Dawid Wozniak:

Let's start as usual. I have changes that I'm going to present and then I will ask you a few questions. So, let's start with it. So here, we have NAV repository. So, the first change that I implemented, it's the feature to be able to resize that. So, we can resize the visualisation. It will probably take a while because it's huge here. Then, we can make for example this wider or that wider. It supposed to be helping you to have the right size of dimensions that you want would like to have. Another change when I click any file, so let's say, this one then you have this view here that it's kind of overlapping with this detail view. So, the change that is there now, when you close that, you can still expand it here. If you have it closed like this or collapsed here, then if you open this detail view, they are gone. You can use the full height of the screen for this particular detail. This is connected to UI review. There is one feature that I also have here that's like chart depth with that you can specify that you want to see just the first level of files or two levels of files. And there is a small issue that still when you say, let's say first level, you can see that there are some other folders, and you can see what the size of them is. So, if I go here, it is the base. You can see that you have like huge bubbles that seems to be empty and it is because of their sizes. Yeah, so we need to figure out how to do it, like, to be able to move to the folders but not to take the whole screen. For this let's say app folder. Here as I speak, it seems like it's almost another type of chat.

Monica:

So here it's not that big issue. but when you have the full, then you will see them all. Right?

Dawid Wozniak:

Yeah. It takes some time to generate.

Monica:

Can we see another type of chart?

Dawid Wozniak:

Yeah. Then you have just the squares instead of bubbles. It takes a lot of time to change that as well. That happens sometimes when you start doing things. Here, it is maybe more visible. It depends how you look at it actually. Yeah. So let's look at some file that has some commits so we can talk. Maybe I'll change back to the bubbles. I think that's more optimise. It's something that I will probably put like in the future work in my master thesis, saying like scalability is an issue. So the other changes that I'm going to present you before when it loads, it's connected to this commit stuff. So now there is the sorting and filters. You can also highlight the changes that were done with the particular commit. Maybe I'll just refresh this view. It might be faster. So when you have any particular commit now, you can go into like single commit view and you can see the description of this. You can see the date like the precise date to the minute when it was committed. And you can also highlight the changes on the visualisation, so all other things are greyed out and here you have highlighted the files that changed. That's what helped. Comparing to my other testers, the repository that we are using there are actually huge. So, even if, you try to load the biggest projects from small companies, it is like 1 folder when I have a chance to look at it.

Monica:

That's good. You're testing for scalability, right?

Dawid Wozniak:

Yeah, it's good that I'm doing that and it is nice that I have some proof that we did that. Then we can put it in the project. The pity is that when I do something here on the project, it takes time for you to wait. It takes time. Actually, your time, valuable time to wait until it loads and then we could do something that it's more valuable. So, in some projects, it's very, very quick and for some, it's not that quick because they are huge. OK, let's try that again. Yeah. So here we have some information and let's say that I will go directly to commits. So okay, there are not many here. It's more changes here so that is a good example. So, the changes are: Now you can start by date in the accessing and deaccessing order. So, you can also see them from the oldest commits to the latest comments, and you can filter out them, so you can see that it is the list of the user that committed to this repository. Yeah. So that's the feature that was kind of requested. And now when you go there... do you want to ask some questions?

Monica:

No, carry on. I'm noting down all the observations.

Dawid Wozniak:

So here we have filters. So basically, if you want to just have filter by some part of the commit message, let's say „match" or whatever. Then you have just the comments that include this phrase. Now it's not case sensitive, that's the change. So, it used to be the case sensitive, and it was confusing. Here we have the authors. And now you don't need to remember them by heart. You can just say, OK, there is there is of all authors that committed to this repository, not this file, this repository. So you can say okay I just want this person commits and you can see there is one. So, we are lucky, but maybe you want to reverse, so we want to see everyone else but this person. Then you can choose the exclude option and you can see all other commits. You still have this from and to dates here. You can now also specify the time, so it may be useful. Maybe not. It depends how big your project is. Mainly, for some project which are updated daily many many times. For our project is maybe not that useful, but when you have the project that is updated by some automated action precisely at the time, maybe you want to exclude that. This is not that much effort to do that. One last feature that I wanted to show it's connected to the single commit view. So here you can see that there is some message. There is the description of the message. So, it is what we put in the body of pull request. Here it is a link because of the security issue we cannot display the images. So, if you add images, I've done it with some items description of the pull request. You have very bad formatted URL saying go to this URL to see the image. It's not ideal but it is also a security thing. You can see the hash. So, if you want to go and search by it somewhere else. Here, you can see edited file. So, if I click that button It checks which files we're edited. It will probably take a minute. If it was a big commit, everything else supposed to be grey out and only the files that were edited will be clearly visible. Yeah, like here. You can see that only this file was edited in this particular commit in this folder. So, if we go level up, we might see. OK, so those files were edited so they are not great out. If you want to just cancel this view, then there is the action to actually reset this visualisation to make visible all files. It is unsynchronised action. It is the first action that is actually not synchronised. You can do some other things when it does it, but it also means that you need to wait a second when it loads when you use it with the big project. When it is that smart project, it looks like you don't even know that it's done in the background when you can do something else. So, my first question is, what do you think about the UI?

Monica:

So, I can definitely see some of the suggestions that I made in previous iterations, for example the chart depth, the visualisation and the full screen for details to see it, or at least read the full commit messages, so I like them. The first and foremost reaction for me is nice that you filter that you took almost all the feedback. You also took a sorting and philtres that were brought up in front of the commits, which is good. But I have another feedback and maybe you wouldn't have time for it, but it's up to you to decide. But it is a bit confusing when I am selecting a file. So, let's select one of the files and „purchase payables" for example. I'm here now and the filters and the sorting are actually applied on entire level, not on this, right?

Dawid Wozniak:
What do you mean by that?

Monica:

So, I'm in this folder right now. Yeah, but all the commits that are here and all the sorting and filtering that I'm applying is actually applied to the whole project. Is that true?

Dawid Wozniak:
No, it's not. Let me explain. So now when you open this detailed tab and you… OK, maybe let's start with the beginning. Now I just open this and I go to commits this is what was kind of cashed. So, if you selected here author as a sorting filtre and you go to another file, it will also be author.

Monica:

That's fine. But when I when I actually apply the filter. So let's apply the author to Dawid. It will look into commits not in this folder, but in the entire repository, right?

Dawid Wozniak:
No, they are commits just for this folder. So here the idea was that, let's say that you want to know if this person make a comment to this particular file. So if you don't see this person in the list, it might be confusing that this person was not the author in this repository. You might be considering that Dawid is not active in this repository. So you can see the full list of author here and if you say OK, I would like to see this author and you see that there are no commits, then you know that this person didn't make any change to this particular file. That was the idea.

Monica:

To get that order, it's still confusing. It is a bit confusing. First of all, like just take this screen example, right? Yeah, the colours. I don't remember what was the green, red, blue, what it was for.

Dawid Wozniak:

Yeah. So, if you want to find out normally when you open the product you have this. So, you say I don't want to remember it by heart. Yeah. So, if you leave it as it is and then you open the file details, you still have this view, but some people say that it's bad that when you have a big screen like this it overlaps over there.

Monica:
I agree. So I would suggest the file extension… if possible, moved to the left side.

Dawid Wozniak:

It's possible. It's definitely possible. What I wanted to achieve is when you have this, it should be draggable so you can drag it and stay on the right side or the left side.

Monica:

It is the next achievement in the UI, but it's not urgent, draggable is like version 2v1. I would suggest just move it on the left because that's kind of the sticky part, right? Because right now, I have another idea. Now for example in this „phone" folder in this view, there are only two types of files. There's the grey type and the AL type, right? I have no idea what grey type is.

Dawid Wozniak:

Yeah, it is because here it is the same case as with authors that we show all file extensions for all files that are present in the repository.

Monica:

So even if you are in this folder and you can see that there are only two type extensions here, you have the full list of the extensions in the repository, and I think that is very confusing because now I'm in this view and I'm only caring about this folder. I'm only interested in this folder, right? That's why I went to this level. Otherwise, I would have been on the repository level if I wanted to know. And now I want to know everything about this level is how I see this, because this was a bit confusing. I was like, what's the grey file doing there? And then, if you couldn't remove everything else, I would really expect at least sort by the types that are there in the full depth. However, it would be better to only show the types that in that present view, it is in many ways, this solution was applied.

Dawid Wozniak:

We say even if you are in particular folder, we present information for the whole repository. It is because some information that you might want to have they apply to the whole responsitory, but I can see your point. And I think that's very good suggestion. So that's nice. Then, we are in the one of the files and let's talk about commits. Right? First of all, let's go to general, yeah.

Monica:

OK. What is this telling me? This is telling me this is the size and so on. The author distribution… can you do click „plus eleven more" and see what is there?

Dawid Wozniak:

Yeah. So here you have all authors that committed to this file, and it is calculated just by number of commits. So, half, actually precisely half of the commits, were done by this person and then you can just go down there. There is the commit history for this particular file. Yeah. So here it is, just informative. So here you cannot click on this. It is not clickable, and it's always sorted by date.

Monica:

Yeah, and it is for this file, right?

Dawid Wozniak:

Yeah. OK. And then if you go to „commits", you have more options here and you have like sorting by dates or author, you can also filter and then these entries are clickable. So, if you click on them then you see some details. You can also do searching the whole repo, not just… but here this is for the file.

Monica:

This is for the file, I get it, but when you go to „commits", yeah and ohh OK, we are in „commits". So this is for this particular file.

Dawid Wozniak:

You can also select the folder or whatever, but this particular commits apply just to this file. This file.

Monica:

OK nice.

Dawid Wozniak:

And then when I search for authors, so let's search for author again. Yeah. So here now you have the authors for the whole repository.

Monica:

That's fine.

Dawid Wozniak:

Then let's search for one. So, this guy has made some commits. Yeah. By default, you have the include. Yeah. So, this person made this commit at this particular date. You can also do the opposite, so exclude this person. Yeah so you can see that all commits but this person's commits. Let's say we search for "bug". There is no commit that includes this word „bug" and this author. Yeah. Let's remove author filter. We have some now. Let's say I found the one that I'm interested in. So let's click on this one. So, when you're searching, it is searching just in the commit message, not in the description. That was one of my questions from the previous iteration and many people said that message is enough, so searching in description might be confusing. When you search, for example, „the bug", it's very likely that you will get a lot of bugs and then you would need to have another sorting saying, let's say „in the title" or „in the title and the description", „in the title" and „just in the description". So, then it was difficult for me to correlate it somehow with the sorting by author or sorting by date.

Monica:

Do you have access to the related work items?

Dawid Wozniak:

No, because related work items here, we have the access to such a thing, but if you have any repository from like open source project or whatever, they might not use this work object. They can find results from commit message or empty description. It's just purely titles they use.

Monica:

Fair enough. OK, let's go back to the view. Ohh OK, so I searched for bug and let's say I'm interested if you scroll down commits. So there are only four comments. Is that what it is?

Dawid Wozniak:

Yeah. In this range of date, yeah.

Monica:
Can I say forever?

Dawid Wozniak:
No. So by default, if you make some search, then this calls this dates update, so you see, if I just see put "b" then you can see that the first commit that include „b" just this letter is at the date, and it is

to the date. And if I add something more exactly telling me as well indicating some information, it changes. So you don't have it in the fixed way, it dynamically updating according to your searches.

Monica:

I'm not a UX expert, yeah, but this might be an accessibility problem. Do have you check?

Dawid Wozniak:

Yeah. So here accessibility, it might be the issue. The problem with the accessibility in this whole product is that if you take such a graph in any accessibility tool, it would say like remove it. So accessibility was not considered in this project from the beginning and now it's difficult to catch up.

Monica:

Yeah. OK. So not even just accessibility. Just this date input because it's in my mind, it's an input, but it's also telling me information. So, one way to do it… it's also an impact on user experience, just not accessibility. So, one way to do it for example would be… make it like the right button, right? So always show the info when you're typing and only when the user says I want to edit these dates, then make it editable. Yeah, that could be feedback just saying cause if I wouldn't guess from the first input that, it is actually changing the dates for me. I thought I would think I have to change the dates and that means I have to have a range and if I have to give a range, I would like to have forever because it helps.

Dawid Wozniak:
Maybe it's a good option to have something like forever and then?

Monica:

Ohh I would rather say just display. Yeah, like in non editable mode and then going there when a pen icon displays, just click or something like that, then a user can edit it.

Dawid Wozniak:

Yeah, that also could be an option, anyways so let's now go to the commit, we have the commit so let's now click it. Let's say click commit number third. So, let's click from here. I think I found what I was looking for. So, what could I do? My options are here. It is so designed that you have this message, you have description, you have some hash. If you want to it or you need this for cherry picking or whatever, then you have the exact date, the author and you can also see the edited files okay. So, if I click on this, then it will execute the comment in the background checking which files were edited and displays them. The action makes this view to grey out all the files that were not in this particular commit here. There is actually not loading screen. Yeah, it's loaded so you cannot see that it's doing something. But if we go the level up, yeah, now you can see that this and that file were edited. Yeah. It looks like those two files were edited.

Monica:

What was the files called? Right? I have no idea at that point. When I clicked on show edit files, then there can be more changes.

Dawid Wozniak:

So, you have graphic indication, that it is one option. Then another is that I have this information. I have like the streams so I can basically list those files here with the link. So, when you click on them

you are brought to this particular file. The problem with this solution was that if you have like „initial commit" then you add 200 files. Yeah, it is like the very extensive list.

Monica:

Ohh well, excuse me. Why not have both?

Dawid Wozniak:

Yeah, that's the option. Which is probably what I can add.

Monica:

Yeah. If you think that it would be great. I mean the thing is at that level I have no idea what happened when I clicked show editable files. Right. So, it really didn't show me unless I know how to use it. But I think it's gonna be good to have some indications like an arrow, button highlighting go up to know. I don't know you figure out, but you know what I mean.

Dawid Wozniak:

There is also another idea that I would like to ask you about. So, let's say that now I'm in this particular one file that I wanted to see the changes that were done to this file. And next I wanted to see which file were edited with this file in this commit. Yeah. And I have the access to all these commits. So, do you think they would be nice to see that there is correlation that if you change this file? You always or nearly always changed another file somewhere else with this file.

Monica:

For some cases, yes. I don't know how widely I will use it and how it'd work.

Dawid Wozniak:

Yeah, it's actually possible to have something like this. Then the analysis is a little longer because you need to go through all the commits, take all the path of files that changed, and then basically calculate what are files with the biggest number of repetitions.

Monica:

That would be a new value addition. If you have that possibility because I don't know many tools that does that currently. As I said, sometimes it could be right for example. I'm thinking of that we have this concept of local files for globalisation. I know it's ironical, but yeah, that's how we call it, right? So, for example, if there is a certain feature that only needs to be applied in a local country, for example Thailand or Belgium, right? Then we have this feature specific files and we always have a globally associated files for those features as well. So, if you're not in a special country, you get this file. Otherwise, you know you end up in your own local files. So, every time that I make change to global file. We have our own way of figuring out the special app to the local files, but maybe it would be nice have it there too. That's the purpose.

Dawid Wozniak:

Some people suggested it is to define what is the right person to ask, so you can select this file and this file. Then you do this and see files that were edited with that. You also see the authors for all these files combined. So, something like you have here in the general view, but you have this out of the whole repository. Then you would see not for all but this file. You would see it for all, let's ,say top five files that are related along with this file.

Monica:

That's actually even better. I would love to have that kind of view, right? Because especially in projects like our, there are experts that have been building certain deep technology and it supposed to be located on special files and folders. Right? And then every time, I end up doing something there, I might be able to see it per file view that who did most of the changes. I will never like able to figure out that. OK, now I have these related files who did most of the changes. You can infer it, but there's never a tool that tells me that, so that would be a very good value addition. I would use it. That's great.

Dawid Wozniak:

I have another question that is referring to the question from the first iteration. So now, I build something here that it's displaying you the messages and you can also do some filtering, sorting and now when you have that, what would be the most valuable insights that you can get from these commits, especially this commit messages, descriptions etc. Do you have any, maybe, crazy idea that what to implement.

Monica:

Who to contact is the basic right. But who to contact now? You can also kind of have this information. If you go to author distribution, then you can see, if this person has the commits that include these files. It is probably the right person to contact. Yeah, but on a folder level or on a collection of files level. I think it would be really something interesting to do this now.

Dawid Wozniak:

Okay, I can do the collection of files. That's something that I might add. Yeah, but I was thinking more about the commit messages here. Would you like to have some more information about that? Commit messages or some other information that we might retrieve from them.

Monica:

No, not that I can think of.

Dawid Wozniak:

Yeah. Yeah, that's a good answer. It's good that you said that. Another question is about filters and sorting. Do you think that it's enough what we have now or you think that some others things might be added here like not only date and author, but some other factors that you can kind of get from the commit. Here I have all information about the comment. So, you can also specify something crazy like done on the Friday or other crazy stuff that you might find be interesting.

Monica:

Not really. That should be enough what you have. Author is good. I think this is good for now. OK, I don't have any ideas,

Dawid Wozniak:

So, that is one suggestion that was given to me during the previous way of feedback. I wanted to ask you about that as well. So when you have the commit, that might be huge, like this commit, let's say. It upgrades some dependencies and then you basically edited each file because you changed the structure of the folders and you have one commit that is like „fix missing semi colon" and then you have one line changed in the one folder. Is it important or… would it be valuable for you to indicate that it is somehow big commit, it is small commit, or it doesn't… Number of files should be able to tell me that, right? Yeah.

Monica:

Are you gonna do math or number of lines? I'm not sure if it's worth it.

Dawid Wozniak:
Yeah, that's the question. How to define that? Even number of files is good enough, maybe number of lines.

Monica:

OK, yeah, I think I've already told you this right? When I'm trying to figure it out. not only just, I want to know what were the files that were changed in the commit. But I also want to know what the changes were made on those files. I considered the idea or the plan what was added with those edited files then they are highlighted. If you click on them, then you can see the list of changes. So, it will basically replace this visualisation with the changes to particular file.

Dawid Wozniak:

That kind of the idea of the view… the question is if we are not going to go so deep. It is a good feature to have the recognition of the changes, but it's not that much related to the commits or certain information from the commits but when I get this, let's say, list of the files that are edited and then highlighted. Maybe, it's important to show actually the changes that were done. So, it's something that I still have on my mind on the list to do. The question is only if it's useful for this project or it's not that much useful. Yeah, so now, it is the last question that is very specific. So, if you have this comment view, what would be your primary reason to go there and search for some comments. I think that there might be some scenario… I think that I've asked similar question about that earlier, but now when you have this view with filters, maybe it would change for some more and specifies than it used to be… something that you might think of, or it's just browsing comments.

Monica:

It will be mostly browsing comments, right? So, my main reason when I always look into commits is when I don't know what regressed something? Yeah. And that's my primary scenario for me. So, I know there was a bug that caused it, right? I know this was working before. I know this is not working after. I need to know which commit changed it and that is my primary scenario to look into commit messages. I hardly look into them to learn more about the feature, because there are better ways to do that. There is documentations and there are real people. So, my primary reason is to figure out where the regression is, what regressed it, right? If I'm new to a scenario, I want to know who the person is I should talk to learn about it. So, then I will do basically get commit author or could look into them to understand related files and figure out, OK, this is the main person I should ask. And I think your project answers both scenarios in some way great.

Dawid Wozniak:

That's great. So that's all my questions but maybe you want to say something that I haven't asked something general about the product.

Monica:

No, I think I already gave all the feedback. I would like the file extension to be on the left. I would maybe sort them with only the colours that are relevant on that current folder level. Ohh then from and to date entry looks a bit confusing. I personally would also recommend you think again about searching also in description and not just a message titles. Maybe you can do it like if you don't find

any results maybe you can have an option to ask from the user, if they want to search in descriptions as well. That's what I was thinking of when you said that that maybe it would be good to have something like set also in description like the exactly same search there because most of the times like… I'm just thinking what I write in commit message and I usually write „fixing bug number this with this", but then in the description I described. OK, I fixed this as this, this, this, this, this. These were the steps. So maybe some person is looking for, you know, what was the fix? Yeah. Okay I generally think you should at least think about it again.

Dawid Wozniak:

Yep. So, thank you for the feedback. That's the end of this interaction. There will be another iteration that would be kind of special because then we will compare the version before my changes and with my changes and we'll talk about it then. Thank you.