

Dawid Wozniak:

Okay so I started the transcription right now you should be able to see yours on the screen. How it's...

Jonas:

Yeah, there's some.

Dawid Wozniak:

...recording what we are saying and now I will analyse this project so here I have the git track open. It is the same screen as it used to be. The only one different thing is that there is the footer with some version, so people know that actually which version it is and some credits. Let's analyse this project. Yeah, it is a small project, so it went pretty fast. So, the first look is the same as it used to be, but there are a few improvements that are not directly connected with my project, but they are kind of useful. The first one is a new option here the chart depth, so you can choose it to be, let's say one. Then you will see exactly what you would see if you went to the File Explorer then you can increase it, let's say to two and you have some more details use mainly by people who work in very big projects where you have a lot of bubbles and maybe it's a little overcrowded here. So that's the one thing. Let's stay with the full option. Another is that now you are able to resize the part of the visualisation so maybe you wanted to make the layout like this.

Jonas:

yeah, that's pretty cool.

Dawid Wozniak:

It's possible now. You can actually make it bigger. You can also make it bigger in sense that it's exceeding the screen, but it is something that you don't want to do. If you want to reset it, then just reload this page. In the general view, so when I click any bubble, let's say "app" bubble. Then we have the standard things that used to be here, and we have the commit history that now looks a little bit different, but the underlying assumption is the same. So, you want to see the dates and what kind of commits were done, distinguish just by the message. It is from the latest to the oldest one, displaying just part of it, and you can expand it here. So, there is another tab that is called "commits", and if you go there, you have some more options. So, you have a date. Actually. Now the one improvement that they didn't tell you about, but I think that's important that now you can close this. So, it's gone and you can have like the full high of the screen for this detail tab, if you close it then you can basically reopen this if you would like to.

Jonas:

That's nice.

Dawid Wozniak:

So let's go back here. And so here you can change the order so it can be from the orders to the latest and in the another way around, and you can also sort out by authors, there so you can see, OK, this is Jonas. This is probably also you but with the different GitHub account. And here there is some other person.

Jonas:

Ohh that's cool.

Dawid Wozniak:

But maybe it's not enough, so let's stay the dates and then we have some filtering. If you go to this file and more commits, I think that this file is more interesting. You can search for some part of the

commit message, let's say, ok, they're actually two commits that "add" something in the message, but it maybe it's also not enough for me. So, I would like to search in the description and then I see, OK actually there was a release and, in this release, at least some word "app" is the description of the pull request. So, I can open the detail about the pull request and it is the releasing the version. I can see the author, when exactly it was created with the minutes, the hash if you ever wanted to cherry pick or do whatever, and I can show the edited files. So now I fetch the files that were edited with this commit. Actually. it's a lot. that's good and here you have the complete list as you can see in the visualisation. It highlightings the files that were changed and others are kind of grey out. So now if I go level up, I still have those files highlighted that were changed with this particular change. If I go back, then it's basically inverting the process and now you have everything as it used to be. OK, so let's remove it.

Jonas:

How did you do that? How did you remove the highlight?

Dawid Wozniak:

And so actually from the technical point of view, what I'm doing here... oh, I've just finished. When I'm in this commit and then I have the condition that if you have any files highlighted, have this data, let's say, then let's say highlight it and if not then, don't highlight anything if you click this arrow and there are some data, so we knew that you click that we reverse this process. Another option is from the technical point of view that you click just back arrow, okay you close that. Maybe you wanted to change something else and then you click on this bubble. Then we also reverse this process. There are two conditions to reverse this thing. Yeah, here we also have some author filter. So, let's say here I just wanted to see your commit. OK, there are not commits. But maybe I want to just exclude you. So, then I can see OK there are all commits but yours. There is some date filtering. So, if there is no commit, there is no dates but including all and then you can see there are those dates from the first commit to the oldest. At the end, let's say the dates, they update automatically, so it is kind of also information the range of the changes.

Jonas:

Ohh that's cool.

Dawid Wozniak:

If you specify the date, let's say this date, then it will never update without your editing it again.

Jonas:

How can you make it go back to updating it live again?

Dawid Wozniak:

Yeah. So, if you close those and you basically open again.

Jonas:

Okay then it's reset yeah.

Dawid Wozniak:

It's basically resetting this. Yeah. It is like OK, let's start again. So, my first question to you is - I showed you the product to your eyes. To what extent on the scale from zero to ten, do you agree with the statement information about the commit messages is presented in the clear and easy to navigate UI in Git Track?

Jonas:

So the commit view or what?

Dawid Wozniak:

Yeah, yeah. Commit messages. So, what I'm asking, it is about basically this stuff. If you look at this tab, is it in your eye friendly for you? Is it clear what it all does and how you can access it? From zero, that it is completely not usable to 10 that it is perfect. Nothing to correct.

Jonas:

There are some points of confusion, so maybe I would say seven or eight, seven maybe.

Dawid Wozniak:

OK. And would you like to explain some points of the confusion where it was?

Jonas:

As one of the things was that it wasn't apparently clear without your explanation that the date range was updating automatically, like you could notice it if you were looking for it, but it wasn't immediately clear from the UI. And it also was not that clear how to reset it again without closing the entire thing. Otherwise, I think it's very nice with the date groupings, the icons and it's pretty nice. That makes sense.

Dawid Wozniak:

Yeah, that's a very good answer. And now I have another question also the scale question from zero to 10. So, if you have the Git Track now, how beneficial would it be for you to use it for any work or private project from scan zero that you will never use it to ten that you would use it for all your project multiple times a day? And if you can give some suggestions why you gave your grade that is also good.

Jonas:

Like do you mean with the improvements added? If it would increase my grade?

Dawid Wozniak:

Yeah, yeah. With the current version of the Git track. How beneficial is it for you to use this?

Jonas:

So I kinda like the highlight, especially when you click on a specific commit. I think that's very nice way to visualise that because you can see all if it's not too big, you can see most of the files of the project and when it highlights for the given commit, it's helpful to see how broad this commit changes the repository. I think that's a very useful for that specific action or use case. So on a scale... Can you repeat the question?

Dawid Wozniak:

How much would it be beneficial to use Git Track in your work for any purpose on a scale from zero to ten?

Jonas:

I almost always see something useful, I think, so. I would say nine.

Dawid Wozniak:

OK. You gave some good reasoning. That's nice. And if you said nine, it means that you would use it and now I would like to ask you about some scenarios. So. if you have a project and you would go to this tab, what would be your primary usage of this commit view? What for would you go there?

Jonas:

So I think I kinda brushed over that in the previous question, but especially the highlighting of which files changed in a specific commit I find very useful. I also like the filtering that also searches in the

commit description. So, if I'm looking for bug fixes, for example, I can just search "fix" and then it both uppercase and lowercase searches the commit messages.

Dawid Wozniak:

Yeah, it's not case sensitive.

Jonas:

Yeah, that's very nice. My question is maybe if I'm zoomed into a specific folder, is it also filtered by that or is it global?

Dawid Wozniak:

Yeah, it's filtered by that. So, if you say in "app", you can see those comments with the "fix". And then I can go to "api" and then I see different commits. So it filters on that.

Jonas:

Ohh, it is very nice. I like that very much. It's very nice. So, you can see specifically filtered on the API which fixes have been implemented and how many and maybe you could also look if your search "ad" or "feature" then you could compare how many features versus bug fixes are made to the project.

Dawid Wozniak:

Yeah, that's true.

Jonas:

And specifically to the API and then you could take that data and maybe compare to the UI and see where we have the most bugs fixed. Ohh yeah, maybe it's just an idea for a use case.

Dawid Wozniak:

That's a very nice use case, I think. And now maybe when we use that you think that there is something missing. So, if you think about it, what is still missing regarding this commit message history that you would like to have, do you have any ideas now on the top of your head?

Jonas:

One idea I had was - if you have selected the top contributor metric, it would be nice to have the author colours on the commits, maybe? So you could see it's Thomas and Emil who made these commits and etc. That could be a nice change.

Dawid Wozniak:

Yeah, I can comment on that. So, at the beginning, I actually did that. So instead of this icon here, it was the colour. But if you have a very big repository, when you have like over 100 people contributed, then those colours are very similar for some people and this list becomes very colourful. So, you can also see it here in the list description here. You have actually just five people, but if you have now. let's say 1000 committers. Each has some different colour. It was kind of usability issue so that is why in the sorting you can put like author and then it's list more consistent with other things, yeah.

Jonas:

Yeah, that is true. That's nice. Yeah, I see that. Yeah, but I think that you mentioned that it is a general issue with Git Track and I think there are some ideas to address it, but I don't know if it's the time to talk about that right now.

Dawid Wozniak:

It is not the topic of my master thesis, but I'm happy to talk about it afterwards. Also, I got some

ideas from my testers and so maybe there is something else that you would like to say about this product with this commit messages that I haven't asked about. Any comments or something that you would like to comment or say it's time for you.

Jonas:

Um, so I have a question about the groupings. So, what can you select in the drop down where it says author now?

Dawid Wozniak:

It's just author and date, so it's just those two. So date, it's default.

Jonas:

And if I select the date so it just picks the groups by the day that it was committed, right?

Dawid Wozniak:

Yes.

Jonas:

So if you have a very active project versus endless active project, it could maybe make sense to a dynamic grouping by half day or hour, or maybe weeks if it's less often committed to for months, if that makes sense.

Dawid Wozniak:

Yeah, I think that's a good idea. I just didn't have time to implement that, but it would definitely be improvement for different management of the repository. So, they is some kind of compromise to display something in some order and people clearly understand the idea.

Jonas:

Yeah, but I think it's very nice to group the commits. You cannot also apparent the activity each day and also the days that there was no activity. For example, you can see that, in this case we have all days. Maybe.

Dawid Wozniak:

But here is like third December was not actively.

Jonas:

Yeah. So that's a period of break in the project and other days that I worked more or less. So another thing maybe to show could be how big the impact of these changes were, like how many characters changed or lines changed maybe? It should be interesting.

Dawid Wozniak:

Yeah, there was a question I asked if they commit size is important for you and how it should be calculated. And some people said yes, it's important. But the other group of people said, yeah, actually it's not important for me. So here it's some option that might be useful for users that we might have also as some checkbox like show how big they are. But I also didn't have time to implement this.

Jonas:

Yeah, like you had to select a specific item to implement and focus on that makes sense.

Dawid Wozniak:

Yeah, exactly. And so now I have a few questions just about you, if you want to add something... I got the impression that I interrupted you.

Jonas:

No, it's fine.

Dawid Wozniak:

Okay. Yeah. So, I have a few questions about you. So, I can actually do some analysis of my testers. So how many years have you work professionally with IT project including part time jobs? And it is in years, so you don't need to be very precise.

Jonas:

Okay, let me just look, I think. Think about 7 years. I mean, I had a break with studying, but I started having an IT job seven years ago, I think, let me just check that.

Dawid Wozniak:

Yeah. So, if it was seven years ago, then you, of course, developed professionally in this time. So, seven years is a good estimate. And what is your primary role when you work?

Jonas:

Like a lead developer role. I also try to guide the team as a whole like guiding developers and planning the project so like a mix of planning and working as a lead developer and assisting other developers.

Dawid Wozniak:

That's actually perfect combination for Git track. Yeah, so how big is your average team, so you can include developers, QAa, if you have PMs, product owners, but not people like ine high management that they are not involved in projects development but some other aspects of it.

Jonas:

So the place, I currently work, and I think we are big team for doing Scrum. It's a bit problematic, but I think we have around 15 people maybe.

Dawid Wozniak:

That's good estimate and if you have your average project, do you know how many commits are there and you can say per day, per month, per year, what is more comfortable to you? So, I can always like recalculate it to the right metrics for me.

Jonas:

I can just take a quick look. So some projects have like around 200 commits. Some projects have well thousand commits so.

Dawid Wozniak:

OK. And it is in total, but in which time frame?

Jonas:

Ohh that's a good question. Maybe it's something we should show in Git Truck. So at work, maybe we have around four or five pull requests merged each day.

Dawid Wozniak:

Great. That's good metrics.

Jonas:

That's a wide question, but we use squash merging so it becomes a single commit in the history.

Dawid Wozniak:

Yeah, I think that's a good metric because you always have time when you are more active or there

are some holiday times when people are not that much active. So, do you know in average how many files are in your standard project? So here it is like 114. So maybe your project is much bigger than that or much smaller.

Jonas:

So that depends if it's at work or at home I would say. So, like an average project is maybe around the 100 files for side projects and school projects while on work we have much larger projects. Let me see if I can. I don't know if you have time. I can just try to find it. Go on.

Dawid Wozniak:

Yeah, I think that 100 is a good estimate. It is something that I just want the rough estimation and I have the last question. So, when I finish my project, there would be some paper that I'm going to publish as my master thesis project. So, would you like to be informed about the results so get like the link where you can read the conclusion of the paper?

Jonas:

Sure. Definitely I would.

Dawid Wozniak:

Ok, great. Thank you for your participation in the project. I will stop the transcription right now.