Dawid Wozniak:
OK, so let's start. I will start with some introduction and there are a few questions. So, let's do that now I will show the project. So, my project is visualising some of the project that we are working on hopefully and it'll resize. It takes some time. Our repositories are huge and so there is some limitations. 5000 comments only. This is shown. So, comparing to the last time when I showed to you and now it's actually the repository that you know. We have this chart depth. So, you can set it to one then you see only things that you would see also in the file explorer. So, if you go there, you would see this and the size is meaningful. So, it might look like this bubble is bigger than others in this. It is true. So, it is just based on the size. It looks like this is empty, but if I go actually here then I can see some substructure and you can define this level here. So, you can also see how much it change when you add some next level seep into the tree of the repository. So, if you look for space, it is the folder structure. OK, so that's easy.

Ievgenii:
I like this.

Dawid Wozniak:
Yeah. And we will stick with the full that it's very crowded. And so, it is just the one thing, but let's go more. So, we can see actually a lot of bubbles. So here they are colour coded. They are just the extension of the file, but you can change it here for some other metrics and I would like to have, let's say this file. So here I have now the extra tab that's called „commits". I can close this, so we have more space, and you might go there. Then I can sort it by date. They are accessing or descending order. So, all these commits that they are shown here they apply to this file and then you have some filters, you can filter by some part of the message. So, let's say that I would like to see if there are commits that mentioned this word „path" somewhere and maybe there are other that mention it just in the description. You can see they are also there and here you have the full list of authors who contributed to this repository at some point and you can say, OK, maybe this commit belongs to me. Yeah, that's actually not. So maybe exclude me and then change something else.

Ievgenii:
Can you see all the areas which you modified for last six months on that map?

Dawid Wozniak:
No, not really, it's not supported, but if you wish that, that's a good suggestion for the improvement and yeah, so the one feature tha I still did not mention it is that now you can click on this commit and you can see the message. So, it is usually this here it's actually longer and there is also the description. The description might be long as you see here, we cannot display the images and do any formatting because of the security reasons. You can see the hash, when it was created and then you have the option to show edited files. If I click that, it fetches all the files that were changed with this particular commit and then there will be highlighted in the visualisation, all other files would be grey out. Here you will also get a list of all files that have changed. If the commit is big, then it takes, of course, more time. So here you can see that with this commit these files were changed. Maybe it's not only those files and there are some other files that are also changed. It is the case actually here. So, we are in the „server" folder and here the tests have been edited. That's where you can see the full path. Now if you would like to go back, we are reversing this so you can do some other features. We are making the visualisation as it was, so without any changes.

Ievgenii:
Can you show me NAV repository? How would it look like? I'm really curious.

Dawid Wozniak:

I think it would look very similar. The problem with the NAV is actually that it is so big that it will crash on this computer. So, it basically goes definitely like too information into memory state. Then you will get an error. There are so many folders and there are so many files, there are so many commits and so on. So that is why I think that it works slightly better with platform core with NAV, it used to work. But now I think it's too much for this product and scalability is one thing that I'm also going to include in my report. So, my first question is if you look at this, in your eye, do you agree that this information about the commit messages is presented in the clear and easy to navigate UI in the scale from zero that it's completely not usable to ten that it's perfect, nothing to change.

Ievgenii:

It is good, it's very clear.

Dawid Wozniak:

OK. And if you needed to give a grade from zero to ten.

Ievgenii:

Nine is fine.

Dawid Wozniak:

OK. And so now we can talk about the GitTruck as such thing so how beneficial it would be for you to use it with those changes for any purpose for your work or any project or something from zero to ten.

Ievgenii:

So, I would like to see what it would be interesting for me to see NAV repository as I told you. If I can see, which areas you do not modified for last six months. We have a lot of discussions who really do specialised work and I think this is very awesome but just an overview. Why does it work like this? Because right now we can do it per commit. Of course, cause it's obviously easy. Probably, it would be interesting to see a person in the period of time, of course. Not forever. Forever - it wouldn't make sense.

Dawid Wozniak:

So here you have the dates to set the time range. So, on the scale zero to ten?

Ievgenii:

Very straight forward 10. Let's put that.

Dawid Wozniak:

Then if you have this commit view, what would be your primary usage of it? So, in which scenario would you go here to actually see something using some sorting or filters. In general, there is also this commit history, that's just simpler here, but you don't extra options here. You have predefined sorting and those commit messages are not clickable. So, if you want more, you need to go to this tab. What kind of scenarios would you need to actually go there?

Ievgenii:

Can you go back for the general for a second? Author distributions is very interesting.

Dawid Wozniak:

It's something that used to be here before I changed this project, so it's calculated based on the number of comments. So, if you have the commits from the people then you can see that this person did 45% of commits. It's here so it might be the use case.

Ievgenii:

Let's say. You just check if that time was not just fun.

Dawid Wozniak:

It is as far as we can reach. So here it's for all commits that we have but it's usually not all what you have here. It also might be the case that this person is, kind of, like maintainer of this repository and doing some, let's say, code changes in the context of the style or formatting. Then, we will get it on the top because these people do a lot of commits.

Ievgenii:

So, I would use this to try to understand who does what. So, this tool is really interesting, but basically history of commits allows us to ideally describe them as children. When worse things have happened and by whom in a period of time. Now I know from this tool in the forever frame, because it's easiest, very pretty, pretty good. I'll have to calculate for a period. We should probably look at locations which is hard to understand. The reason why - it's simple, useful. I would like to ask the question, what was changed for the last six months? Ideally, I have a filter and then it shows some kind of relations between some bubbles in some circles where changes happened but in some there was not the change. It will be super great to see because then I could clearly see where the change was not happening. And it's very, very interesting, you know, in terms of errors, which is in maintenance mode, errors which might happen, you know, it is bad coded. You might also be surprised that there's no change here. I would use that information first, like where the change has happened and by whom. Ideally, I'd have all data to help to answer that question here. I would you use to look back. Now the date and top contributors, that is also still very interesting. Sometimes we have also like management level discussion who is really specialised and how much they really did versus someone else and it's for the quantity of data. So in period of every three months you'll verify all files which never changed. I think it's very interesting look globally if you're working on a feature for a couple of years and you still have 1% of changes, you probably don't do any good job. Whatever excuses, you'd probably expect to contribute much more.

Dawid Wozniak:

There's also the situation when you change the folder structure, let's say, and then basically like really starts everything from the beginning because it does not have link. Yeah. So, if suddenly someone would delete this file from here and put it on the ground level, then he will be like the one owner who contributed 100% to it. That's why I said that it's usually true but it's might also be a little misleading, so you imagine some things that you also would like to have here regarding this view. Is there anything else missing regarding commit message history that you would like to have here?

Ievgenii:

So it is interesting, like commit message history if Damian. In this case, I found titles quite descriptive which actually I was a little surprised. I think there is much or less good-looking titles you can more or less understand what's going on. At least that's how I feel. If you take anyone, actually, they're pretty good. Last time, we talked I told you like to understand what has happened, but actually it depends on the quality of the commits, right? So, if you look on this list, maybe for this team, like almost every single commit title can be understood and I know what's happening. You can say, maybe, it's a craftsmanship, maybe in other disciplines, people don't pay attention because many of PRs, kind of, creates the work item, which usually have something meaningful but in the PRs there are also some changes that are more difficult to explain, so when you have some scenario that you need to change some integration and connection then you put something general like „change", „change integration connection", but all you actually change and why. It's probably very good described only when you go to the description. I also like your search for commit, you can type, you

can search for commits. This is super helpful. Practical example: There was some recent change about that stuff, which requires the behaviour or improve the behaviour. What is the change? What was the change about? Is it typical happening all the time or once? What do you do then? You're going to start looking for that, obviously, try to express your wishes in the tool like this, if the performance of application is good. Actually that works fast. You can use this tool, especially if you know when you might be involved from engineers comparing to just a search in the whole devops for that. we have.

Dawid Wozniak:
Yeah. When we search here, it's pretty fast because this data is already there. We have to just kind of be operating on that in the browser level, the problem is actually to load this. That is why we don't load all commits. So, is there anything else that you would like to say that maybe I haven't asked about the product? So, it's all what I prepare in case of questions, but if you have something else to say. It's opportunity to do so.

Ievgenii:
Maybe you want to drill down from that map. It feels like the circle called "office" is interesting, I know you can do it here.

Dawid Wozniak:
but which one you want to see like, like an office, report or like any circle?

Ievgenii:
Yeah. Then I can see the name, but here I can go down to some other folders and then here. So here I see all these files are C# but if we show the legend and we can change it like to top contributor.

Dawid Wozniak:
You can see who should be the owner based on the author distribution. Yeah, it's actually Cody here, but those colours might be very similar comparing to those other colours. So, it's easy to find similar colours. So, that's the best way to find out whose actually name it is. On the basis of that, if you go back to commit history, you can confirm it.

Ievgenii:
Yeah, actually, that's super useful, actually, I like this feature a lot. I'd really like to try it out on my own to see how it works because then I can give you more practical examples how I use it but it doesn't have to work for the whole history. Can you just load like last six months? Because the whole history maybe is good for documentation purposes. Here you need to build some data, but maybe you don't need to go that long back in a time.

Dawid Wozniak:
Yeah. So, for now it's 5000 commits and here it traces over 2 years. Yeah. So, there were not a lot of contribution to this point I think in this year. So, we have a lot. So, this is now informative. If you change it, then it's fixed. But if I don't change it at all and they put some other filter, it also tells you when was the first commit and when was the last.

Ievgenii:
I think it's interesting.

Dawid Wozniak:
Okay great as it's our first meeting for sake of analysis depending on some tester's factors. I need to

ask you some questions I've already known answers for some of them, but I need to have a proof that it's true. So how many years have you work in the IT industry, including part time jobs?

Ievgenii:
That's interesting question. What year is it?

Dawid Wozniak:
2023. It doesn't need to be like precise to the month. It can be number of years.

Ievgenii:
17.

Dawid Wozniak:
OK. And what was your primary role during this time?

Ievgenii:
Yeah, developer.

Dawid Wozniak:
and… your average team, how many people were there? So like developers, QAs, product managers, product owners.

Ievgenii:
It's really changes over time, Dawid. Five years ago, Microsoft teams were stacked differently. It was more organised how you just mentioned. Now it's a very homogeneous. I think in my Microsoft career it was mostly engineers reporting to me and then you're kind of responsible for everything. You don't have this like this split of function.

Dawid Wozniak:
OK, that's good answer. And how many commits are in the typical project and you can say per day, per month, per year. What is more comfortable to you?

Ievgenii:
Like for me as an engineer? Or is it an observer? How the team works?

Dawid Wozniak:
I would say observer.

Ievgenii:

Well. I hope they do it every 5 minutes, so it gets saved, but you never know. It's hard to say, no, I cannot. Can I tell you something I know? For example, I can tell you, for example, Google. They really look on commits, histories and the number of commits per engineer for his or her performance evaluation. Like, that's a big deal. You need to code a lot. Even not do, I mean you don't need to do something useful, but you really need your hands on a keyboard daily on the very high intensity. That's one of the metrics, which is for some reason discussed to be a good metric to judge your productivities. Microsoft doesn't do anything like that. Facebook doesn't do anything like that. Google does. So maybe you can use that you know the answer should be like every 5 seconds but Microsoft really doesn't know.

Dawid Wozniak:

And I have the similar question about the files in the project. So, do you know what is the average size of the project?

Ievgenii:
How would you define size?

Dawid Wozniak:
So you can define it as a size like 1 gigabyte or you can say the number of files, it's all valid.

Ievgenii:
Yeah, a number of files 60K.

Dawid Wozniak:
Ok, let's finish here, thank you for helping me.