**Dawid Wozniak:**  
OK, great. So as always, I'm going to present some changes and when I present you the changes, then I have some questions. So, let's start first of all now you are able to resize this component. So, when it's bigger, you can make it smaller. Let's say I am not that interested in this. So, I can make it smaller. I can make it wider. I can do exactly the same. I can even like make it not visible. So, it is one suggestion that was implemented regarding the UI. Another suggestion is that here we have some metrics like file extension and now you can close that. So now you can not see what this colour means, but you can, of course, expand it again, but when it's closed and then you open some detailed then it's gone. So, you don't have this situation when those two panels overlap each other, then it was a little confusing for some people that they were some how connected, but actually they are not and maybe they should somehow be connected, but we can talk about that. So, what else has changed? So now we also have this depth, so it's the full depth, but we can make just the one level and then you can see only what is in this folder there. Problem with that is that this size is meaningful, so the size of the bubble when you have the bubble that is bigger, then it means that the size is bigger. So even if you have one depth, you still don't have that much space or even when go there, you can see there are three files and one folder, but you don't know how much stuff is inside this folder. That's something that it's still somehow to be solved. The question is how we want to solve it. Then you have a few levels. You can also have full. So now when you have this example of the folder then we can go to the commits. So we have the same commits view as it used to be, more or less, but now we have the sorting so we can sort from latest to oldest or from oldest to latest. That's the one thing. And we can also sort by authors. So, you don't need to do filtering, you can just see where authors who did some changes. But they are still filters, so as you used to be, you can search for some part of the message, now it's not case sensitive, so even if I put „merge”, all have „merge”. But if I put „master”, you can see that here it is upper case. Here is lower case. It's not the issue anymore. You don't need to know author by heart. So here you have the list of authors for this repository. So, you can select, let's say, you and then you see that you didn't make any change to this file. I hear you can also exclude people, so you say all, but this person’s commits are visible here. More or less, it is what the main changes were here. Also, we can define the time. So, I remember that you said that it might be good. Other people agreed. So now you can also specify the time and it's precisely to this date if you click on some commit, you can see some extra information. So message, it is like the title of the pull request, description, so it is what you put into the pull request, hash, when it was exactly created, who created that. You also have a button to show edited files. So now, I will talk about that. It is the last feature. So, if you click on it, it will check which files were updated, it is doing it in unsynchronised way. So, we need to find them because there is not alone on the screen for now, but it checks which file we're changed. It will grey out all files that were not changed on this visualisation. So, when we wait, it's supposed to do that, hopefully… and now you can see that in this folder only this file was changed. But maybe if we go up in the direction then this file was also changed. It's not that visible from this view, but I can tell you that it was changed because I played with it sometime ago. So here there was also like Jason’s change and so on. So, my first question that it's related to this changes is - how do you like the new UI? How is it visible here? So just one comment now it's doing reverse so now it's basically make the visualisation back to as it used to be, but it also takes time so it would be in a few seconds as it used to be. Yeah. So, what do you think about the UI?

**Matti:**   
I think that it looks a lot better. I think that it's nice that you have the commit messages now and the commit hash and the dates and the authors. It is more clear.

**Dawid Wozniak:**  
Yeah. So, when you look at this - If you had unlimited resources, time and money, what would be the most useful insights about commits, especially commit messages? So, it is the same question as I asked during our first meeting, but now when you see more or less what I can do with just the UI and how it's done in terms of filtering and sorting, do you think that there will be something more that you would like to have?

**Matti:**   
Not immediately. I think I would probably have to use it for something real to get more ideas.

**Dawid Wozniak:**  
OK, great. You can still use it. So, if you remember, I gave you the comment. So, if you want to try it without my attendance, then you can just do that. So, if you think about the sorting and filters, so in filters I added this include/exclude and time here. In sorting now, you have author and date. You have these two orders. Do you think that there should be something more? So, I have the information about all aspects of the commit, so you can have some crazy ideas like show me what was made by day of the week, like Monday, Tuesday and so on. It's just the example, what we can do. So, if you have an idea, you can share it now.

**Matti:**  
Yeah, I know I don't have anymore ideas. Not right now.

**Dawid Wozniak:**  
That's good. That also means that what I've done, it's enough for you that I'm happy about that. And what do you think about this visualisation of changes? So here I show you this visualisation. So, it was grey out and then there were files that were changed were still visible. What do you think about this feature?

**Matti:**  
Yeah, I think that that's nice. Uh, maybe I have a little bit of a hard time figuring out when that is going to be useful exactly. I guess that it is sometimes. If you want to know which files, the commit has changed. I'm trying to think of it like a normal programming task where you look at a commit and you're interested in knowing which areas that it touches. I think it's kind of like a nice use case probably. It seems nice.

**Dawid Wozniak:**  
Yeah, that connects good with my next question. So, when we have this information, which file we're edited, we actually not display them here, but we will because now there might be somehow confusing that is not currently visible and you might get this impression that it's not edited, but it's actually was changed. But we can also check all these commits and we can give you something like the correlation. So, when you change this file, let's say, you in 90% also change this file. Do you think that something like that might be more useful for you?

**Matti:**  
Yeah, that sounds nice when you have to reflect a code base. If there are two files that always change together, then maybe. Some of it could be programmed away, it could be automated in some sense. You know.

**Dawid Wozniak:**  
Yeah. So I imagine that for now we can just say the correlation, but then when the correlation is very high and it can be somehow integrated into the repository, it might ask you a question like in 95 of 1-00 commits - 95% of the commits this file was changed with this file, but you just changed the single one of them and maybe you just forgot about it and then you can confirm so and that's the goal for this future. I guess maybe with this product but more integrated into some environments now there is another question. So, when we have this commit, some of them might be very big, like. Here we update just to the version, so it is one line in one folder where we have this app.json. But we can also have the commits that actually are big and then do you think that it's useful for you to know which commits are small, which commits are, let's say medium and which are big commits? Whatever, it means to you.

**Matti:**  
Yeah, I guess so. It's always nice to know how much impact specific commit has.

**Dawid Wozniak:**  
How would you like to measure that? But number of files that change, number of lines or something else?

**Matti:**   
Yeah, maybe different files. How many different files have you changed? I think that makes sense.

**Dawid Wozniak:**  
And now the general question. So, when you have this view, as you can see it now, so you have sorting and filters, and you can do some magic here. What would be your primary use to go there and just explore some commits? Do you have any scenarios? This is also the question that I asked before, but now when you have more features including this sorting, filters om this view to show the changes in the comments. Do you think that there is something more, something more specific maybe?

**Matti:**   
Yeah. So, like sometimes you work on a feature that is extremely complicated and then maybe you already made a pull request a long time ago that changed the specific file. So, you go back to that commit now you have to change that feature that you committed earlier, and you don't remember where everything is hosted. So, you could go back to that commit, and you can see exactly which directories are all of these files being changed then. And you could basically correlate that to your local repos. They're in the specific solution file in Visual Studio, for example, it's like some projects they have, like. I don't know, 20 different solution files, so you have to open the correct one and then it can help to go back to the to the commits and see what is going on.

**Dawid Wozniak:**  
Okay great. And that's a good suggestion. And now I would like to ask if you want to say anything about the product not related maybe to those commits but to some other aspects of the visualisation of the settings, do you have anything to add at all?

**Matti:**   
I don't know. Can you add the legend with the colours back?

**Dawid Wozniak:**  
Yeah. So, so when you close this view and then you have to see legend and if you click on it, then it's there if you want to have it always here, then you just don't close it, you just don't collapse it. Then it's always there and it is as it used to be. So, then you might think that this overlaps each other. The thing is that they are not connected parts. So, this now is not connected. In the future, maybe it would be connected. Then we will think how to manage that in the UI.

**Matti:**  
So what happens when you click on that what is called under the file extension thing? Like the 33 more.

**Dawid Wozniak:**  
There are more than just what we show you. So, they are in order of how much files with this extension are there. So, the most files are with the AL in the whole repository then Json files, then C# files and so on and so on. So, it means that when we show the whole list, there is no space for anything else. So, we just show you 3 the most popular colours and then you can expand this view to the full form to see all extension, almost all because there are many. There is also like „other” group and you can just close it completely and then you need to expand it as a shown to you.

**Matti:**  
Yeah, yeah.

**Dawid Wozniak:**  
Is that a good sign or it's confusing?

**Matti:**   
No, I think it seems fine. I don't know how many different programming languages are usually used in a single repository. I think this one in particular has a lot of file extensions for some reason. It's probably fine for smaller repositories as well, but some of the colours can be a little bit difficult to see the difference, right?

**Dawid Wozniak:**  
Yeah, the accessibility is a problem over this tool. Also, if you put something like that into the accessibility tool, it will tell you like remove it, don't use it anymore. And here it's also problematic. So, if you have just json file, batch files and CMD so Windows Terminal files, the colours are very similar. So, it's something that we also would like to solve. The problem is how to generate these colours in the right manner when you have so many extensions. But it is the good suggestion, so maybe we should think more about that, how to make it more clear for the user which colour it represents. What is on the visualisation. OK, so if it's all, then that's all for today. There will be a fourth iteration where I will bring chocolates or some other gratification for helping me. It would be kind of special because I will correct this version a bit and then we will compare my new version with the version without the commit history and we can talk what change, what scenarios are better or worse with the new version. So, thank you one more time, Matty, for showing up and I will stop the transcription right now.