Dawid Wozniak:

So let's start. Thank you for helping me again, Enrico. Now, I will present my changes then I will ask you a few questions. It is the product already loaded, there is our repository. The first change that maybe not be that visible, but it was requested by many people. It is that now you can make this your own size. So, you can make it smaller, and you can make this wider. You can also make it so small, that is not even visible. If you're not interested in that, it's something that was not achievable before. Another thing that is connected to the visualisation depth, that was also requested, but here it's a little problem that I'm going to explain. Maybe you have some idea how to fix that so you can change some number here. So, let's say one so you can see only files that are directed here, but the size is meaningful. So, if you have the „app", you know that the app is much bigger than this single file. So, even if, I'm here then you have the impression that. You don't get the best out of this visualisation because of the size of the bubbles, but the bubble size, it's kind of on purpose, because it's meaningful. Then, if I go there, it might seem like it's empty, but if I go there, then you'll get another layer and another layer. It's good in terms of loading things. It's easier to load things like that, but then if you want to just explore your repository, you don't have that good experience. So even if we increase it to two, then you get more. Actually, I will stick with it as it is a good example, because you can see that if you increase the depth, you are getting more and more folders. It's good that we have a structure but it's maybe not helping when you don't like this chart to be very deep. You can set it now to one because you still don't get much of this visualisation. Yeah, but it's like side issue.

Enrico:

I think it's fine cause I mean if someone thinks that this chart is too busy, they can limit the depth to some other number to see it less busy, but then they still get the information out of it, which is like the size and such.

Dawid Wozniak:

Yeah, but I'm still working with some improvements that you can put, for example, additional checkboxs here like saying make the bubble size meaningful and if you don't tick that, then the size would be just as a label in the bubbles. They would be more or less the same size on the screen, so it's one solution what was suggested to me, but let's go to some other improvements. So, then another one is here. So, we have this situation that these two boxes are overlaping each other. So. if I'm in this view, I can close this now and reopen by clicking either on an arrow on this text or a cross sign to close it. Then, I open some details and they are gone. So it's also something that you need to get used to. It was requested and now we go to the commits. So now we can sort by dating the accessing or descending order, so from the oldest to the latest comments. We have filters here now. It's not case sensitive, so typing any case. You will get all things included, even if it's like uppercase here. You have the list of all authors in the repository here. So not only those that contributed here. They are in the order of contribution basically. So, this is the first person that was caught that contributed to the repository. Maybe I should start it in different way.

Enrico:

It would be nicer to have it sorted by like alphabetically because that's something, you probably want to, you probably know the authors' name.

Dawid Wozniak:

Yeah, it's a good suggestion. Here now you can include only those people, or you can exclude so all other commits but those people's commits for those dates. Now you can also specify the time, so you can also say what the time should be. One more thing that I would like to clarify is that those dates have like two roles, one is informative so you can see that now when I include you, this is

actually the time when the first commit was done, and this is time when the last commit was done. So, it shows you the range, if you don't change anything here. But if I set something here, let's say to 10th April, then it remembers that you set something, and it does not update with your search anymore in this view. Here in general tab, you have just the information about those commits and you cannot click them. They are not clickable options, but here they're clickable because I think that you are kind of in advanced mode. So, you want to know more, and you can see the message so in our repository, it's the title of PR. Here you can see description, hash, when it was done, at the end there is a button to show edited files. So, if I click it, it fetches all files that were changed with this commit. All other files will be grey out in the visualisation. You will just see the files that were change with this commit. So then you can focus on them. It is asynchronius action and it is something, that is also problematic, because of the size of the bubbles, so I'm pretty sure that there is a bubble, that is like 100% visible, but it's so small that you cannot easily see that here. Yeah, yeah. So, the one improvement that people suggested, that maybe would be good to have, is a list of these files. And if you go back there then it is reversing this. It is done bubble by bubble so we will show it to you when actually it finishes changing the property for all the bubbles. We have mant bubbles, so it takes more time. You can do something else now. We need to have some kind of loading stage but it is not here.

Enrico:
Yeah. I was gonna ask that cause it would be nice to have an indication that it's doing something because you might just go back and then you don't know that it's loading. I mean, if you didn't tell me, I would assume it kept the filter.

Dawid Wozniak:
OK, so how do you like the the new UI of this tab? So I changed here the sorting, and I change a little how the state might be displaced. So, for sorting, we have now dates out there so you can also sort by authors here. It is not that interesting because I have a filter just for this. But if I remove this person then it will be more interesting because you don't need to like filter by these people, you can just see what they did and collapse them. So, what do you think about the UI?

Enrico:
I think it's nice. I like the filtering options. I like also the the date filtering. I think it makes sense what you mentioned. I think it would be nice to have, for example, here whatever you have a group that you can collapse it can be kind of bold or something. So. it's clear that it can be collapsed you have a little symbol arrow on the right but it's very far away. So, I actually didn't notice it in the beginning because I was focusing on the left side.Yeah. So, I'd give there different look. I think it would be nice, but overall is very nice. It also seems to be like on the right pane, it seems to be fast as well, which is nice.

Dawid Wozniak:
Yeah, it's fast because most of these things are preloaded, the things that we are doing in the background, they are just searching. So now, I will come back to the question that I ask you during the first iteration, maybe it's changed. So now when we have this list, we have some sorting, filtering. Do you think that there would be something that you would like to have from the commit messages or from commit description something like the valuable insight that is not there, but might be there.

Enrico:
So it is something additional to add for the insights on commit messages?

Dawid Wozniak:
Yeah.

Enrico:
I don't think so. I think like this gives a pretty good overview of the things I usually want to see, which is like what the commit changed, which we can see, which person touches and also looking at the file. We can see who committed to that file and I think that's pretty much what I will want to know.

Dawid Wozniak:
OK, that's a nice answer and now I have another question that is also kind of abstract. So, as you can see, I have information about the commits like the commit messages. I can do everything with it. So when you look at those filters, so you have part of the commit message, authors. We have also dates and merge commits. If you use merge strategy, we can sort by author or by date but we can also do some other crazy stuff. One example that is kind of crazy. Here, we can sort by day of the week when a commit was done like Monday, Tuesday, Wednesday and here we can have filter like show me all commits done on Friday or on Monday and so on. Do you have maybe any idea of sorting or filters that you would like to have here?

Enrico:
Currently, you can include and exclude when you search for author, right?

Dawid Wozniak:
Yeah.

Enrico:
Does that work also for commit message?

Dawid Wozniak:
No, here it always includes.

Enrico:
OK, that's maybe the only thing cause what I'm thinking is, let's say that I'm looking at some file that gets automated translations everyday. Then that file will have a lot of commits, for example that say automated translation, 27th of April, automated translation, 28th of April, blah blah. So let's say that I want to exclude commits that maybe contain the word translation instead of including it. I don't know how easy that would be to do, but that's the only thing I can think of.

Dawid Wozniak:
It's not difficult to do that. Actually, it's a nice suggestion. And now I'd like to talk about this visualisation. Yeah, so here I make zoom in to some folder to actually show you how it might look like. So, in this case we have this file. It was difficult to have discovered that, like visualised that. So, you can see that here. It's visible that this file changed, but maybe some other files also changed. Then you can go level up, but then this is getting less and less visible. You are going up in the hierarchy. So, what do you think about this idea of visualising stuff like this and how you would improve that? Is it needed? Or maybe it's just too much?

Enrico:
As it is right now, I don't think I could use it. I mean It could be nice in some cases because you can still kind of zoom in until you find the file. So, wait, can you go back to the „tax engine" folder?

Dawid Wozniak:
So, one folder, yeah.

Enrico:
OK, so why is the app circle here?

Dawid Wozniak:

Two separate things. So one is that you have this file that was changed. Yeah, but you can also select other bubbles. I can go here. So hereby clicking it, then it will show me where I am. So, this is kind of selection showing you where you are at. That is why it was circled to kind of indicate it to you.

Enrico:

Yeah, cause what I'm wondering here is. I'm not sure it's the good idea. I'm just thinking right now out loud. And if you go up one folder, so now the the dot is very small, so it's basically invisible. Would it make sense to have also the folder kind of highlighted? Like all the structure folder cause then what I would see is basically I would see yeah exactly here in „tax engine" was something changed.

Dawid Wozniak:

That's possible.

Enrico:

I just didn't know if it would make it more visible or not because what I'm thinking is a lot of commits like commiting to one folder, so even to see the folder like this, where the files are located might be better than current behaviour, cause, then at least if you don't see the file you know which folder it's inside so you can at least zoom in and get to the file.

Dawid Wozniak:

Yeah, that's a good suggestion for the visualisation. So, then, I will just leave this file on the screen here as it is. I think that's nice. There is another idea. So, when I go back here, then I will get some commits. It is for this particular folder, but I think that it makes more sense for the file. So, if I just select some file, hopefully there will be some commits. OK now it' still loading. The idea is that you might have this file and this file later and here you have a file with twenty commits. Som let's say that I can see that there is 100% correlation that when you change this file, you also change this. So would it be interesting to have such a matrix showing you that this file was changed along with this file? 100% with this, 90% with that, 50% with another. It just would be like the threshold.

Enrico:

Yeah, I don't think I could use that information. It's a bit too advanced cause then like the problem is that I would get information overload at that point. There are too many things to correlate. And what I can see is, OK, I see that there are like twenty or let's say even one hundred commits here and what they can do is I can go into one commit and see which files changed. Then, if I see that file, for example, look like, they change at the same time, I can still with two clicks go to the commits and see if that's the case. I don't think I ever need to do that for 100 commits. I'll do it for three commits and I see the correlates, then I get the information I want. So, I don't think it produces that particular good experience in our case.

Dawid Wozniak:

I was thinking about the localization files. So, when you have special version of some page for some country. We have the correlaction. So, I was thinking about some that kind of stuff. We have a tool to do that, but since there are other companies who actually do something like this manually for the localization for special low statements and then it might be useful, I thought. There is another question that's following your understanding, I think. So, when you have this commit, is it important for you to know the size of the commit out-of-the-box? Like without going into and checking which files changed, you might know it from the message that saying, „change label from this to that", then you know that it's probably a small commit, but you might also get some suggestion in the UI when

it's something like updating version to twenty-three then it might be big commit, might be small commit. So. do you think that would be useful to have such information like out-of-the-box?

Enrico:
In the UI, I think actually that's a good idea. I think it would be nice because there are some cases where like commit changed only one file. If I'm searching, for example, in the list of commits for certain one and I see that one of them changes only one file. I know that that's the file I'm looking at, so it doesn't even make sense for me to open the PR or like that commit information. So yes, I think that it would be good to have it. For example, on the right or somewhere number of files changed.

Dawid Wozniak:
So you would measure that by number of files change or number of lines?

Enrico:
Probably more number of files. I think number of files would be more interesting promoting, but that's for my use case. It will depend, of course, on people. Some people might try to do something else.

Dawid Wozniak:
Now I have the last question about this. So, I also asked you that during the first iteration but now when we have this commit list, what would be your primary usage to actually go there and make some filtering or sorting? What is primary scenario? So, we have sorting and filtering, do you think that there is maybe something more that now you think it would be useful to use this view for? Like something maybe more specify more scenarios or it's still browsering commits?

Enrico:
Finding right person to to contact.

Dawid Wozniak:
I think it is what you said last time.

Enrico:
Yeah, I think it is, for me, finding ownership of the code. I think now having been able to basically click through the UI to different commits, I think it also can help for example to find what you mentioned - correlated files. So, let's say, I know I need to change one file which is this file. I'm like there is a similar change. That's easy to see even without doing a metrics just like by navigating to two or three commits. So, I think it gives also someone that and I think that could be one of different use case. It's very hard to think for more now. What could I use it for?

Dawid Wozniak:
Yeah, I think that the first impression is important. That's good. So, if you would like to say something that I haven't asked about or something about the general product like not related to commits and it is time to say it. I can include it in the future version or at least answer why I cannot do that. So, it's time for you.

Enrico:
First of all, It's a very big improvement since the first like iterations, so good job. I think the main thing from what we said today - I would like to see is definitely the loading indication. But we talked about that already. But I think that would be quite important because then it tells me that the that the OS is doing something. It would be one thing. Another thing is that the way the menus open and close, sometimes I just don't know to which menus I have access to. The other thing is, for example, if you select like one folder… I'm thinking like earlier when we had a commit selected and also folder

selected. It wasn't completely clear, for example.I think you were here and then you changed level. Something like that. I think the general idea is okay, as long as, all the menus are like visible when I collapse them, I would still like to be able to reopen it somehow. So, like showing them on top, right? If I close this thing, I would also like these, for example. to be able to reopen it in a few seconds. Yeah, it still be open by clicking, but maybe, I don't know, maybe to have it like collapsible and expandable somehow. So it's clear that, OK, I have collapsed it, but it's still kind of there. But yeah, it's minor things. I really don't think it's a big deal. It just small user experience. Yeah.

Dawid Wozniak:
Thank you for those comments. So, the next iteration would be a comparison between improvements and the clean version. I will ask few questions more how you think it improved and so on. Finally, I can include it in my paper and it's end for now. Next time, I'll probably bring the chocolate or something. That is some gratification for helping me.

Enrico:
You don't need to but I will not say no to chocolate.