

Dawid Wozniak:

So it is a Git Truck, Git Track beta version and here we have a few repositories. If you have pre analysed them, they have this mark, you don't have to analyse them again. So, for you are lecturer, I have some projects that actually were done by students. So, let's say we can look at this „talk”. So here, we have some general information like what repository it is, which branch, when it was analysed, which commit, how many files are there. some feedback box here. We have this bubble chart, so each bubble corresponds to the size of this particular file. So here, we can see that this file is probably the biggest file. But this bubble is the biggest in the visualisation and this is a source folder. So, it contains other bubbles. You can also change it to tree map. So then, it looks something like this but let's stay with the bubble chart. We are doing some metrics and it is colour coded, so for now it's just file extension and you have some JavaScript and CSS file. But you can also put like number of commits. So which file were changed frequently, when was the last change, single author. So now, we highlight just the things that were committed by one person. Top contributor, when we colour code some authors. Then, we have the track factor that is basically combined top contributor and single author. So, then you can see how many people have actually committed to this file as here three authors, there one author, that you can also figure it out from the single author. So, let's stay with the file extension and then we have chart depth. So now it's full. So, you can see all the files, but if it's a big repository, maybe you just want to see one level. So, it is what you would see in the File Explorer and now you can go to two or there and you have some different level of abstraction. You can also increase it to three, and so on and so forth. Here in this repository, it's not problematic, so we can stay with full. So, all of this, it used to be there. So, this is what I've presented for now. It was there before I started my project, but now when you click on some source, you have also detail panel. You have author distribution, where it's located, and some commit history. Here it is just informative, but you can go to „commits” tab and then you can do some more magic with it. So here it is from the latest to the oldest comments, you can change that in the tab so you can have from the oldest latest. You can sort it by author, so then you can see OK, Laura actually did those commits then we have Sophie, then we have Christina and so on. You have some filters, so maybe you are just interested in things that fix something. So, we have this filter by a part of the message. and now you can see Sophie did „fix style”, „fixed to input button” and so on. But then you can maybe come back to this date sorting. I think that it's better for the sake of this visualisation. So now I would like to see actually just Sophie and you can see, it's sorted by date. Finally ,you can say OK, but I'm just interested what happened, let's say from the 1st of November, then you have some more information that you have here. You can also exclude merge commits here. Actually, there are not much commits, so it will not take any effect. <y first question is what do you think about the UI? Is it presented in the clear and easy to navigate style?

Bjørn:

Yes.

Dawid Wozniak:

Yes, OK. So um, then next question is following. So, if you need to give a grade from zero, that means, it is like completely not usable to ten that it's perfect. Nothing to correct then. What grade would you give for this particular commit view here?

Bjørn:

Just the usability?

Dawid Wozniak:

Yeah, usability and UI. Some people might say, ohh actually I don't like those colours and that's also

something that counts. Uh, it's difficult to measure and say what colours are right? It is just a matter of taste.

Bjørn:

I mean, there's not really interesting case. You can always ask to add like themes and dark themes like I mean the UI is fine. Um, well, except for those cuts and this icon, that might make that pixel, but that's less interesting. So, you asked for a number, yeah.

Dawid Wozniak:

Yeah please.

Bjørn:

Can I click around?

Dawid Wozniak:

There's another feature, so you can also click on it and then you have more information, and you can show the which file we're edited. So which file basically were changed with this commit and then you have some visualisation but only of the files that are still in the repository. So, if you click that, we fetch which file were changed and here you can see just one. And now if you go back, we reverse this process. Yeah. So, if you look in the comments that are like back in the history and then you might get the like the commit, that seems not to have any change. It is because all these files were either remove, rename moved and then then it's not visible here anymore.

Bjørn:

So you're looking like a broad answer, I think the UI on its own, except for this part and this part, I was talking about, I'm talking about the border cut and the fact that that some of the border in the two input fields is not visible except for that I cannot find any problems with the UI. I don't get like any problems... 8... maybe 9.

Dawid Wozniak:

OK, that's fine. And and now I show you this total and we play a little with it. So, do you think that it'd be beneficial to use Git Track for your work or site project, anything related to the repositories that you do, it's also scale question from zero that you will never use this product again or ten that's if you have access to it, you will use it like everyday multiple times?

Bjørn:

Can I, please, play with it?

Dawid Wozniak:

Yeah. So here is just one branch, because it's a student project.

Bjørn:

Yep, but I can choose if they were there. OK, I have a comment and it says two more... It was not obvious to me that the two more were dates and not entries. It is a small thing... I mean, I can definitely see use for this tool when giving feedback on student projects or even in a company.

What I would like to see here, and it is a big ask. I'll just mentioning it now look... what I would like to see is the temporal evolution to how does it change all the time and create the timeline that you have here. Again, that's a big ask.

Dawid Wozniak:

That is good to know that. So yeah, it's just one commit at image and some files. So yeah, it's maybe not that interesting file to look into.

Bjørn:

I'm confused now. It is blinking... Right, I clicked it. That's right. And it's so knowing I did it.

Dawid Wozniak:

I can explain what happened. So, if you click a file, the commits that include this file also changed. Yeah. So that is why this list was updated. There was just one commit. And if you have filters and now we have a filter that says that we should include just Sophie's commits, it still applies to other files when you click them. To reset this view, you would need to like close this with the cross sign and then it basically back to the default. You can see all others commits.

Bjørn:

So if I do this, it resets the default.

Dawid Wozniak:

Yeah.

Bjørn:

Ohh yeah then then it's default.

Dawid Wozniak:

If you click back on this and here you have the file extension. So, the metric that is colour coded is likely a legend.

Bjørn:

Right. OK.

Dawid Wozniak:

So first here it's general view, so you have more information and just informatic commit history and then you go to commit to do some stuff. Here. It's the author distributions also calculated based on the comments.

Bjørn:

What I find useful is that I can see who did what. So I can make sure that that the distribution of work is not too distributed. Um, so someone did entirely the styling and someone did like the heavy stuff or something like that. I can also spot that here. I like it. Is there a component in a React project, right? Or it is similar component-based framework?

Dawid Wozniak:

Yeah, I think it is React.

Bjørn:

I obviously cannot see is the actual code here, yeah... I mean I can definitely see it used but this tab focuses my attention with them. It makes sense. Yeah. And to, if you needed the grade...

Dawid Wozniak:

Yeah, thank you for that. You mentioned that that this timeline is missing that you would use it for something here. Is there anything else missing regarding the commit messages view here?

Bjørn:

Yeah, it just on the top of my head, if I could have like a view of this. So, I could have the commit history and then I could have like a slider. Yeah. When I move it, I see how the project has changed.

Dawid Wozniak:

Ohh yeah, that's okay.

Bjørn:

I am just thinking out loud here. Then I could also spot like refactorings. I'm very interested in the refactoring because that's when they don't just add stuff, but they actually refactor stuff. That's when they learn something new, right? That's when they figure out, actually, we should probably have all this stuff and all these files into an API folder, something like that, right? So we move all this styling into our style. That's interesting that that means they they learn that particular thing, so should to be able to spot that that would be extremely valuable.

Dawid Wozniak:

It makes sense. Yeah, yeah, actually, it's answer to my next question because I wanted to ask what is still missing so if you have any ideas for improvement. But here for the current usability for you from the scale from zero to 10, right, then it's easy for me than to actually visualise what other group and other people think, how they compare from different groups, you know...

Bjørn:

okay, so could you rephrase the question? So, what is it you want to know more about?

Dawid Wozniak:

So how much would it be beneficial to you to use Git-Truck in your work or for your side project for any purpose basically on this scale of zero to 10 ?

Bjørn:

Yeah, in the current form as it is... how beneficial... Five.

Dawid Wozniak:

Yeah, that's nice answer. And my next question was about missing features regarding this commits. So, you mentioned that you would like to have like the timeline, evaluation of the project to see how it changed.

Bjørn:

Ohh yes.

Dawid Wozniak:

Do you think that there is anything more that you would like to have here?

Bjørn:

I like that I can click it and get the information. If I could right click it and there was like a customised options thing instead of this.

Dawid Wozniak:

Yeah, we don't support it right now, but we could.

Bjørn:

Or maybe. Actually, you could just have like to a file. So, when I click this, there is a link to the file. You can easily locate it at here, right? But if I could click and see the file. Maybe I'm just missing it here.

Dawid Wozniak:

So there is an option to open this file. So, if you click here, we can go there and you see the basically the default editor or something to select so then you can actually see right what is there.

Bjørn:

OK. Uh, improvement... maybe it should be clickable when it's located at. Or maybe when you right click. I mean that's the difference between learnability and memorability, right. But I think if there was a link to the GitHub, so I can go online?

Dawid Wozniak:

Yeah, we can also do that because we have this information.

Bjørn:

That's all that will. OK, I'll tell you. Overall, it is very nice and I like it.

Dawid Wozniak:

So my last question that I defined it is about this comment view. So, you also mentioned that I think, but I would like to ask again. So, if you have any project, what would be your main usage of this commit tab? Do you have any scenario that you would fulfil going to this step and using some sorting and filtering checking something here...

Bjørn:

Timing! I would like to find out about that definitely. I think I could, I could probably implement the whole spotting refactoring things myself by using like tags I don't know if you know, but it's very common when you commit and group work to use tags and so you have. This is a feature, that is the bug fix, right? So, if I could get them to do that from the beginning, I could use the filter to filter for tags, right? So, this is the refactor great...I'm just gonna look at all the refactorings now and see - Can I spot like learning outcomes? Ohh doesn't it make sense?

Dawid Wozniak:

Yeah. Yeah. Makes sense. It's a good explanation. Um, I actually I was trying to do something like the tagging like automatically detect this tagging. What is very difficult when you don't have any convention for commits.

Bjørn:

yes, yes, it is.

Dawid Wozniak:

So I asked some questions about this, but maybe you have some general comments, something that you would like to say or ask about. It is like time for you if you want to say something and then I have a few questions about you. So, I have more information about my testers

Bjørn:

Sure. I'm curious, did you did consider the timeline?

Dawid Wozniak:

Yeah. So, there was a request for some people to see this timeline. Yeah, but it's useful when you have a small project, and you want us to see how it's developed. Many people who I talk with, they are from industry, and they have projects like Visual Studio Code, something of that level of the complexity. So, then it's like I will never use the feature to see what was like 10 commits back. It's not interesting, not visible, and it's actually does not bring much value to me when I need to change

something, so it is the question in which direction you want to go to. Should it be like more for lecturers and people who grade other people, or it should be more for people who work in the industry and they would like to have more automated stuff, more integration with the IDE, so they don't need to do anything. They want just like one button and it's instantly there and they can do whatever they want.

Bjørn:

Makes perfect sense. So that feeds would be only interesting to a teacher in there.

Dawid Wozniak:

Yeah, they are also product managers. Who said OK, so I can actually use it for maybe marketing purposes, I don't know code that much, but when I do some presentation and I have a developers, like talking to developer group, I can show okay that's our product. We will show you how its structure and if you want to extend it and make some like your own extension. Let's say. Then you actually use this and that in your project would be more or less structure like this and then you can end it in bigger product. Yeah. So, it's that kind of usage was useful for product managers product. Yeah. OK, so now I have a few questions about you. They should be rather easy. So how many years have you work professionally with IT projects, including part time jobs and you don't need to be very precise. You can say like in years, not in months, weeks. It doesn't matter much.

Bjørn:

Not including education?

Dawid Wozniak:

Ohh, including education if you think that education was „working professionally with IT projects“, you can include the education. I just leave it to you.

Bjørn:

Sure. Alright. Well then four years. OK.

Dawid Wozniak:

And what is your primary role?

Bjørn:

Uh educator, teacher...

Dawid Wozniak:

so probably, you work with other people like grade other teams or you work with some open source project. So, what do you think is your average team size including roles like developer, QA, product manager, product owners but not like high management like CEO or that kind of people?

Bjørn:

Well, that's 4.

Dawid Wozniak:

OK and when you have your average project, how many commits are there? And you can say like per day, per week, per year. I can scale that later.

Bjørn:

Good question. And I say I don't know really.

Dawid Wozniak:

That's some good answer. Yeah, that's good. So do, you know, maybe the size of the project in

context of file. So here we have like 71 files, and it is a student relatively small project. Yeah. And do you think that it is similar to your project? Or maybe it's like completely different or you don't know.

Bjørn:

No, it's pretty precisely this actually. This was one of the projects when I talk when I was teacher assistant.

Dawid Wozniak:

Great! And now it's the final question. So, would you like to be informed about the result of my papers? So I interviewed many people including students, people from industry and lectures. So would you like to be informed about the result?

Bjørn:

Yeah, sure.

Dawid Wozniak:

Now I have some gratification, one chocolate for you. You can choose which one you want. Thank you very much and thank you for your feedback. So that's the end.