletion. So, you can see that this author did something and made these commits. Finally, you have dates, so if I don't put any filters and they're just said that the oldest commit....

Ayrton:
You see where it says 132 more. Can you expand that see more or can you only see the top once?

Dawid Wozniak:
No, You can expand that. So here I would just want to select some because then for now it is not that easily accessible to see what the date is. So here, for example, when we analyse it because it is the long list, you can also go there and you can see okay, there's more commits and you can scroll through the list. It can be very long list, so it can be like almost endless and then you have this date. So, we have the commits from this date to this date and use 5000 comments that were between those dates for this particular bubble that I selected. So, my first question is - what do you think about the new view is better than the previous one when it was connected with the general view?

Ayrton:
Yeah, I think this is nice because you can see like those individual commits and search for them, right? So, I can go down to a folder and see the commits for „server" that folder. I can also see at the bottom, this is one of the things, I was asking you for. I can see who's touched the most files in this folder in this location. And here it's actually for the whole report, so it's not for the location. It's just, , maybe it's a good improvement actually to show just like the localised view of where I am right now, that would be nice.

Dawid Wozniak:
OK. And that's good feedback and now I wanted to ask about this filtering. So, we have the filter by some part of the commit message. Then we have the merge commits, but it's not applicable to this particular repo then you have authors and dates. Do you think that we need some more filtering or sorting or anything connected with displaying this list?

Ayrton:
No, I think this is good. It would be nice if it was a bit wider. Yeah. So, you have a lot of information to display, but it's kind of like compressed into the side. And you have this like top contributor panel, which maybe it would be better if the panel with the commits was like a wider but also took up the whole height of the screen so that you're maximising the amount of area that I might be seeing these messages in. If you move this top contributor thing somewhere else because you can see over there, it's like overlapping.

Dawid Wozniak:
Yeah, it just by purpose. So, we just have to save space and then we allow it to overload with the above part.

Ayrton:
I mean maybe like it could be a separate tab, for the moment, because I'm not sure of the scenario where I would need to see like the top contributor thing at the same time as the commits because they're not related to each other. You know, like some contribute just to the whole repository, like maybe if you show person that contributes to the thing… If we had same filters applied to it, but, even so, maybe, it would be better to like set the filters and then you have to be at a different place because you're just trying to display a lot, right? It's very difficult for me to get just the commits, which is what I would want to see, or just the contributors for where I am. Let's say that you implemented that to just see that, right now. You're showing me everything all at the same time, which means that I have very limited view of what I can see. I can see like 3 commit messages here at the moment. Yeah, maybe I'll be able to see five because it's gonna push the filters off the screen. It's like the most failing thing for me.

Dawid Wozniak:
That's very good feedback. Thank you.

Ayrton:
Also, if I see one of these commits, it would be nice if I could like expand it to see the full message right, because at the moment you're only showing the summary, but maybe I'll see one that I think is relevant and it's like I wanna see more information. That was my actual goal to find it.

Dawid Wozniak:
So, for now, we just use this title of the commit, when we fetch that. But we also have the descriptions, the description would be very long and for now we don't use it for anything. But you think that it will be beneficial to be able to see this maybe as, some kind of detail, view for their particular comment.

Ayrton:
Yeah. It's like, if you click it, it could either like replace this view with the view for just that commit and maybe like if you click it… There are two things, right? Either you click this, and it shows the commit message in the dialogue, so you can just see the details. Or maybe you click this, and it drills down to this commit shows you the full message, but also highlights all the files that it touched on the screen.

Dawid Wozniak:
Yeah, that's actually what was just suggested that I also got it from other people. They talked about this message and highlighting files because we have this visualisation. Right? So, we should make use of this. So yeah, that's good suggestion. Now, I would like to ask about something that is not there, but it could be. So, let's say, that we have three commit messages as it's here, and then I can generate the tag cloud saying which words are more frequently used and which less. So, you can see this in the kind of visualisation, do you think it should be useful for anything or it's just not that useful?

Ayrton:
Yeah. For this commit messages, you will generate this tag cloud. I mean it depends because, at the moment, I've already searched, right? So, you are, kind of, just showing me a word cloud of words that I typed into the search box because I would expect those words to show up very often because I searched, right? But maybe, if you showed me a word cloud is like the most commonly searched files or something like that. Okay. So, you know, you're not showing me words from the commit messages, but you're showing me like the most frequently touched files between all of these

comments. So, if I search for like "update this resource image", then I'll show this word cloud, then maybe, I'll see that the image file changes a lot, but I'll also see that these manifest files changed all this TypeScript files. It changes very often because, you know, maybe, somebody has needed to add that image to the code somewhere as well as add the image file itself.

Dawid Wozniak:

That's good feedback. So now, I would like to ask about any suggestion that might not have been connected with those commit details. Maybe, now you have some comments when you can see actually the repository that you are familiar with. Maybe, you also see some comments about problems with the general product.

Ayrton:

I mean like I think that this top contributor thing could be expanded, a lot more, right? Because, at the moment, you just show me at the top level, if it showed me the commit details, you showed me like the author details and you showed me all the different authors that have edited the view that I'm currently in. Like, I could type a specific person and it will highlight places that they have touched. So, I can type in my own name, and see that I've done a lot of stuff in the web client, but I haven't really touched stuff in the NDC, right? So, I will be able to find out like, what areas of knowledge, people have, and also, what areas of knowledge, they don't have and being able to drill down on that information would be nice.

Dawid Wozniak:

That is very nice feedback. So, coming back to what I mentioned and here the third round will take place after Easter. So, you are invited and then fourth iteration, but that, of course, you are also invited and here also prefer some chocolates or some surprises for participating in all those rounds. I have the transcription and I will collect this transcription. So, it was pretty nice what I said so we can correct all mistakes that are made. Alright, this transcription then will be attached to the report, but it would be just using your name, so not the surname, just name. Yeah, that's it. So, thank you for today.

Ayrton:

So, I have one more question. Yeah. If I run this and I use this command to open this product, I can do that on my own computer. So, does it communicate that data anywhere?

Dawid Wozniak:

No. It stays on your computer. So, it's safe to run this against Microsoft stuff. Yeah. So, I got the permission running it on this stuff connected with our work and you can also check the code. So, we are not sending it anywhere else. It's all running the newest version. When you analyse it, then it's json file also on your local computer. You can check the code of this tool it's written in TypeScript.