#### **Dawid Wozniak:**

Let's start. So today we have the second iteration of this GItTruck product with the commit information. So, there is the first iteration that we already done, and it is a second when we suppose to look at your requests and my changes, then there will be third iteration for your request because your requests are big in general, and more changes will come out and at the end final iteration. It will be comparison between 1st and 4th version. So, it means that this is the most important part because it's something that I would use for my master thesis. If you would like to check the program on some other repositories without my assistant or the current repository, you can do it. Use just the simple comments, so you need to have NodeJS installed and then use `npx -y git-truck-beta@latest` I'll show you how to see the version. So now we can just look at the screen and I will try to do a presentation and of course you have some valuable feedback for me. Let's find what I would like to show you how it looks in our repository Platform Core or NAV I don't know which one you prefer. I don't actually was able to determine which repo is like a base repository for you, that you would like to look into, so you can tell me now.

#### Iulia

Neither, I guess so. We can see... maybe... it is actually NAV but not from the beginning.

#### **Dawid Wozniak:**

Okay, Let's start with the basic view. And it will take a while.

#### Julia:

It has a lot of obsoleted code.

#### **Dawid Wozniak:**

Yeah. It is what you see when you run this comment and how you can check which version of the product you're running. So here you have some copyrights note, and you click on it you have some information. It is not perfect, but I think it is good enough to see which version you have. It is 023. It means it is a second iteration it would be 030 iteration and so on. I have also started bugfix versions so it might be like 023 but it still is the number two meaning the iteration. If you analyse the repository, you analyse it on the branch level. So here for example, you have a platform that is on master branch. So here, if I change this branch, I would need to reanalyse. If I want just master, then I have already analysed it. You need should be just looked so here you can just click view button and then it will not be analysed data again. But it will reuse some already done work. Currently we have the limitation that we don't take more than the 5000 latest comments starting from today and it is due to the number of commits might be big. When we add more then the product is getting slower and slower and at some point, you will have likely out of memory errors, OK. Now, we just have how it looks and we have different views in detail part. So, we can first disable all animations that I will do just now. Then I just click on the biggest bubble then it will open details tab. First thing that you can see that is different. It is that now we have two tabs in details. There are general and details tabs. If I go to details there, I have the completely new view. Here the first thing that probably is interesting for you. You can see that the comments are from 17th March to some June commits from 2022. It is because of this commit limitation. So let me show you what else has changed. At the beginning of this year, let's say you have to search for commits. Here you can just put any word, any phrase that you would like to have in the commit message. So, let's say that I will just go with the word "permission" so you can see now that we have all them with that word "permission" inside the message. Only they are loaded. We can put other dates. So, we don't do anything outside it. That's the last commit date. I will talk about it at the end, how we're going to solve this limitation and let's

go to another feature. So here we suppose to have some merge filter that you might encounter when you have different merging policy than here, so it does not work. It is because it is designed for GitHub, it is the one thing and another that we use squash and merge commit strategy. So we don't have this merge commits that are used with different merge strategy in the pull request. Then when you merge to master, you have two comments from your branch and extra merging commit that's not here. So here actually it's not that useful. But here you have authors and how you can see authors. But form where you know authors, the simplest way is to go to another metric, this called top contributor. Then we will wait, it reloads and then we can see here the list of all people who committed to this repository. I can see that this list might be very, very long and for us it is just that case. So, you can see like, OK, well, did Dawid do here anything with the permission? Nothing, but maybe someone has this. "Tom dash". Yeah. So here you have two filtering working at once. You have a text filtering, and you have the author. That's the earliest commit from author that starts with Tom and dash. You also can filter on dates, so you can say OK, but I would like to just now what happened in this year from the 1st of January. I would just start here and there was one comment that mentioned permission in the title. So, it is what we have now, and I would like to ask you a few questions. So, the first question is that we have a new tab view for commits. Is it better? Would you think that this should be something else you mentioned? I think that the said during first round it might be a pop up.

#### Julia:

I think that it's better than before. It's definitely less cluttered. An option to have a pop up even from this view, just to take it out to to see it bigger could be beneficial, but I think it's better than it was before for sure.

### **Dawid Wozniak:**

Okay and now let's talk about all these filters. So, I will just say one more time that we have a filter to filter through what is included in the commit messages. Here we have the filter to show the merge commits. That's not usefully in our scenario, we have a filter for the authors, and we have the date range that you can specify.

#### Julia:

I think I'd rather have all the filters in the same place because we have now a text filter on top, but then all the other filters are on the bottom. I don't have preference for it, but it'd be probably better for me have them at the same place and my question is also: is it picking a date before that predates of the 5000 commits possible or blocked?

### **Dawid Wozniak:**

Now it's blocked OK, but with the new version so the third version we supposed to enable that and we will just ask at the beginning saying that your commits, if your history is too big for us to handle, then we will just ask what we want to take and here when you have some extra information, we might be able to filter through the whole commit story. That's the ultimate goal. But for now, I just want to enable it to see working your repos.

#### Julia:

That's the solution that really need to be implemented. 5000 is not enough for companies. Can I see this view? First of all, the icon is, I think, cut off - the merge icon.

## **Dawid Wozniak:**

Yeah Icon is a little cut off. I think that it is because of this commit.

#### Julia:

So there is no way to check who was the author of this commit right and where it was done?

#### **Dawid Wozniak:**

Yeah, that's very interesting observation. The one that you mentioned about the authoor. I've tried to use the colour coding. The problem is that here let's say that we have over 100 authors and I can put the icon here. Yeah. But then some colours are very similar and that's the one thing and then another is that you need to actually remember which corresponds to which author.

### Julia:

That's true, but since we have filtering. This looks like the tabs are these semi connected, especially when there's more commits, right? They touch each other top contributor and details so if we filter the author, it could also filter the top contributor or just contributors to have this checkbox, but I mean that's just idea.

### **Dawid Wozniak:**

That's a good suggestion. I haven't thought about it, but it would be good to do it, maybe even in this way. Would you like to add something else about this filtering?

#### Julia:

I think it's good. I mean, sure, it would be nice if the author is also there, I don't know if it lists author suggestions. I don't think so, right, it's, you know, we might think about the suggestions. So I could, I guess, get suggestions. Other things, it's just another spacing and so formatting for the for the dates, it would be nicer if the box is aligned, but it's just a minor.

### **Dawid Wozniak:**

Yeah, but it's good to mention to have it on my list. Ok, so let me go to the next topic. Next topic is connected with the thing about the commits in general, but very related to this project. So, when you have any commit here, you have a title that says "I remove something", "I bring it back" and it is what you can see here. But there is also the description of the commit. That's how it looks in our repository. You can view it by hovering over this message and you can see more. There is information like "something was introduced for a solution and then I needed to replace that". Would you think that it would be beneficial to use this description for anything here in GitTruck?

# Julia:

I think it could be used for the text filtering, I mean searching. Yeah, I don't know if it will be beneficial to show it all as it might clatter unless you have like a way to separate and just show, you know, just one commit or something. Then I think that you will need to have the full screen. Yeah. And then there will be link next to see it here and it makes sense. But I think it could be included for the search text for context for sure.

### **Dawid Wozniak:**

OK, that's great. And so if you look at this current state, what do you think might be still improved?

#### Julia:

So for example, so we have the general commit, sorry, the commit details, yeah. And we have a list of commits, but it also doesn't show us where it was done.

### **Dawid Wozniak:**

Where the changes were?

#### Julia:

Yes. Yes. Which part?

#### **Dawid Wozniak:**

Which part of the big bubble you said, what do you think should be the right indication? Like the bubble should like pop up or we just bring it here.

### Julia:

There's a couple of ways I could imagine this. One of them could be if you hover even like hovering right now over the commit, the bubble that is like the closest to but still not too small, maybe, I don't know but for example you know some layer of it should be circled, so you can kind of narrow down what is your area, yeah, or just when you pop up the the details of the comment then tell us where it was created. However, if you know, searching for your areas or something like that, then just hovering like that is OK. Now I just say the idea from my site.

### **Dawid Wozniak:**

So, what do we benefit here having the pop up for this whole view or pop up when you click on the commit to see some details about the commit?

#### Julia:

Um, I think it could be beneficial. That's a good question. It could be for the whole view and then you see more details or even if not a pop up then some kind of called tab that spreads a bit when you click on the commit. So then, you see more. But I think if you did the proper popup for the whole view, it would enable you to profit more. Especially that there now there's not a big connection between the tab and the rest of the product?

### **Dawid Wozniak:**

Right. It's because they're not interacting with each other and that's a good suggestion. So, there is another question. So, when we have this filtering, we can generate like tag map based on your commits that you filtered. So, let's say that you put the "permission" here and then you can see the cloud map that includes all other words that was here included in the commit message or maybe also commit description in the tag map. Would you think that it's beneficial if we have that or it's not needed?

## Julia:

Tag map?

### **Dawid Wozniak:**

Maybe I will show you the example. It's something like here. It's not. Ohh it something like this, but maybe I just describe it when you have some words more times than they are getting bigger than other words. It wasn't correct the Bing results are wrong, but basically you have a map where if you have more words, then those words are bigger.

## Julia:

Yeah, this stuff I think it could be useful in a way to enhance your search if you didn't find what you actually needed. There are some words so I can inspire you to check what they left basically here. Yeah, I think it could be useful to narrowing down your search or pivoting the search. If you didn't find what you were interested in.

### **Dawid Wozniak:**

So is there anything that you would like to add about this product not related to this commits I've shown you but general impression, some new ideas that you have come up with, the ideas from the first iteration,

#### Julia:

First of all I say that I think this is a great improvement. Regarding other ideas. Is this map desirable? The bubbles? Can you zoom? So if you would like to check some specific file or we should just pick random?

#### **Dawid Wozniak:**

If you want to you can do it here. So let's say "power bi". If I type it here, then it needs time to react first. I don't know why, but I think that it is maybe because the huge number of files but you can zoom in and if you type something here, you suppose to see that file. OK. It's there. Would you like to see this so I will click on it then it's here. The specific location is here actually, we don't have the commits here. So it does not interact with the comment details, right. The files are grey and their general is not here because we don't have any information about the commits but if you go to the different things like this one then here we have some more stuff. You can also see the current location here.

### Julia:

I think it would be really cool to be able to navigate from commit details to this sort of view like a list view. If you know what I mean, right. So you find something that might be interesting and you're able to go there. This type of zoomed in view so you can see what files were there where it is actually located but diffrent. It's what I mentioned before. So it's connected to the thing that when you have a comment you would like to see which files were change or like which area of the of the app host is impacted. That's it. OK, that's it.

## **Dawid Wozniak:**

So as I said, there will be 3rd iteration and I will try to make more improvements on the way how we see the repository. I think that it will give you much better experience comparing to this experience with 5000 comments and this new version will probably show up in the minute. As you can see, it's not perfect now and there will be more changes. Hopefully there will be also changes that we have talked about during a second iteration they all are very nice. Finally, we'll have 4th iteration. That's the most important because it would be in the paper. I hope you'll participate.