#### UX test 1 (Figma prototype) - Outline of questions

#### 1. Recording permission

To analyze the results we would like to record this session, do you give permission to record?

#### 2. Background questions & introduction

- How old are you?
- Could you tell me a bit about your academic background?
- How many hours would you say you spend online per week? (rough estimate)
- Are you currently using a laptop and will you be using a laptop for the entirety of this test?

Share Maze link and ask participant to share their screen.

#### 3. Maze - Welcome screen

- You will soon start to complete a series of missions and questions. There's no right or wrong answer: just do what comes naturally.
- What follows is a succession of interactive designed pages, the final product might differ.
- When asked to complete an action, you only have to click or tap. If something doesn't

#### 4. Maze - Informed consent form

The purpose of this study is to provide insights into the functioning of a website. The collected data is anonymized and will only be used for the development of this tool. By clicking 'yes' below I indicate that I understand the terms of this study and I voluntarily consent to being a participant in this study. I understand that I can refuse to answer questions and can withdraw myself from the study at any time, without having to give a reason.

Thanks in advance. If you have any questions please contact jellevanelburg@gmail.com

- yes
- no

#### 5. Maze - Context

This website is a prototype for a tool that converts floor plan images to structured data, developed for the municipality of Amsterdam.

#### 6. Maze - Focus on the image (5 second test)

You will view an image for a limited time. Try to understand what the image is about and remember as much information as you can.

#### 7. Maze - Open question

What are the first impressions of the previous image?

#### 8. Maze - Mission (from this point ask participants to think aloud)

Extract features from floorplan 8\_32.jpg by uploading it

#### 9. Maze - Mission

Download the extracted features

#### 10. Maze - Multiple Choice

How many windows are present in this floor plan?

- -4
- -6
- -8
- -58

#### 11. Maze - Open question

Do you understand what features are extracted from the floor plan?

#### 12. Maze - Open Question

What do you think of the overall design of the floor plan feature extraction tool?

#### 13. Maze - Open Question

Can you think of some improvements to the current design?

#### 14. Maze - Thank you screen

You completed our maze and we couldn't be more grateful. Thank you for helping us build a better product. Hope you had fun!

#### 15. Close

- Do you have any remaining questions?
- Thank participants again for their participation and give contact information.
- Stop recording and end the call.

#### UX test 1 (Figma prototype) - Transcripts

#### Participant 1

#### 1. Background information

22 years old

**Bachelor Medical Informatics** 

currently: Master Information Systems (Information Studies)

between 40 - 60 hours online per week using laptop for entire usability test

#### 2. 5 Second test

"First impression is that there is a large emphasis on the uploading of floor plan, so I'm assuming that is the main functionality of the site.

I didn't have enough time to look at them, but I believe there were 3 calls to action or unique selling points (USP) below the upload button. I'm not sure what they exactly said but I assume that they explain the functionality of the system."

#### 3. Mission (thinking aloud)

#### a. extract features

"My first intuition in clicking the upload button. I see a folder would like on a mac computer, the file is already selected so I don't have to click it. So, I'm going to click select her on the bottom. I see that is now analyzing ... and now it is done."

Q: Did the action you have to take feel completely intuitive? "Yes"

#### b. download extracted features

"The mission is to download the extracted features. Which I'm assuming, if it works as intended, I have to click to download data .csv. This opens a saving menu from my device. The name is already filled in, so I'm going to click on save. And now it is saved to my computer."

Q: no follow up questions

#### c. How many windows

"How many windows does the floorplan contain? 4, because it says 4 in the identified features."

#### 4. Open questions

#### a. Do you understand which features are extracted from the floorplan?

"Yes, so I'm guessing the features it identified are the rooms within the floorplan and also the amount of windows and doors."

Q: Do you also understand the representation of the floorplan that is given?

"Uhm, it's a bit hard for me to zoom in. I don't understand the difference

between the two images that are shown, but I can tell both of them are floor plans."

Q: Do you also understand what the colours mean? "No, not really."

Q: what would you think?

"I'm guessing the left is the original floor plan and that the right might be what the system has identified. ... Ah wait, I now see the colours behind the features. It wasn't really clear from the start what it meant, only on looking closer did it become clear to me."

#### b. What do you think of the overall design?

"So overall I think it looks very clean. It's very intuitive what to do and it's very clear what actions are possible on the page. The only remark that I have is regarding the colours again. I think it's a bit hard to find. Because, I was first looking at the extracted features and when I found it I'm assuming that something between brackets is not that important. But it is actually quite an important piece of the identified features. But, overall it's very clean and intuitive. I don't really have any other negative points."

Q: If the features are not completely clear right now, do you have any suggestions on how to improve this?

"So, what I would do is put the colour in front of the feature name in a small rectangle. (Like a legend). Then the connection is immediately clear, that would help a lot."

## c. Are there any other other things you would add to the site as it is right now, or strip away?

"Perhaps it would be interesting that if I hover (my mouse) over a certain identified feature, that it would highlight this feature in the image so it is immediately clear which parts belong to the identified feature. And perhaps since there is a difference in the identification of certain features as I saw on the 'what it is' page, to also have kind of like a filter on the floor plan, so you can see the difference between doors and walls and windows."

Q: would you mean something like a checkbox for the features you could click to show certain features?

"Yes, exactly. So, you could decide yourself which features are shown in the representation. That would be an interesting addition as well."

#### 1. Background information

23 years old Bachelor Information studies currently: Master data science (Information Studies) around 40 hours online per week using laptop for entire usability test

#### 2. 5 Second test

"It seemed like there was a large emphasis on the 'upload here' part. There was some information at the bottom, I didn't get the read through all of it. But it was obvious that it was there."

#### 3. Mission (thinking aloud)

#### a. extract features

"So, I need to extract a floor plan that I have on my computer, I assume. Upload your floor plans here, that seems the obvious choice. I assume you would either drag a file there or click it. I assume that the highlighted one is the one you need. So I would double click it. That's not possible, so I press select. Analyzing. And now I have completed it."

Q: What you did, did it feel intuitive? Was it immediately clear you have to do?

"Yeah, it feels very familiar. Considering that most sites use a format like this. So I feel like that for most people who work with data, it would feel very obvious and fast. Very user friendly, I guess."

#### b. download extracted features

"Review the floorplan. I'm supposed to download the extracted features. So, features identified \*mumbling\* (proceeds to list some of the extracted features). Ah, download data.csv. I'm assuming it's downloading data.csv. I would think that it would be easier and more helpful if it said 'download features as csv file' or something like that. Because, what is data in this sense? But I click download data.csv and I click save."

#### c. how many windows

"Oh it's fairly small, can I zoom in? Preview of your floorplan, there's two of them. Aha, I see it now, 4."

Q: what were you going to say about the features text box?

"The features thing doesn't jump out immediately. It's there, but it's not obvious"

Q: could you elaborate a bit on that point?

"So, I read the question (about the number of windows) and I was literally

going to count the number of windows, because I couldn't immediately see 'features identified' contained windows. It took me a couple of seconds to see it. Maybe do something with outlining or colouring to make it more clear there.

Q: are the colours for you as you see them in the pictures clear, in meaning? What does it tell you?

"What jumps out for me especially is that you want me to download the datafile or upload another image. So I see the three floorplans on the left side, I see the floorplans in the middle and then I see the download the data or upload another image. So it really wants me to do the actions.

But I feel like the purpose of this is to identify the features, but I would say that is not highlighted enough in the frame or dashboard or what you want to call it. It feels sort of muffled to the background with how big you present the floor plans themselves and the blue buttons. The features identified don't jump out to me. I would even pay attention to the top menu faster than the features."

#### 4. Open questions

a. Do you understand which features are extracted from the floorplan?Q: and what about the features themselves?

"It's readable I guess, but it's not very user friendly. If you read it it's fine, but you can't tell much at a glance. You have to read the whole thing to understand. So if you want to make it very user friendly, you could use a picture or something.

I get what you want to say with it, you give a lot of information, but it doesn't tell you much at a glance. You might want to put a click on it. So if you click on 'bathrooms', maybe the letters of 'bathroom' are blue or it opens up and gives you a little bit more detailed information. So you can find your information targeted, because now you give a lot of information but it doesn't jump out."

"Just for the visibility or the at a glance impression, maybe give less information and hide some of it behind a click and make it dropdown. A bit of additional information. Because then you see something immediately (because it is larger) but you still retain the information for people who look for it.

So maybe do something with colouring, outlining and positioning of the features. Like maybe put them in a long box below the floorplans."

#### b. What do you think of the overall design?

"I wouldn't trust it as I came across it as a website. It seems a little shady. But it's hard to identify why. I think I'm missing something above the upload button. I feel like you could make the upload a lot smaller and maybe add some information. Right now it seems very functionally focused, except for the bottom part which seems more aesthetically focused."

Q: Could you go a little bit more into why you wouldn't trust it at first sight?

"Because well, if you look at something like dropbox, it doesn't immediately give you that big upload button. That big upload button, it kind of gives me the feeling of like 'we want your data!', if that makes sense. I get that not everybody would think like that. But it feels like that to me"

## c. Are there any other other things you would add to the site as it is right now, or strip away?

"It's easy for new users and users that are coming back, but users that come back might also use the API. So maybe make the upload button a bit smaller or add some stuff to the side. But maybe do keep the blue button, because it sticks out and you want it to stick out. But maybe add some information to the homescreen. Maybe start with some information up top, like add something with the relation to fire prevention. Give it a purpose, the purpose is now hidden behind 'what is it'."

"Maybe the upload another image should not bring you back to the homepage, it should just bring up the upload menu immediately. That would be more intuitive"

"It's fine for people who know what it is. But if it's for internal use, it might even be a bit too user focused. You know what I mean? Like, if somebody uses it internally about 50 times a day, that big blue button, you're always gonna find it. You don't need as much of a jump out. But usability of the features is more important if that's the purpose. So make sure the features are interpretable at a glance."

Q: So more emphasis should be added to the data presentation?

"Yes, that's what I would say. Focus more on data presentation."

#### 1. Background information

25 years old Bachelor Physics currently: Master Information Studies estimated 35 hours online per week using laptop for entire usability test

#### 2. 5 Second test

"Okay, well there was a small error where I could still see our Zoom conversation and it was a little bit in front of the website interface."

Q: Ah okay, well then please describe to me what you did see.

"I saw 'extract your files' here. So I guess it's some sort of upload page where you can upload your own files. It seemed like you could just drag them over there with your mouse. ... It looked like a pretty normal site."

#### 3. Mission (thinking aloud)

#### a. extract features

"Ah okay, yes, I need to upload floor plans. So I click here and it is opening my own files. I'm just checking if it's the right file selected. I select it. I'm waiting, it says analyzing. Oh well, that wasn't that hard."

Q: Did the actions you take feel intuitive?

"Yeah, I didn't have to think that hard. It's just as it's supposed to be."

#### b. download extracted features

"Okay so I have to download extracted features. Okay (clicks save). Maybe I can save it as something (tries to adjust file type and name). Or just as it. Okay, so that was also pretty intuitive"

Q: Anything about the data that you notice so far?

"Just that it was in a csv file format"

#### c. How many windows

"(starts to count windows, zooms into page and sees the 'extracted features' list) Ah I see"

Q: So what happened there?

"4 windows, yes I was looking at the image but then I saw it over at the side"

Q: But your first impression was that you should look at the image to find it?

"Yes, but that's maybe just because it's a mission I'm doing. So maybe I was thinking it should be harder. But I was focused on the image itself at first."

#### 4. Open questions

a. Do you understand which features are extracted from the floorplan?

"The features just tell me in a legend what is in the floorplan, so what the rooms are and what the colours mean. So it tells me what is in the picture and how many of it are in the picture."

Q: And can you tell me what the difference is between the left image and the right image?

"Uh, well first of all the colours are different. And I think in the left image it's a generic floor plan and on the right it has given a purpose to the rooms. Oh wait, or it's how you decide to make use of certain rooms."

Q: So basically, the left one is the image as it exists before entering the model. So the ground truth and the right one is the model output.

"So the legend is only meant for the right one?"

Q: Yes exactly

"Aha okay"

#### b. What do you think of the overall design?

(on landing page)

Q: I see you clicking on the yellow icons below, do they make you feel like they should be clickable?

"Well a bit, because they're are also coloured like the upload floor plans here button So maybe it's your first intuition to also click those."

"So this is what I saw before, the output of the model"

Q: Is there anything in terms of functionality or design that sticks out to you?

"Well the colours are a bit childish, it seems like a child has coloured it in (commenting on the model output that does not fit perfectly to the image). It gives me the idea that I see three floorplan images on the left, and it makes me feel like these are three levels of the same building. But I'm guessing they are different buildings."

Q: do you have any suggestions on how to get rid of that idea or feeling?

"Well I think that if I upload floorplans, it is for one building or one house. So that's why I think that it would be multiple floors for one building. So maybe if

you just get rid of the other ones?"

"Maybe if there is the possibility to upload several different floor plans, you could indicate them with a name like 1a, 1b for the same building something like that, or just give the output a label with the filename."

## c. Are there any other other things you would add to the site as it is right now, or strip away?

"Well so at first maybe, how the rooms are coloured in could be made clear. I think how it works and what I should do is pretty clear. So that's okay. Also it's nice that it's just in three simple steps, it's minimalistic, I guess they like that nowadays. It's simple"

"It's also nice that the old floor plan is still there, so you can compare it to the output. I do see a typo though. It says 'orage'. I also like that the left top makes you go back to the main page"

Q: You mentioned that you can compare floorplans, what would it be that you would want to compare?

"So here in the first one, there is still some text in it. So you can compare the original plan to the output (based on room function). You can also see the doors better in the first one. After analyzing you cannot see how the doors open. So that would also be pretty handy to have."

Q: You mean because both doors and windows are pink?

"Well that too, but also in the output you can't see which way they open anymore. But also maybe give the windows a different colour. Because here (points to door on outside wall) it's unclear whether it is a door or a window"

Q: So differentiating between doors and windows?

"Yes, and also on the main page maybe add a small introduction text on how it works and what it is. That might be helpful."

#### 1. Background information

23 years old
Bachelor Future planet studies (major AI)
Master Information studies (datascience)
roughly 35 hours online per week
using laptop for entire usability test

#### 2. 5 Second test

"Oh fuck"

Q: It's okay, that was supposed to happen. So could you tell me what your first impressions were when you saw this landing page?

"That it was some kind of instruction and that it was yellow, and I already forgot what it said on the top and there was some information below"

Q: was it immediately clear to you what you could do on this page?

"Yeah, I think you could upload something or fill in something. I think, but I don't remember exactly"

#### 3. Mission (thinking aloud)

#### a. extract features

"The mission is 'extract features from floor plan 8 by uploading it'. I'll start. So I'll click on upload my floor plan. Well, the correct one is already selected. That's nice. So I'll select that one, now it's analyzing and now I already completed the mission."

Q: At any point did you feel it was unclear to you what you were supposed to do?

"No, quite clear."

#### b. download extracted features

"Download the extracted features, okay. Well this is my floor plan, here are the features, so I'll download the features (clicks button) and save it. Oh this is download the data, but I think it's also the features. So I'll save and now it is completed.

#### c. How many windows

"Can I zoom in?"

Q: you can click on the page.

"Oh nice, okay let me see. This is the floorplan, 1, 2, 3, 4, 5, 6, 7. Oh I did not

#### 4. Open questions

#### a. Do you understand which features are extracted from the floorplan?

"Let me see. Oh, I probably could have seen it (the number of windows) over here (points to extracted features text block). Ah yeah, how many windows there were. So yeah, I can see it, bathrooms, living rooms. The areas and the walls with the windows and the doors and that kind of stuff."

Q: Right, but it wasn't something that immediately grabbed your attention, only on a second viewing did you see this list of features?

"Yeah, I did not see it before but probably because I was too focused on the question and I was not really inspecting the page properly. Because now that I see it's there, it's really obvious that it's there. But no, I did not see it at the first glance. But I think that was more my fault than the fault of the page."

Q: Is it clear to you what the images represent?

"Oh yeah, the floor plans and the colour coding on the second one. So I think the features are extracted from the first floor plan, the one I uploaded myself, and the second one is a graphic representation of what the model identified."

#### b. What do you think of the overall design?

"Well I think this is really clear already. Even though I did not remember it, I still remembered it correctly, so I'm really pleased with myself about that. But that also says something about the tool I think, so that is really good. This is nice, oh this is really nice! (looking at what it is page) With an explanation of the graphical representation. Oh and this, the colour coding is really. I think that's what I missed when I was counting the windows. I kind of made this up by myself, not correctly though."

Q: So you're saying it would be helpful to have this same legend next to your results?

"Yeah, I think so"

(looking at how it works page)

"This is not correctly lined out. But overall it looks really nice and easy to use. The only thing I kind of miss maybe, is that you can't see anywhere for which company this was made or what it is used for. If I upload my images, where do my images go? Like, is it safe to upload it? You know, that's the one thing I can think of. If I upload a floorplan of my house, I would want it to be handled with care. I don't want every burglar to know where my windows and doors are."

Q: So, some kind of mark to indicate who's website this is and where your information is going, might make it more reliable?

"Yeah, I think that's what I would be looking for if I were uploading personal stuff. But it's actually really clear. Not too much text, I like that. Using pictograms."

## c. Are there any other other things you would add to the site as it is right now, or strip away?

"No, I think. This is really clear, all of this (landing page). The text at the bottom is a bit small. Not for me, but like if my mother had to read it, she would need glasses. But that is not the main purpose. The main purpose is to upload your file."

Q: Okay, and if you have another look at the results page?

"I like this as well, that it says it is analyzing. Well as I said, I did not see this before (extracted features). Probably because it does not have the colours yet. So I totally did not look at that part. But I also think that it is quite clear what is happening."

Q: In terms of functions, is there anything you might be missing? Or in terms of presentation?

"No.. Like this part (what it is page), I love this part. The visualization of this is really clear and it explains it terrifically. ... Yeah, I think it's clear and you can see what is happening. The only thing as I said before, is some information about where the data is going or what it is used for. But you probably know what it is for if you use it. But I'd like to know where my pictures are going."

#### 1. Background information

26 years old
Bachelor Future Planet Studies
Master Information Studies (Datascience)
about 60 hours per week
using laptop for entire usability test

#### 2. 5 Second test

"I think it's a website where you can upload an image of a floor plan and this will be fed to a model."

Q: Anything else that stood out to you?

"Well, I didn't know it was timed so I was reading everything. So I kind of missed what was happening at the bottom of the page. But I think there was like a big upload button and that's like the main thing I got from it."

#### 3. Mission (thinking aloud)

#### a. extract features

"Okay, so I have to upload this picture. I don't know where this picture is. I'm just going to press the button (upload button). Ah okay, I think it was this one (pre selected picture), 8\_32. I'm going to select it. Okay, I completed the mission."

Q: Did the action you have to take feel intuitive to you?

"Yes, it did. It was very easy."

#### b. download extracted features

"Okay, it asks me to download the features. So I guess I just have to download here and it will give me a csv file that lists all the features that were in my floor plan. Okay, yes just as I expected."

#### c. How many windows

"Well 4 I guess? I mean, that is if the model is correct. The model thinks it's four."

#### 4. Open questions

#### a. Do you understand which features are extracted from the floorplan?

"So the features that are identified by the model are all the features that are here in this rectangle. I think it justs lists all the possible features the model can identify and when the model doesn't detect it, it just says zero."

Q: And what do you think about the images next to it?

"Uhm.. I guess that the left one is the original floor plan and then the right one

is how the model interprets the plan. And I guess for each (room) category, it gives it a different colour. Oh yeah and you can see that right here the colours. So for example, these are the two living rooms and all the pink things are all the doors and windows."

Q: Is there anything that isn't clear on the page?

"Well, when I see 9 doors and windows, I don't directly see 9 clearly defined pieces of pink. As well, what is a bit confusing is that there is like yellow here inside the green. And it doesn't show up as 3 bedrooms, but I do see 3 or 4 yellow islands."

Q: So what you're saying is that the text 'features identified' doesn't completely correspond with what the picture is showing?

"Well I guess it does roughly, but if I would have to count, I wouldn't have the same numbers as it says here."

#### b. What do you think of the overall design?

"Yeah, I think it's exactly what you want and expect from a feature (tool) like this. Just a big simple page with a big upload button with 3 key information points on what it does. Yeah and this is super easy and straightforward. And if I want more information, I can find it here (in header), which is exactly where I want to find it.

This should be evenly centered (how it works page). This is nice (what it is page), because at first I didn't know what the colours were, but this helps."

Q: Okay, so in terms of design, according to you most things are where they should be?

"Yeah, yeah, definitely."

## c. Are there any other other things you would add to the site as it is right now, or strip away?

"Well, I did think, I know the context of this web page, because you told me. But if I go to this website, I think it would be nice if... Well I was thinking it wouldn't be clear what it does, but it actually says so right here (title on landing page), extract your features."

"I don't know, I think it's pretty nice. I'm just trying to think of things. It might be nice if you hover over the colours, it would like show what it is (in extracted features list)."

"Let's say you have a house that has like one living room, I don't know if you want to have zeroes for everything (extracted features list). Especially if you have a lot of features, maybe in the future. So maybe just show the features that are actually present, because otherwise it might become too cluttered if there is a big list of words, but there is only one feature present in the image.

Because you do say features identified, so at first glance I thought 'oh all these things are actually in the house'. But then when you look closer you see that it is actually zero. So I guess I would change that. Instead of having a zero, just not having it show up."

#### UX test 2 (functional prototype) - Outline of questions

#### 1. Recording permission

To analyze the results we would like to record this session, do you give permission to record?

#### 2. Background questions & introduction

- How old are you?
- Could you tell me a bit about your academic background?
- How many hours would you say you spend online per week? (rough estimate)
- Are you currently using a laptop and will you be using a laptop for the entirety of this test?
- Share zip file containing floor plan images
- Explain context of the system
- Share prototype link and ask participant to share their screen.

#### 3. Chat - Mission 1

For your first task, please upload one of the floor plan images provided to you.

#### 4. Chat - Mission 2

Please download the features that were extracted from the floor plan.

#### 5. Open Question 1

Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

#### 6. Chat - Mission 3

Now, please upload a batch of at least 3 floor plan images from the files provided to you.

#### 7. Open Question 2

Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you.

#### 8. Open Question 3

"Do you feel like the site is reliable?"

#### 9. Optional question

Is there anything else you would change on this site? Please tell me about it.

#### 10. Close

- Do you have any remaining questions?
- Thank participants again for their participation and give contact information.
- Stop recording and end the call.

## UX test 2 (functional prototype) - Transcripts Participant 1

#### 1. Background information

25 years old Master Information Studies (Data science) Roughly 42 hours per week online Using laptop for entire usability test

#### 2. Context / Introduction

thinking aloud pretend you're a data scientist

## 3. Mission 1 - For your first task, please upload one of the floor plan images provided to you.

"Please upload one of the floorplan images provided to you is the first task. So I have this list of floorplan images right here. And, sorry what did it just say? (looks up question in zoom chat) One of the floor plan images. Am I supposed to be someone of the municipality here?"

Q: "Yes"

"So, I probably just want to know what it does first. So I'm just going to put the first one in and see what comes out. So, upload your floor plans here, I guess. And then I need to find the folder, working on it. Just go for (number) one, and now it's analyzing. It's interesting. Usually you would have to confirm first. Here it instantly uploads the image, I'm not used to that.

Ah, Preview of your floor plan. So now what does this thing do? It turns the colours around. I think it has windows, it has like open seperations of rooms that are being identified here, this kind of weird bathroom here. I can't zoom, which is a pity. So it seems to have found some things here. Also, what are the units? Is that pixels?"

Q: "Yes"

"Ah okay, what is this pink mess outside here? (point to wrongly identified feature in output image)"

Q: "We'll get to that later on. So for this first mission.."

"So this was my task?"

Q: "Yes, this was your task, and you completed it. Did the actions you have to take, did it feel intuitive to you?"

"Yeah.. I would have liked to upload all my images I guess, at once."

Q: "Before, you said you missed a confirmation button?"

"Yeah kind of, usually when you upload thing, when you put it in and then it says that the file is in there and then you can click okay. Is a step that I intuitively think I missed."

## 4. Mission 2 - Please download the features that were extracted from the floor plan.

"Please download the features that were extracted from the floor plan. Uh, download data.csv, uhm okay so download the features. I mean depending on what want, I would maybe also want the image. But csv is a comma separated values, which I might not want? Yeah, but I guess this is straightforward. Okay, so I downloaded the csv. Maybe I would want the image to be downloadable as well. Should I open this file?"

Q: "You can check it"

Q: "Okay, so you said you would also like the image to be downloadable?"

"Well I mean, I don't know the exact context of what I'm going to need the floor plan for. And since the image kind of shows errors in the prediction, as here the pink stuff does not seem to be right. So that gives me an intuition that I can use this to see if the data in the csv is good or bad and whether it is usable."

## 5. Question - Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

"I suppose that, if we just have an image here, then I can see walls and different rooms from the colours, which are just pixels. So, I guess what this Floorproject tool should make is just distinct rooms through image analysis. Because it creates new lines, so I think it tries to find rooms this way. So, I think the image is present to check if the data that is extracted is actually correct, is it the way I want it to be."

Q: Is it clear to you what the table contains?

"Ah, features identified, well I didn't see that. Uhm, yeah I didn't read through this actually. Maybe that also has to do with the layout. (list some feature names and colors). I don't see most of these."

Q: Maybe you can upload another image, as this one does not give a lot of the possible output.

"Okay yeah, upload another image, that's clear. Then you go back to the original site again. So does it (uploading) work via drag and drop?"

Q: I don't know, does it?

"Ah, no I don't think so. I tried. Now it's analyzing. Also, for the analyzing part, you might want something that moves, so you know it's actually doing something. If I have long simulation run times, if I know something isn't moving, then it's stuck. So that can be useful feedback."

(new image) "Ah this looks good. Okay, cool to see."

Q: So before, you didn't really notice the table with the features.

"Yes, and I think I wouldn't have no either. For some reason."

Q: Do you maybe have a way to improve this?

"Uh yeah, so instead of colour, put colour coding. Don't write blue, give the colour blue. Maybe also just put a color legend on the right (next to the image). I think the quantity is not that important to have at this point. Because I suppose this (extracted features table) is the csv that is outputted. So, you can find your features there. Maybe I also wouldn't say features identified but something like output preview. But especially a colour legend would be cool."

## 6. Mission 3 - Now, please upload a batch of at least 3 floor plan images from the files provided to you.

"Okay, so upload another image. I would intuitively try selecting many images (in this window), instead of dragging and dropping every single one, and also now I know that as soon as I do one it immediately starts to analyze. Oh but the drag and drop doesn't work.

Upload your floor plans here. (uploads multiple images) Analyzing, but now I don't know if it's stuck or if it's working. Maybe adding 1/11 would help."

"Features identified, it's a little bit small (the image). I would like to zoom in, but maybe it is also the resolution of the picture. The image is what I would immediately check as someone from the municipality just to see if the input is usable. Because this (table features identified) does not catch my attention. It is trash. I would skip it and just look at the next image."

(checks several output images)

"What is this salmon (colour)? Is it pink or is it orange? I don't see it represented in the table. It might be purple? Oh no, here we have purple as well. There are two pinks. That's kind of confusing. Maybe use different colours, or just add the legend."

Q: And for you the legend makes more sense beside the image (instead of below it)?

"Yeah, definitely. This is more data output and it doesn't look like it can help me understand the image. And you would have to scroll up and down again. So having it beside there would save a lot of time. So that would be my improvement."

#### 7. Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you. This is followed by a couple of questions.

"(landing page) extract your floor plan features easily. Maybe be more clear on what

those features are. And easily, yeah I guess I would agree. This upload button is quite big."

"Transform your rasterized images to vector objects, now I read this, this makes sense for me. This is helpful. The text below the other icons is less clear. As soon as I have to read something twice, I don't really care for it anymore. I feel this could be simpler. Transforming rasterized images to vectors and then getting features from those, that is the message here I guess. It really depends if I were to just stumble onto this site."

"Ah, what it is. Here we go. Ah, but here is a legend. That's cool. I don't know if the site should include what your aim is. Just what the site does. I would be more interested in what this thing does for me."

Q: So, more focus on the functionality of the site and less on the purpose it was made for?

"Yeah, exactly. Focus very much on the output, I think that's very necessary. I come on this site, but what do I get out of it? It's not quite clear yet. How it exactly works comes third. And for this, I might want to know what the accuracy of the model, as a data scientist. Like, if the accuracy is 20% I might not want to use the model."

"Now how it works... Upload, analyze.. Ah yeah this is cool! I would put this on the front page."

Q: So you would prefer this to the pictograms that are already there?

"Yes and maybe also put it on the top (higher on the page). Okay, upload, analyze, output. Now I know you can upload, I scroll down and I see the button. This is all I want to know, I think. But it's like somewhere in the corner of the site. Because intuitively, you go from left to right (in navigation bar). So first you click what it is and you see all this text. That might not be interesting. This is the essential information I want to have. This is also nice and short.

Outputs a visual interpretation of the floorplan, with a supporting csv file containing the features. But you cannot download the output image interpretation. Maybe that is just your checking mechanism, that would also be okay. But this (page) makes it super clear. This is really well done. I would put this somewhere on the front page. Otherwise, you're uploading something but you're not really sure what comes out of it. So I want to see this before I upload it. The stuff that is on the frontpage now is more of a marketing pitch. To me it seems there are too many fancy words, but this other page actually is how it works."

Q: So maybe you could switch the information of the 'how it works' page and the icons on the landing page?

"Yeah perhaps, that might work. I think that would kind of be my input. The logo is cool. This is nice. It shouldn't be a super fancy design, so this is good."

#### 8. Do you feel like the site is reliable?

upload a lot of floor plans from Amsterdam."

"Uhm, no. I mean, I just uploaded some things but the output of that is gone. I can't download that anymore. So maybe having something like my saved floor plans. But I guess that is a big feature to add. That might be cool though.

A moving analyzing button or just adding image 1,2,3,4 and sofort to indicate progress might be cool. Having that run time prediction could help me see if I could get a cup of coffee. That would be a great thing to have, especially if you are going to

Q: Then does the site not seem reliable because of many of these small things or is there a larger issue as well?

"Reliable, well it never froze. It's a straightforward site. Another thing, as I said, I would like to download all at once. Or at least make it more clear. The output is somewhat confusing I guess.

"Also, there is no option that says that you can upload multiple images at once. I did this through trial and error and also because you told me to do it."

Q: Okay, so that should also be made more clear? That it is possible to upload several images at once?

"Yeah, upload images. It's a small thing. Like, I would do it through trial and error, but for user friendliness you want it as clear as possible. And also now (from output page) if I click how it works.. And yeah now I'm out. That's shit. That's not cool. Maybe have something like 'your data', I don't know how the software is structured, but I think it would be kind of essential."

Q: Anything else you want to add?

"No, just that it's cool. I like looking at the images. It's all the input I can come up with at the moment. It's quite straightforward actually, the upload process so there is only so much to comment on."

#### 1. Background information

25 years old Master Artificial Intelligence Roughly 35 to 40 hours per week online Using laptop for entire usability test

#### 2. Context / Introduction

thinking aloud pretend you're a data scientist at the municipality of Amsterdam

## 3. Mission 1 - For your first task, please upload one of the floor plan images provided to you.

"First task, please upload one of the floor plan images provided to you. Alright, so there's a big old button here. So, let's use that. Well, I just downloaded the files so it's in here and let's try the first one. Uploads first image.

Alright, so we got something. So, the whole mission was to upload an image right?"

Q: Yes, so you've completed the first mission, sadly the output this image gives isn't ideal, but we'll get to that later. So, while performing this task, did it feel very intuitive to you?"

"Yes, it was very clear. But I've been staring at it for the last couple of minutes. So that might help"

Q: And the moment you opened the site?

"Yeah, it was quite intuitive."

## 4. Mission 2 - Please download the features that were extracted from the floor plan.

"Please download the features that were extracted from the floor plan. Alright, so we should definitely not upload another image. So I will download the data, and it's apparently a .csv file. And I guess that's it. Do I need to look at it? Or is that it?"

Q: Well, yes you can have a quick look.

"My excel usually doesn't open .csv files that quickly. I could show you how I open it in another way, but I don't think that's within the scope of this test."

Q: No, that's not really necessary.

## 5. Question - Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

"Alright, so I just use this page right? So, apparently it has marked the doors and windows in pink. I would assume this is our output (right image) and this is the image I uploaded (left image). Let's check. So this is my image and this is my output image.

Not many features were extracted. We only got three doors/windows, which were supposedly put here in pink. So I think these, but I count more than three. So, I don't know if I'm looking at the correct thing or if it's just the algorithm threshold. But I guess if I had to identify them, I would think these (points to largest pink lines) are the doors and windows. Maybe we can do it with another image, to see if it works better."

## 6. Mission 3 - Now, please upload a batch of at least 3 floor plan images from the files provided to you.

"Okay, so let's do 1 to 10 (images). Oh is this gonna take a couple of minutes? I didn't really account for the time it would take. How long does it take on average?"

Q: I'm not completely sure, we'll see.

"Okay, so they're all on the left here and I can probably click through them. Yeah, so was that the mission then?"

Q: Yes, maybe you can have another look at the outputs?

"Oh yeah, maybe let's do one where it identifies more different features. Well, this one fits most. It has identified a living room, at least one in green here. What I would like to see in this user interface, I would like to be able to click on this so I have a larger image and this one as well."

Q: So a zoom function?

"Yeah a zoom function, I guess. Now I'm just using the native zoom thing from the browser, but that's always a bit iffy. And this one always looks a bit lower quality than what the original image was, so I'm not sure if it works correctly. "

Q: Was it immediately clear to you which one was the input and which one was the output of the model?

"Yeah, but that's just because I saw the image (i put in) beforehand. But I guess if you would put input and output on top of there, it would make it even more clear. Apart from that we have two halls and one bedroom, but it didn't really identify this correctly (points at image). And this blue, I don't know what it means, it seems like a bathroom."

Q: How do you feel about the table representing the features?

"What I would do with the table is make every row the colour. Because now in your mind you have to go from (the word) blue and try to identify it in the image. For me that would make an easier connection."

Q: So, providing a legend with the actual colours would help?

"Yep, definitely."

Q: Is there anything else you would add?

"Well I was thinking, if you were to do something really fancy where you hover over a part and then it would sort of make the part you hover over stand out or something."

Q: It would highlight that part?

"Yeah sort of a highlight part, you could do that. But that might also make it a bit messy, since there is also already text here (in input image). But I guess not all data would have the text inside."

Q: Yes but the highlights would have to be in the output image, because the input data is not labeled in that way.

"Oh yeah right, if all the source data already had written in it what type of feature (room) it is, there would be no point in making this algorithm, right?"

Q: Exactly. Anything else you would add?

"So actually for the scroll bar, I would highlight the thing (image) you're on. Now you have to match it visually. And also, when I opened this, I thought it only analyzed the first two because you don't see that there's more. So maybe make it longer so you see part of the third one or make sure the scrollbar is always on (visible also without hovering)."

Q: One more question about the download button, if you see this would you assume it downloads the data for a single image or all the floor plans that you've uploaded?

"I would be really guessing. Yeah I would make like two seperate buttons. One for this specific one, which you then highlight here on the left (in scroll bar) and another download button for download all. And if you want to go really fancy, maybe add a checkbox here (features extracted) where you can select 'I just want to extract bathrooms and livingrooms', something like that. But you could do that later in excel yourself, ofcourse. But for now I would know what would happen (by clicking the button)."

Q: What would you assume?

"Well I uploaded multiple files, so i t would make more sense to download the whole batch. So that's what I would assume what happens. So let's see what happens. Ah and it downloads everything, so I guess I was right."

7. Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you. This is followed by a couple of questions.

"Well let's see. No not really anything in particular. I'm just wondering what would happen if you upload like a million of these images. Would the site be able to handle that? Because that's eventually the workload we're going to be talking about. But I

cannot test that. So, I guess when you would do that, in this page (landing page), and then on the next page (output page) it would load a million images. I don't think the web server or the browser would really like that. But maybe that's for a different type of project."

Q: Earlier, some people had comments about the fact that if you upload a large batch of images, it would probably to a long time to run. Then if you click something else on the page, it immediately takes you elsewhere and it doesn't save your results. I just wanted to hear what you think about this.

"Okay yeah, well but I can go back (by clicking on previous page). Uhm, but you cannot add to it. That would be a nice addition I guess. It really depends on what your goal is. If it is just an exploratory mode, then it's fine I guess. But if you are talking about hundreds of images, you would just use it and download it. You wouldn't look at it in this way, I think.

What's also a thing, you can download the extracted features, but you cannot download the outcome image. That's also one thing you might want to look at. Because now if you want to look at it, you would have to upload it again and I'm not sure if the algorithm does everything exactly the same each time? It probably would. If you're looking through the data and you notice a floor plan of which the features have a really weird count, then you would actually want to look at it. Then you could use this tool again, but it would also reduce the workload if you could immediately download the output images."

Q: So make the output images also something that is downloadable, or would you include in the downloadable dataset?

"Maybe make it an option. If you're doing 10.000 then you might not want it."

# 8. How do you feel about reliability, do you feel like the site is reliable? "It doesn't see that dodgy. I just wonder what would happen if I upload 100 images at once. Seeing as how long it took right now. So one thing that I might add on the analyzing screen right here, is showing the progress. Now it's analyzing and you're looking at nothing. A simple ½ or 1/11 would be enough. Just talk to the users, so you know it's actually happening and not hanging. Because now you have no indication of that. And I'm not sure how long the download would take if you upload a lot more files. Maybe also have an identifier there, because I'm assuming it would have to grab some data. But I'm not sure what is in the backend. Reliability, do you then also mean the output?"

Q: No it's more about the feel of the website, not about the model.

"So yeah, overall it seemed fine. Especially if you fix these things (how it works page), because now I'm just wondering why you didn't center this and why I have to scroll here. Those are just small things, but they make it feel a bit unfinished. But, apart from that, it works. So, that's nice."

9. Is there anything else you would change on this site? Please tell us about it. "Not sure."

Q: If you were in charge of this project, what would be your main focus?

"Well if you could have the hovering thing, where you like hover here and it highlights the colour here. But that's like a very fancy feature that you don't really need. Just maybe make the output image larger or add a zoom function, because to me it is a lot more interesting than the table. Not that much else I would add, apart from what I've said of course."

#### 1. Background information

24 years old Master Information Studies (Information Systems) Roughly 21 - 25 hours per week online Using laptop for entire usability test

#### 2. Context / Introduction

thinking aloud

## 3. Mission 1 - For your first task, please upload one of the floor plan images provided to you.

"Okay, so I upload a floor plan. So I'll just do number 5. Now it's analyzing and now it's finished."

Q: Okay, you completed your first mission. Could you explain a little bit to me about the reasoning behind your actions?

"Yes, okay, so I picked one of the floor plans from the zip file you sent to me. Now I think it has been uploaded and a model is probably like indicating which rooms have what type of purpose. So it says that the hallways are orange and the living room is green and the doors and windows are pink, I get that. Basically, it is looking at floor plans and then reading what kind of rooms it are, I guess."

## 4. Mission 2 - Please download the features that were extracted from the floor plan.

"Please download the features that were extracted from the floor plan. So the download data.csv button, this one. I click it. And now?"

Q: Now you can just have a look at the results. Did the actions you have to take to upload the floor plan and to download the data feel intuitive to you? Was it clear what you had to do?

"Yes, I think so. Although I'm not really clear on what information I'm giving away and what the site is doing with it. But the actions are very clear. So I've downloaded the results and now I will upload another image."

"I'll do number 7. Now it is analyzing again and again it presents the results based on the floor plan I've sent in. I guess when we are talking about fire hazard, some of the rooms with different colors probably have different attributes related to fire hazards, I guess? So I think that is the purpose, finding buildings that are more hazardous."

## 5. Question - Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

"Yeah it's clear. Not really a lot to mention about this."

## 6. Mission 3 - Now, please upload a batch of at least 3 floor plan images from the files provided to you.

"So this time I'll do 5 images at the same time. I uploaded it, it's now analyzing. And, just wait, wait. It takes a longer time. Okay, so now I see the same exact thing but on the left side I see the five pictures I sent in have been made into a list. If I press the second picture, the image and the quantities change. It's very clear to me that these are the 5 pictures that I uploaded. So yeah, that's clear."

Q: So for this mission I asked you to upload several different floor plans at once. If I hadn't told you to do so, would you have assumed that it was possible to do this?

"Ohh, no probably not, because there weren't any numbers or instructions saying to me that I could do that. But if I wanted to upload several different floor plans, it would be way easier to do that all at once."

Q: Would you try something like this?

"Yeah, I would probably try something like this to save myself time. But it wasn't clear right from the start that I could do that."

Q: And if you look at the download data button, would you assume that this downloads the extracted features for 1 floor plan or for all the floor plans that you've uploaded?

"Well it is actually for all of them, and I would think that it would also be all of them. It would not be as efficient to download them all separately. So that makes sense to me. And if you open it, you can clearly see that all the names of the floor plans are in there."

# 7. Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you. This is followed by a couple of questions.

"Well for one, I would probably zoom this picture (how it works page) out because it is all very close up and I can't zoom out. It is clear, but I would zoom it out more and maybe add some colour.

Now if I go back here to what it is, I would also like to zoom this out. Maybe add some titles or subtitles, because now it is just like text. And maybe give a better explanation to what's going on.

Also in the output page, in this image there seems to be a lot of green outside of the building. I don't get that, as there are clear compartments here (input image). So maybe I would have a look at the analysis method, to find out why that is happening."

Q: Is it clear to you what the images represent?

"Uh yeah, it was at the start. But since the green spaces are out of the picture here, it makes me question the result. But, it is clear that this is the input image and this is the output image."

Q: And if you go back to the main page, is there anything you would change?

"I would probably say the same again, I would zoom it out. It might be my laptop actually but the resolution does not seem right. Maybe add an arrow or something or make it more colourful, to make it a bit more entertaining. But that's just my opinion. It looks good though, nothing too fancy."

#### 8. Do you feel like the site is reliable?

"The website looks reliable, yes. The results don't really look that reliable though. As in, I know that this button will take me here and this button will take me there. But the results of the model are not really the best they could be."

9. Is there anything else you would change on this site? Please tell us about it. "Not much more than I've said. It's very clear, there are not too many buttons. There are no annoying pop ups or other things that might distract you. It is a very clear and functional website."

#### 1. Background information

2 years old Master Information Studies (Data science) Roughly 60 - 70 hours per week online Using laptop for entire usability test

#### 2. Context / Introduction

thinking aloud

## 3. Mission 1 - For your first task, please upload one of the floor plan images provided to you.

"I see that I have to upload one of the floor plan images provided to me, so I click on upload your floor plans here. I think. Then I go to my downloads, go to the floor plans and then I just click on one of them. It doesn't matter which one, I think. Okay, number 10. Open it. It's analyzing, okay.

Q: Well that was the first mission.

"Nice"

Q: Did it feel intuitive to you what you had to do?

"Yeah, it was exactly what I expected."

## 4. Mission 2 - Please download the features that were extracted from the floor plan.

"Please download the features that were extracted from the floor plan. Yeah I see a big button here on the right side. One is upload and one is download. I want to download the csv file where the features should be in there. So I click the button. (it downloads the file) And I open it and save the file."

## 5. Mission 3 - Now, please upload a batch of at least 3 floor plan images from the files provided to you.

"Now please upload a batch of at least 3 floor plan images from the files provided to you. So now I want to upload more. I see the upload button, that's clear. A batch of at least three floor plan images. I click on that once again (upload button). Now I try to select more images, so 2,3 and 4 with the control button and try to open it. Now it's analyzing again. Yeah okay, so on the left side I see them."

## 6. Question - Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

"Yeah okay, so first I see the picture that was uploaded. I see it in a dataframe or matplot or something like that. On the right side I see everything extracted except for the walls, the doors and the windows, something like that. The images are not that clear. Then I see the features identified here (in features Identified). Bathroom,

livingroom, bedroom, other even so that can be anything. Doors and windows, not seperated I guess. Pink, ah now I also see the colours. That makes sense. And the quantity. Yeah, it's clear what it says. But I mean 4 living rooms, that looks a bit strange maybe."

Q: You just mentioned the colours. Was something you didn't notice immediately?

"No, because first I looked at the picture that I uploaded and then to the right (output image). So yeah maybe it would be more clear if there was like a legend on the right side."

Q: With the actual colours next to it?

"Yeah so you see it immediately, because now I see these pink things and I assumed windows and doors but I didn't see. And then I looked here (features identified) and the green also made sense, it's considered as living rooms. (clicks on other image in scroll bar) Ah here I maybe I would have noticed sooner."

Q: So it was also dependent on what was present in the output image?

"Yeah, because here almost everything is green. Here I would have realized it earlier. But still it would be easier if it was made a bit more clear."

- 7. Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you. This is followed by a couple of questions.
- 8. Is there anything else you would change on this site? Please tell us about it "Uuhm.. No, I think it's really clear. Maybe if you open this, the home page, you wonder 'what is this'. You immediately see 'what is it'. You can't miss it. You click it and then there is an explanation of how it works, so that's nice. It's not too long, so you keep the user interested. It's not too much in detail but the necessary information is there.

So, I think it's really usable. You could say, we put the explanation in the home page, so people who use it for the first time, they know what they use. But if you want to use it more often, you don't want to see that story all the time."

"It's a little bit grey. It's not that spectacular, but it's also not distracting. It's just very usable."

Q: Before, you had to upload several images at once. Would you have assumed that it was possible to do that if I hadn't told you?

"No, I wouldn't have thought of it myself. I would have done it in different batches in this. That would also be a question, if I upload one and I then upload another one, does the first one then disappear? Because when I uploaded the 3 images, the image I uploaded before was gone, I think."

Q: If you were going to use this more often, would that be a feature that would be useful to have?

"Save results? Yeah, I think so. Because now it just disappears. So you would have to open different tabs or something like that. So you could add that, or maybe at least have an explanation that if you want to have access to multiple floor plans, you should upload them at the same time. But I like that there is not too much information on the page, so that's also difficult. Yeah but, I wouldn't have thought of it myself, I think."

#### 9. Do you feel like the site is reliable?

"Yeah, it looks kind of professional. Easy, not too complicated. I think that's a good thing. Yeah. I think it looks pretty professional, I would trust something like this."

#### 1. Background information

24 years old Master Artificial Intelligence Roughly 35 hours per week online Using laptop for entire usability test

#### 2. Context / Introduction

thinking aloud

## 3. Mission 1 - For your first task, please upload one of the floor plan images provided to you.

"So yeah, I got a .zip file with images and here I have to upload one floor plan image. So I click the big blue button in the middle here. I just select one of these I guess? Click select. It says it's analyzing, and now it's done. So I'm looking at the output of the model here, I guess."

## 4. Mission 2 - Please download the features that were extracted from the floor plan.

"So, I see a button here on the right that says download data. So, I suppose that's what is mean by download the extracted features. I click the button. Oh it immediately goes to download. And now I've downloaded it."

Q: Were you surprised it immediately downloaded the file?

"Well, yeah kind of. I mean, a lot of the time it asks are you sure or something. But this was instant."

Q: Would you say that's positive or negative?

"It's okay I guess, not bad. I was just a bit surprised."

## 5. Question - Do you understand what features are extracted from the floorplan? Please explain what you see as well as you can.

"I think I understand yeah. So this is the image I put in and this is what the model makes of it. The colors just seem a bit off here, I guess. And it's surrounded by what I'm assuming is the size in pixels? Yeah I suppose it's clear.

Q: Do you understand what the colors in the output image represent?

"Well I see these pink things and I guess those are windows? Or maybe doors or something and then there's this green here. Ahh. Okay. This here, this explains it I guess. It's sort of a legend, but it's got the colours written out next to the room type and then the quantity. Okay yeah, now I understand."

Q: Was the table not something you immediately noticed?

"No, no. I guess because you have to scroll down and you just look at the pictures first. So it's not something I immediately noticed, no. I might be better if the colors were, you know, actually colors. Like an actual legend."

## 6. Mission 3 - Now, please upload a batch of at least 3 floor plan images from the files provided to you.

"Okay, I go back to the main page if I click here. Now I click upload again. And here i select a number of images. Let's take 1,2,3.. 6 of them. I guess it works like this. Now it's analyzing again. It takes a bit longer than the last time. And now it's done. Here's the output again.

Yeah, if this would be a set of over 20 images, the scrolling (through images) might become cumbersome. So the image representation in this list might have to be smaller. I don't know. You could also argue that it is redundant to have the image here (in scroll list) and also here on the right."

Q: So how would you like to see it? Would you just number them?

"Well I'm used to a layout like this (shows mac folder with lines). I don't know, the structure just seems kind of funny. But it depends, for 1, 2, 3 this is great. But if you want to upload more, it might become a bit big. And also.. Is this the last task?"

Q: This is the last task, but I have some more questions for you after this.

"Okay, then also, what I would do.. Now you have to go here, click download, go here, click download, go here, click download again to download all the features in a csv. That might make it annoying for big projects. Instead you could have a button to download all features in csv. Those kinds of things would make life a lot easier. But then again, you would want to check every file to see if it gives sensible output, I guess."

Q: I believe the download data.csv button actually download the extracted features for all the images that you have uploaded. But, do you feel like that should be made more explicit?

"Yes, then I feel like it should be written there. Because now I would be wasting my time."

Q: So what would you label it?

"Maybe separate buttons? One for downloading this floor plan and one for downloading all floorplans. Or the features identified. Also it isn't completely clear what kinds of data are in there, is it just the room numbers? Is it area? Is it line thickness? You know, the number of walls? So maybe call it data output instead of features identified.

Also, if I were a first time user, then I know, is this model actually useful at all? So maybe put that on the intro page, explain what the output is. That might be interesting for first time users."

# 7. Please navigate the site freely. Click around for a bit, take a look at the pages you haven't seen yet and explain what stands out to you. This is followed by a couple of questions.

"Ah, how does it work. This is like really zoomed in for some reason. Uhm, analyze, interpret the compartments and identify doors and windows. And then, oh I have to scroll. Well maybe make sure this doesn't fall off the page I guess. Or am I zoomed in a lot? No it's just the website.

And there's a 'what is it'. Oh my god. I should have started here. Here you actually have the colours, that's nice. (reads page). Alright, yeah so this is a nice explanation. I would put some more padding to the left and to the right. It's a bit too large I would say, the text. So you can see everything at once, but apart from that I think it's quite clear. But this is also really my field of expertise (haha)."

Q: Well for now you're roleplaying as a data scientist.

"Yeah yeah, then I guess this would also make sense."

#### 8. Do you feel like the site is reliable?

"It's okay I guess. There are some things that look a bit weird, because they are pretty zoomed in and look a bit funky. But in general it seems to function fine. And because it's for internal use, there's no reason to assume it shouldn't be reliable, or something. I mean, I guess the data is not going anywhere."