Sunny and AJEC-20250919 131514-Meeting Recording

Select Dell. What the hell is this? Cannot share a sound. Why not? Why can I not share a sound? Is it recording? Okay, it's recording.

It's recording it says. Okay, so what I'm going to do is, okay, so what I want someone to do for me, Sonny, is to start, let's say we have imported a drawing like this into AutoCAD, all right? Okay, okay. And then somewhere in the plug-in column or express tool or feature apps, whatever it is, we can just click on the app and then say start or whatever, right, like just let's say that's the way.

And then it would draw these lines for us after detecting the house and come up with all these layers. So you don't know AutoCAD much or what's your knowledge level with AutoCAD? Zero, I just know about it. Yeah, that's okay.

So AutoCAD is like, here is a, you know, like it's drawings basically. So it has like four lines. I know what AutoCAD does, but I have never used that, but I know the utility of AutoCAD.

So basically, when the drawing is imported into the drawing, it looks like this, nothing is done. But the tool I want you to create, it reads this file and then it would create these two layers for me, these two lines. What are these lines? They're a chase, they're chasing the inside of the house, like inside the house.

And then the yellow line is outside of the house. Okay. All right.

And then with different layer names, like this is inside interior, and then this is outside, you know, exterior. So the program would be able to chase it and then assign the layer to like the correct name, basically. Okay, got it.

So where AI comes in, it has to recognize that, you know, this is the basement and then, okay, here's the house and here's the house. And it would kind of do that on its own rather than us drawing it. Okay.

So you mean the software should draw those lines, right? Yeah. And change it into the right layer name. Okay.

So I'm just thinking like how the software will know this is the inner part and this is the outer part. We have to train it. We have to train it.

Yeah. Will those files will remain same all the time? It's similar. It's not the same.

It's a different house plan. So this is one house design. The house design will be very different every time, right? Because every house is, but the concepts, you know, the same where you

have the outside and then like I think detecting the outside is easier because outside is where like this is outside and then how much is inside, it depends on like I guess how thick that basement is.

So that's the difference. Okay. So once we draw those lines, then what we need to do next? So the next thing is, so let's say you can draw these lines and then name it like, okay, this is inside and then this is outside.

So the basement would use the basement line and then the outside with the outside line. Like that's what the next step is going to be after it's chased. So we need to draw inside line, outside line and the basement.

No, the inside line, outside line, and then change the name. So the layer name is correct. Oh, so what will be the names? So it's all, there's a, there's a lot of names.

They're all in here. They're all in here. But in this case, this is a basement.

So it needs to recognize that this is a basement, not like a different, different name or cross base. But having this done is, you know, important. Like the chasing part is important for us.

Hmm. Okay. So you mean the names should be automatically assigned to the trace lines, right? At least it should be, it should be pre-assigned by the software so that we can just check that it's correct.

Because, because it will come like this and then when it comes like this, we have to be able to chase it automatically, right? So it's not human chasing. And then the name would be like, okay, this is the basement. So it's in a basement interior line and then basement exterior line.

Hmm. Okay. Is that making sense to you so far? Yeah.

Yeah. Yeah. It's making sense.

Okay. Now the next thing is the ground floor plan. So basement and then so the ground floor, same thing, right? Interior exterior.

Okay. And this green one is what? Okay. So the green one, great, great question.

So green one is basically the green one here is because there's a garage here. There's a garage here. And this garage is not conditioned, but it's, but there's a door.

It's like an unheated space, but it's not outside. So we have to differentiate that this line here is, it shows that it's the garage versus inside the house. So we, we differentiate this wall length compared to the outside because outside is like snow wind element, right? But here it's, it's beside the garage.

So the garage is protecting this wall from the wind, from the rain, from the snow. So, so it's a

different wall. You got it.

You got it. So, so that's what kind of, so this is something I need to teach the programmer so that they understand that. Okay.

Main floor, look for the garage, like, you know, the coding behind like the big, the AI, the AI is going to detect that, oh, this is the garage space and that, okay, now this is the garage. So this is a protected element. We call it the buffered space.

So then, so we, we just differentiate that this, there's another line here so that it, we draw this line with the garage. So it's called the garage wall. Like the layer lane is called the above gray wall, but it's garage wall.

And this is the interior, but it's not the basement. It's the main floor. Now this is main floor, basement, main floor, second, third, and terrace, like fourth floor, basically.

Okay. And then, so that's only the first difference. And then here there's a door.

Yeah, door, that's door. Yeah. So it's door, right? Like the, the, the door basically.

And then there's also another door here. There's also a door here. But we don't need to differentiate the door right now.

The only way, the reason why they draw this door is because they want to, we needed to know the language. It's 36 by 80. So, so it tells us the size of the door already, right? This one's 36 by 82, the door size.

So it just needs to recognize that this, this image represents a door and it knows that it's a door. Like that's where the, it's image recognition and AI prediction, and then also commanding the software to, to draw that shape. Okay.

So image recognization and we need to draw the shape. Okay. So basically the AI should like understand the floor plan and should find the difference between like inner walls, outside, garage, and what type of floor is that ground floor, basement or what, right? Exactly.

Okay. And once we draw all those parameters, then we need to find the like sizes, the correct layer names, the correct layer names, layer names next. Then the sizes, the software has the sizes already.

We don't have to find the sizes because the software itself would have those ready for us. Is that possible? You provide me all layer names? Of course, it's all here. Everything's here.

Everything's on the file. Can we export that? I don't know how, but I'll, I'll figure it out, man. Okay.

So maybe we can just run this as a sample and we just need like five to six layer names only for

now so that we can pass those layer names. Yeah. Once you figure out three layer type, the rest is just like repeat and rinse, right? It's easy.

It's just like how to get to that assigned to that layer name. Like how do you differentiate it? It's just the, so that's programming now. It's logic at that point.

It's not like coding anymore. It's just logic. Yeah.

It's just logic. Yeah. So I don't know computer language, but I understand how it thinks.

So I'm just sharing with you. And then, and then here for here, we just kind of need to know that like, we're not doing anything here because it's a roof plan. It's more for FYI.

Okay. So, so, so that's floor plan for now. Can we move on so I can tell you other stuff? Yeah, yeah, sure.

So floor plan is that, then the next thing is elevations. Elevation means that like the look of the house. So like the front, the back, the side, you know, that's the look of the house.

Understood. Okay. Yeah.

Okay. So here we have a door. So this is the front, right? This is the front elevation.

So it's the front. So it's a door. So it says front.

So front door. Okay. So, and then why, why is this layer? Cause it was, cause it's the door is 01 main.

It means main floor is N is a door. D is a door. So that's, and then now here the door has a window.

So it's a door window. So front. Okay.

This is wrong. This should be a front door window, not a left window. So it'd be a front door window.

So it should be a front door main like that. This is the front door main, right? So that's, that's what that should be. So the, so, so the layer should be front door window.

Yeah. And then it should be yellow. I'm going to change it to yellow.

Oh, okay. No, that's not what I want. Let me cancel this.

Just this guy. I want this guy to be door front. Okay.

A window. And then, but I want this guy to be a different color. So let me just change that.

Why is this guy changing? Where's the door itself? Okay. This is what it should be. Front door.

So take off the door doors right here. Doors main main. Yeah.

Right here. Doors main. Okay.

That's how, what it should be. It's fine. I'll just tell my team.

Okay. So, so, so it does this and then this is the back. So it knows that this is a window.

So it draws the shape of the window and this is a patio door. So it recognized that that's a patio door. It's just a shape of the patio door.

Hmm. Okay. And then, you know, this is the, the, the, the side.

Right. And then it knows that, okay, so this is like, I just needed to draw the shape and then automate the name for it. So like the draw shape and automate names.

Yeah. Like draw the shape, just like, just like, like the floor plan, but instead of doing floor plan in this case, it would detect that that's a door and a window and just drop that window out and then assign a name to it. Okay.

I just took the notes. Yeah. So, so the, the, the logic in here is that, okay, first of all, look at this strong, is it a floor plan or is it an elevation from this here, you know, is elevation.

So that's the first logic, right? Then the, then once we know it's elevation, then the program then knows that, okay, now I'm looking for either a window or a door. If they think that there's a door, then then it would, it would, it would chase the door out or the window out and assign a name to it. Got it.

Right. That's pretty much the, the, the, the, you know, the, like the logic in that. So window, basement.

Yep. Go ahead. Do, do I need to like, so to draw a line, so the, the output should be in PDF or how? Nope.

Just draw a line, draw inside the program. So inside, suppose this is the file, right? I'm working on. So, yes.

So the program should draw the line within this file. Yes. This file is what? AutoCAD.

AutoCAD. So you mean editing the AutoCAD layers with the help of AI, right? And chasing it with the help of AI. Automate that process.

So previously we discussed that we need PDF. So you will supply me PDF and then, okay. It was like getting the measurements, right? Yes.

But I think right now, here's the PDF of the drawing. Here's what it looks like in, in PDF. So there's a lot of like, here's the, the, the, the, the, the basement.

Here's what it looks like in PDF. So you got to draw inside. So you mean like, we need to work on AutoCAD file, right? If you can use AutoCAD, I guess you can tell me, either it's PDF or AutoCAD.

AutoCAD would be a little difficult to alter, but I'll just see if we can just manage because that way we can, like in future, the product will be very flexible. And I'll also check the PDF as well. Like if we can just draw the lines around the PDF.

So I need to check that. Yeah. Okay.

You share, yeah, you have already shared me the AutoCAD and PDF of, of your assignment. Like you shared that before with me on WhatsApp. I can share it again right now.

Now you can download the file. So if that's what you want, I share it again right now. Okay.

All right. I'll, I'll, I'll just check this out. Like how we can just, what will be the best approach? Either we use AutoCAD file or should we use PDF? Okay.

If you ask me, I would prefer if you can give me the choice of AutoCAD. Okay. So first preference will be AutoCAD, right? Yes.

Because this way I can do QA in the AutoCAD because when I, when I review the file, I can just look at the layer. So I do quality assurance manually, visual quality assurance. Because sometimes AI may have mistakes.

So if you give it to me in a PDF, like, I don't know how, what's going to look like, but I cannot select the line. It would give me all the data. But if it's an AutoCAD, I select this layer.

It give me the area and the length already and the X and the Y. So all this data is, helps me to ensure that is a, is a good number. Yeah. Okay.

So that's why I prefer AutoCAD. The problem is AutoCAD, if you need to buy the software, it's like $3,000 a year, but you can, but as a developer, what you can do is you can get free trial for like a, for a month. So we just have to register a bunch of emails and just get that free trial while we're creating the software, you know? Yeah.

So maybe I'll use yours. Yeah. But the thing is I, when I'm using my, you, you cannot, when you log in, it's going to kick me out.

So you have to like, what I would prefer is you just register a free account and just renew it meant like, you know, next email, new account. You can go to Gmail, have unlimited email anyway. So.

Yeah, yeah, yeah. No problem. I'll just see.

Okay. But anyways, so, so do you understand the logic for the elevations now? Yeah, I

understand the logic. So we just need to draw the shape like inside, outside and for doors, garage and everything and assign a layer name to it.

Yep. And, and the output should be something similar that you are just sharing on your screen. Yes.

Yes. The manual output and the automated output should be exactly the same. Yeah.

Okay. No problem. No problem.

This is complicated and tricky, but we will figure that out. So there's a few more things I need you to, to, to do, but we can, we can go through that. Like if you can get to this stage one is floor plan, right? Stage two is elevations.

Stage three is like other stuff, like the height and stuff like that. That's, but I feel like if you can do this and this, the rest is just making improvements. And that is what I need to show.

I need, I need to see that we can make these milestones because once we get them that I, I, I, I truly believe that your team has the capacity to do more. And so we just break it into down to like many small pieces, but if you can show the first piece that you can create that piece, then I know making these, it's just matter of revising the code and that's easy. Yeah.

That's that's yeah. So my, my objective is to just draw the shape first. Yes.

Like if you can recognize it, yeah. Then, then we know that we are on the right track and we can do that. Now we can just complete the software.

Even if we are not able to draw the shape, then it's not worth spending like time on it. So let's, let's. Yeah.

Let's try it. So you need to get, get, get back to me with a timeline and cost. What's going to cost me for to pay you to try to see if this is doable.

Yeah, no problem. Okay. Got it.

What do you need from me to get started? I need, I need, I need those files. I send it to you in the chat. Please try to download them right now, please.

And, and, and, and I need AutoCAD access. I'll sign up and send me the AutoCAD URL, like sign up link as well. Okay.

Okay. Let me do that right now, man. Let me do that right now.

That way is not a man. What the heck? I don't need fusion. I just need AutoCAD.

So it's this per month or, you know, like pay monthly or, or like that for, you know, for, for one year type of thing. It's very expensive. Oh yeah.

I know they, they are monopolizing it. They're monopolizing it. If you can figure out like, like, you know, what I need is like 1% of what it can do.

We don't even need to draw stuff. I'm just using it for measurements. So if there's another way for you to do this or, you know, other programs to do the same thing, then, then I'm happy to, to, to, to, to use that software.

Cause if, you know, for us, it's costing us so much money. Yeah. It's expensive.

So there's another one here. All right. It's called draft site.

This one is another software that can do the same thing. I'll tell you what it is that we're, why we're using AutoCAD because after we draw all this out, okay. We, we just run through an app.

It's called app load. Oh, okay. And then we just extract everything from there.

Oh, okay. And then, and then after we, after we extract it, so basically copy layer, the hell copy layer, and then like that, this stuff here, let's say I just copy it. Okay.

Copy. And then, and then I select all of this and now when I, when I go export it in Excel, it would have all the, it has all the information for me. So it has the, you know, the name and the XYZ and all that stuff.

That's basically what I'm, what I'm trying to do. Okay. So, so once we are able to draw the lines, then we don't have to do the measurements, right? No, because it's already part of it.

The line is already includes that information from AutoCAD. So all I need to do is just do this. So my, my macro that I need to write, we can just update it to, to receive everything perimeter area, XYZ, you know, all of that.

It's all, it's all done. Then you don't have to provide that for, for me anymore. You know, like that's, that's, that's why it's, it's, it's AutoCAD's important because if you can do it here properly, then the rest is very straightforward.

Yeah. Got it. Got it.

Got it. So, and, and, and yeah, this is like, so this is still hybrid, but in the future, I would like to just upload this file into, into the tool and it would do all of this and export the information for us already. And, but we need to work towards that in the future, right? Like just automate it.

So it's no human intervention. It's very, it will be very easy. Yeah.

Let's, let's try it out. If we can automate this Sunny, oh man, this, this will be a, become a billion dollar business. Yeah.

So imagine we charge $3,000 a year and we get, and then we get all the businesses that has to do with construction, that we can use this. You get a million. Yeah, that's, it has, it has, no, it's, it

has potential.

Like it has very good potential. Yeah. It has the potential.

And, and it's, it's honestly, I have not, I have not seen such tool before like AI to automate the AutoCAD thing. So I have never seen that before, but if, if we are able to make that thing, so it will be a great breakthrough and yeah. So a lot of market for that product.

We can, because then Paul, when he does HVAC design, he doesn't need a new measure or everything will be done. And then you just export that detail into, into their HVAC calculation tool or whatever, and everything can be done. Automate it.

It's all math. Yeah. That's, that's time saver.

Huge time saver. And time is money. It's worth money to people.

Yeah. So I'll do my R&D on that part and let's come up with some solution right now, to be honest with you. So this thing is not like editing the AutoCAD files is not possible with.

It's not editing. We don't want to edit. We just want to chase.

That tracing, like it's a kind of editing and tracing is the same thing. Like we are adding extra layer into it. Some sort of which, yeah.

So it's not possible with N8n. We need to make our own model, like own AI models specialized in editing AutoCAD files, like tracing the AutoCAD files. So, so in our previous chat, we discussed about N8n.

So N8n will not able to do that. We can do that with the help of N8n, but we need to use some kind of external APIs from AutoCAD. So I'll, I'll just look into it.

And it's, to be honest with you, it's very interesting. So, yeah. And it's very interesting to me.

I see a huge potential. Then we can get like, imagine all the architectural firms, engineering firms, HVAC consulting firms, energy advisor firms using this tool to, to, to calculate whatever they need to calculate, right. Like even like estimation, because if you can get these drones to talk to each other, then you can say how many windows, how many door, how much siding, how much concrete, how much, how much, how much all quantifiable, right.

Yeah. Yeah. We can add more detail into it once we have, once we able to figure out the solution.

So once it started, it started tracing the things. I think that's the only thing, once we break that tracing thing, then nothing is impossible then. You're the man, Sonny.

That is exactly what we need. If you can trace, once you trace it, man, then the rest is easy because it's just logic, right. Because once you can trace one shape, the rest is just logic and we

can trace any shape.

We can trace the inside, the outside, everything, everything. Yeah. So let's do it, man.

Let's do it. This is going to be a huge, huge tool that many, many people can use and it's going to, it's going to, then we can connect.