#### **Dawid Wozniak:**

Okay, let's start. So, I just start with this short presentation and then we will get into the tool. So first of all, I have this presentation "make commit history great again". So actually, this is the topic of my master thesis and then we can go to commit messages itself. So, when we make changes to the project, we have those messages that describe what we did and then we don't use this for any automated processes. But, of course, we want to, but we don't know how to use it and my master thesis project is connected to that, so of course we want to get this information out of it and you can help me with it. So, I'll give you my product and I ask you for feedback and I will give you my tools. So, my time, my knowledge, my skills, everything to fulfil your wishes. But you need to provide me this feedback. You can think about yourself as a mechanic that helps me with my product – my car. So, I will ask some predefined questions that you need to answer them. And finally, we iterate over the solution, so it means that at the end actually we have some results and next meetings so that's all. The tool is GitTruck and it is how it looks like. So, on the left side you have some branch here it's main and it is a GitTruck analysing GitTruck by the way. And we have some feedback box, we have the visualisation there. Then the visualisation is a bubble chart, and the size of the bubble is meaningful. So, it means that this is the size of the file, so if we take the ratio between this smallest bubble and this bubble, it should be more or less the same.

#### Michał

But how do they stick out?

### **Dawid Wozniak:**

So, the order is random but if the bubble is bigger then it means that actually it's bigger in the size, kilobytes. Megabytes, yeah, and so on. We also have the tree map that looks a lot like in old file experts and then we have some metrics. So, file extension as you can see now it is colour coding some extensions. So, it is like gif file. This is tsx file and so on and then we have number of commits. So how change does this file change? Then we have last change how many days ago some changes were done to this file and here you can actually see that lighter means that it's closer to today and then we single author there. So, we have two groups. One group is files that have just one author like this one and then we have files that have multiple authors, then we can go to top contributor. So, people who are designated for this specific file because they made the most contribution to it, and then we have the track factor, so how many people contributed to this file. So, if you click some bubble, then you will get some detailed info here on the right side like size, number of commits, location path, are there. You have author distribution and finally we get some commits so you can also see that there is a message of this commit. They are grouped by day when they were committed. So here we can see that we have some "fixed the bug" that kind of stuff, so it's grouped by date and then we can expand this so you can see all of those if you select a folder like the source folder then you will see commits only for the whole folder. If you selected just with the one file, then you have commits just for this one fle. So, my first question - what is your first impression?

#### Michał:

Yeah, I think that it's nice product. I don't know. I'm not a developer so for me it's fine, but it's probably not for me as such.

#### **Dawid Wozniak:**

Yeah, but do you understand everything on the screen? I've shown you the tool now, so maybe you think that it's not for you, but actually it will be in the future.

#### Michał:

Yeah, I think that I understand. It's nice visualisation. I just think that it's maybe not that much for me

because, you know I'm just using GitHub when we have some robot and then we need to get some some software update or we need to change some program. Then I just download the zip folder. You know this option like when you have GitHub repository then you can click download as a zip and then I just take it from there and I can put it into some robots, so it is my main use. I use more like Yeah, mechanic tools to actually fix robots. I'm not that much connected with the software, I'm more connected with the hardware, so I don't use it that often, but if someone did then probably they would profit of your software to see who changed things and how they are structure and so on.

#### **Dawid Wozniak:**

Yeah, but nevertheless, I'm going to ask you a few questions. Maybe you actually think that this is not useful for you now, but maybe it will be in the long run, not for this job, maybe in the next one etc. Yeah. So now I have the question about the commit messages. So, if you look at this, what is written here, like here, you have the bugs fixed. And I ask you that commit messages are important to you on the scale from zero to ten. What would be your grade like zero it means basically like not important at all and ten very, very important.

#### Michał:

Um, yeah, I think that it's like seven. I believe that it's important what is written there, but it's just not important for me so. It's important if you write something meaningful then probably, I guess that you can search for it and you can make some sense of the history, but yeah, it's like not that important when you just need to download the zip file.

### **Dawid Wozniak:**

That's also a good answer. And then when I ask you about the UI, so you can see that we have it here, it's collapsible and you can see the messages sorted by day and all that. So, I have this statement information about coming messages – they are presented in the clear and easy to navigate UI in GitTruck. Can you give a grade also from zero like it's not usable - it's very, very bad and ten to that is like perfect nothing to correct.

#### Michał:

I think... So, can you resize that? I mean the panel on the right.

#### **Dawid Wozniak:**

No, no, it's not supported now. But yeah, we might add that

#### Michał:

It is, you know, because there are some messages that might be longer than that. And I think that it's nice that I can make it different size, even focus, maybe even a pop up with like the design view just for this commit messages. So, I can see more than here and now I'll give it like 5. It is usable, but it's not like perfect, best UI, you can make some tricks, some tweaks to actually make that better, like the pop up showing the current messages over this visualisation and then I can do more with it. It's also more like visually pleasant okay.

## **Dawid Wozniak:**

I'll think about that but now I have the precise question. So, if I say that it will be beneficial to use Git Truck for your work or side project for any purpose, what do you think about this? It is last scale question like zero you'll never use it to ten that you can use it multiple times a day for all projects.

## Michał:

Yeah. Hmm. So, as I said, it's not that useful for me. I don't think that I will use it that much. I will give it like three. I think that, yeah, maybe just for the fun to check something or to check who owns

some things? Maybe you know, if you have this commit view for the navigation, then I can actually see what they've changed between the versions. It's something like this for now, so I wanted to find this, let's say, particular commit with the new version so they usually add like this to my repo and then I can see OK they change that or they change this. I can read it. but you know I usually don't do that. But maybe if I would, it would be nice I can also see the changes in GitHub so here in this view you can also like over the commits, you can have another pop up with just the changes.

#### **Dawid Wozniak:**

Yeah. Thank you for that. Thank you for that feedback. It's a good idea. We will think about that. And now you mentioned that I think, but I will ask the question anyway. So, what would be your main use of Git Track?

### Michał:

Yeah. So, as I said, it's probably not that much, but maybe, I will look for those changes in the next version of the software. Yeah. And maybe if you connect to GitHub, then I can download the zip also from here. So, I don't need to go there. I can just have it at my computer so I can install this on my computer, right? Likes some other software.

#### **Dawid Wozniak:**

So the answer is like to complicate it so you can, but you have like the one line you need to put in the command line and then we'll open the browser. So, it's possible. Maybe we should make it more like automated.

#### Michał:

Yeah, you should do that.

### **Dawid Wozniak:**

And what is still missing regarding this commit history? As you mentioned, the pop up and the changes in the pop-up. Is there anything else?

#### Michał:

Yeah, I think that it is the most important. So actually, I want to find the specific comment. I need to basically have this view and have the pop up with these commits and with these changes. So yeah, it's something that I would like to have. Maybe you can now integrate it somehow in my software, but I think that is too complicated for the tool. It's been never done, not even integrated with other things. So yeah, maybe just give up this idea.

#### **Dawid Wozniak:**

OK. And what would be the most useful insight about commit, especially commit messages? So, if you have like unlimited resources, unlimited power, unlimited time.

### Michał:

Yeah, actually, highlighting these changes might be somehow but something that would make sense for me, so I know that actually this component change or this component change or they redesign the power system or the redesign, how the settings work. Yeah, but it's difficult. You need to actually go into it, read it and then show it to me somehow so using these messages might be a factor to help you with that, but not like I think that is not possible just with the commit messages. It is more like the general thing.

## **Dawid Wozniak:**

OK. Is there anything else that you would like to say about Git Truck, right now?

#### Michał:

No, no, I don't think so.

#### **Dawid Wozniak:**

OK, so now I have a few questions about yourself so I can actually check that your feedback matches with other people with the similar background. So, how many years have you work professionally with IT projects, including part time jobs?

#### Michał:

Yeah. So, if I calculate when I started working, it was mostly hardware, but let's say like 4 years, I think.

#### **Dawid Wozniak:**

Okay and if you think about your primary role, what is it?

#### Michał:

Yeah. So, I see it's a little difficult to define. So, I am mostly working on things that are more connected with the hardware. But I am like the engineer technical that I operate with robots, and you know, this is Ocado. So, they are doing those robots and we need to service them so. Um, it is like technical engineer manager.

#### **Dawid Wozniak:**

OK, that's a nice answer. Now I have another question. So how big is your team, including like developers, QAs, product managers? If you have some people in your team but not like higher management people.

#### Michał:

Yeah. So, me and another engineers, we are like 10 people I think in total.

### **Dawid Wozniak:**

OK. And if you know this product that you are using on a GitHub, do you know how many commits and files are there?

## Michał:

Actually, I have no idea. I've never checked that because I didn't need to, I expect that it's actually not that big. I can give you a precise number later. We can check that, but not now.

#### **Dawid Wozniak:**

Yeah, it's also goog to answer that you don't know. It means that is not as important for you. Um, so would you like to be invited to the next uh survey about the progress of the project?

#### Michał:

Yeah, yeah, sure, we can talk.

#### **Dawid Wozniak:**

Ok, so thank you one more time for helping me. I believe there would be three more iterations where we will talk about this product and my changes how they change, if you like it or not, even if you think it is not a product for you now. I expect that it will be fun and it is a great help for the development of this tool because we don't have that much people to talk with. So, I just want to say one more time it is important that you are here and provide me your feedback, even if you think that maybe it is not the target group of this product. So, thank you one more time. I will stop the transcription right now.

# Michał:

Sure, no problem. I'm happy to help.