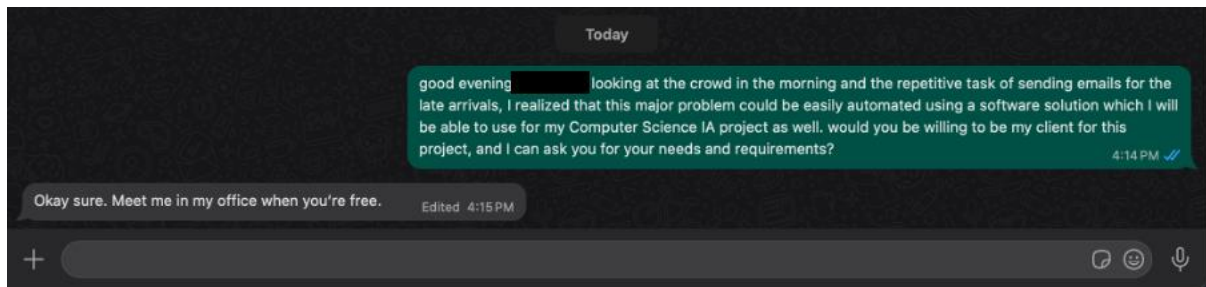


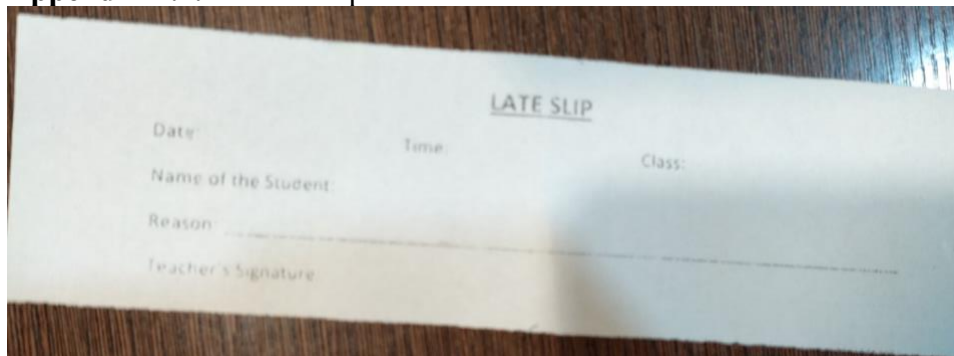
Appendix A

Appendix A.1: Photo of initial discussion with client



Appendix A.2: Photos of current analog system

Appendix A.2.1: Initial slip to be recorded



Appendix A.2.2: Final slip to be submitted to teacher (school name censored)

LATE TO SCHOOL Student Name <hr/> Section [redacted]	LATE TO SCHOOL Student Name <hr/> Section [redacted]
LATE TO SCHOOL Student Name <hr/> Section [redacted]	LATE TO SCHOOL Student Name <hr/> Section [redacted]
LATE TO SCHOOL Student Name <hr/> Section [redacted]	LATE TO SCHOOL Student Name <hr/> Section [redacted]

Appendix A.3: Transcript of interview with client (MS executive assistant), names censored for privacy

Client: Good morning.

Me: Good morning I am here to talk about talk more about the idea I had for ah an application that I could build to digitise the whole arrival system

Client: Yes I saw that message I'd be really happy to be your client because the current system is annoying and is really tough to work with for all of us as well and wastes a lot of time

Me: Yeah I can see early in the morning I whenever I am late and arrive into the office there is always so much rush and chaos in the office and definitely logging everything and sending all those mails must be really painful task for you as well

Client: Yeah it's not it's not very fun so would you like to suggest how we will how we could improve this system?

Me: Yeah that's what we will eventually discuss but could we first look at how the process is currently done so we could see the issues and how they could be fixed in the new digitised system

Client: Yeah sure so as you probably know there are 2 slips here so the first slip is filled and kept inside the office so that it can be noted down in the registers by the end of the day. We moved it from directly noting in the register to first putting it in the slip because there were 2 buildings and so we had to make sure that all of those were entered into one single register for each grade and then every day Mr. XXXX looks at the register and then sees the students that have been late either this month or this semester the third time and then he manually looks up the emails and writes those emails are to the parents which is then sent through my email and then we note down these students separately so they are sent back home the next time.

Me: OK and what and what about the other slip I mean I know I send it to the teacher but what is the purpose of that?

Client: So the first slip is for our internal records and the other slip is to inform the form teachers that this student is late so that they can be excused for coming in late.

Me: Okay and so this slip could be easily replaced by let's say automatically sending an email to the teacher?

Client: Yeah if that could be done automatically that would be awesome.

Me: Okay before looking at that what are some of the problems that you face with the current way you are doing things like apart from of course the tedious work and the morning rush and chaos that is there

Client: That by itself is really the major problem and it is a lot of laborious work that has to be carried out and also the system is not very foolproof because it's not thoroughly checked what is entered in the slip and so students can easily fake something in.

Me: Okay and also I would say this would be wasting a lot of paper and time to print all this and everything?

Client: Right yeah of course that's also something to consider.

Me: Okay okay So what kind of an application could benefit you and aid you in this process?

Client: Well maybe there something I can enter the name of the student that coming in late and it automatically saves the time and then I can see the previous times that they have been late so that I can check if its been more than 3 times and its stores these in its database.

Me: Would have warning message that pops up showing that there have been more than 3 be helpful for you to do that in a more efficient way?

Client: Yeah that would be very nice.

Me: Okay so what about the emails?

Client: Well I guess it could also store the emails if that's possible and so if it is the 3rd time I can send the email.

Me: Would you like the email sending process to be automated as well?

Client: Ohh is that would be possible that would be very helpful as well and then you were also mentioning sending an email to the teachers instead of using the other slip right?

Me: Yeah so I guess each time they are late email could be sent to the teachers and then for the 3rd time it could be sent to the parents to warn them about the issue

Client: And also could it be sent to the child themselves?

Me: Yeah that could be done. So what information would you want to be stored for each entry?

Client: Well in the slip we store the date the time and the reason the student is late as well as the students name and grade so all this information would need to be stored when a new when I make a new entry for the student being late.

Me: Okay that's great so for this I will need the data of all the students and their emails and their teachers and parents emails and all that for the application to get deployed. So what format is that in where can I get that?

Client: You will have to talk about that with the head of IT Mr XXXX he will tell you the technical details

Me: Okay so I will make a way for that data to get imported into the application. Regarding the user interface is there any specific colour scheme or font or something specific that you would like?

Client: Not really but I want it to be fast and easy to understand what is the word for it intuitive right?

Me: yeah intuitive.

Client: yeah and also some of these websites are really small so the information should be easily readable.

Me: okay that works.

Client: it would also be nice if I could see the students photo upon the entering the name so that I could match it and it shows up along with the previous list of entries along with the previous entries.

Me: yeah that can work is there any other features you would like or anything else you want to tell me?

Client: well sometimes well what if I enter something by mistake how will I get rid of that then?

Me: okay I can make a delete button for the entries in case you do that by mistake.

Client: okay that works so will this be an app on my PC?

Me: I was thinking that we could make it a web application or something you log in to because this would be in use in both offices right?

Client: yeah

Me: so a web application will mean it can be easily accessed by you or someone else if needed you would not need to install anything and also this will need to be accessed on both of us offices right yeah of course so that is why I was thinking of web application would be nice.

Client: but then if it's on the Internet within that mean anyone would be able to login?

Me: ah no I guess I can put a special pass key that only let us you log into it or if anyone else needs to.

Client: yeah okay that works as well I guess but then how will it know which building it is?

Me: okay we can have a different button for each building and then you can log into that building depending on the person thats there they can log into that specific building and then it will log the new arrivals as coming into that building.

Client: yeah that works

Me: Do you have any other concerns or questions?

Client: yeah just sort out the data and everything because that will be needed right in your application?

Me: yeah I will I will get that and I will make sure I can import it in whatever format it is.

Client: okay great so when can I expect to hear back from you?

Me: I expect to take 7-8 months to code the application with all my other commitments but I will let you know the date later.

Client: okay I will I am really looking forward to seeing this application

Me: so yeah so when it's done then I will come to you and give you a demo and you can check if it has met all your requested features and then we will implement it and see if it's working properly

Client: so can we implement it for certain group of students only to see?

Me: yeah sure so that can be like the beta testing and you can inform the issues that came up or any suggestions you have

Client: yeah that works

Me: Okay great, thanks for considering being my client

Client: thank you too, see you soon

Appendix B.1: Feedback on prototype designs

Me: Good afternoon.

Client: Good afternoon, have you completed the app already?

Me: No but I have made some designs for the interface and I wanted to ask if you were happy with them

Client: Great, do you have them with you?

Me: yes I am just opening them.

Me: so here are the designs, you can go through them.

----- Goes through design ideas -----

Client: They look great to me, they have all the features that we had discussed at the end. I have a suggestion, though.

Me: Go on.

Client: You have this box here is this for me to enter the reason of late arrival right?

Me: yes

Client: So could there be a box like this just with the option of confirming for the other actions as well just so I don't accidentally enter something?

Me: okay, I can add a confirmation option for confirmation prompt for all the major actions in the app like adding and arrival or logging out.

Client: alright, thank you, otherwise this looks great to me!

Me: okay great, glad to hear you like the designs

Appendix E.1: Transcript of discussion with client before beta testing

Client: Good morning.

Me: Good morning Ms XXXX, so I am pretty much done with the whole application and I have tested it myself and everything is working as intended.

Client: ohh that's great could you do you have it with you right now?

Me: yeah so you can just go through it on my laptop and if everything is fine according to you will get it implemented on the school server with data that Mr XXXX will provide for me

Client: okay that's great lets see

Me: I prepared list of all features that they application needs to have and just let me know if all of these are on par with your expectations

Client: okay great

Me: so this is the login menu

----- Goes through success criteria, client approves of all functionality success criteria -----

Me: Overall, did you find the UI intuitive and easy to understand?

Client: Yes, its very easy for me to navigate the UI, I was able to start using it myself as soon as you showed it to me.

Me: okay overall how did you like the application?

Client: well it seems to work really well to the extent you shown it to me here but I really have to use it with real data some days so when will that be possible

Me: I will get that figured out in a few more days and we will maybe roll it out for just a single grade like let's say grade 8

Client: yeah that works

Me: and then I will talk to you about and then I will contact you with any issues or that you faced or any suggestions that you had using this pilot testing version of this software

Client: yeah that would be great

Me: okay thank you I will get back to you in a few days

Appendix E.2: Transcript of final interview with client after beta testing. How did the application go and suggestions of extension.

Client: Hello.

Me: Hi Ms XXX, so have you been using the application during the past week?

Client: yes and has it been working well overall yeah all the features are working as intended but there were a few problems that I faced.

Me: okay what exactly were the problems?

Client: well the thing is that sometimes the network wasn't available and so the emails were not being sent even though the records were being added so that was kind of a problem and besides there should be a way for me to send the emails manually as well in case the email changes in the future in the middle of the year because then as you said before it wont be updated in the data.

Me: Hmmm so what could be a solution to this according to you?

Client: Well maybe I could just see the upcoming today's late arrivals on screen and it would show me whether the emails have been sent and if not I can manually send them as well if there has been some issue with the Internet or something with the network or something else.

Me: yeah okay well the web application should still work if the Internet is not working since it's hosted locally but the emails would not work so you are right that I should have a separate page for that, that is a good idea.

Client: yeah also just for my mental piece of mind that everything for today has been recorded and I also can see all the arrivals on time according to the time as well so I can view and edit and delete them as necessary from there rather than by going to each student screen.

Me: yeah that would be a great extension

Client: also how would this work the next year with the new students well

Me: Mr XXXX would send me the data for those and that can be easily added to the application but the issue right now I realised is that the images will need to be manually updated which is something that I could automate as well.

Client: okay so if you can figure that out then also add the screen I was talking about this system could be implemented for the entire middle and senior school grades as long as it's robust and working properly otherwise which it seems to have for the past week.

Me: okay great I'll see if that's possible, it would be great if this system could be fully implemented in the future.

Client: yeah that would be a great help for me as well

Me: okay thank you

Client: thank you, I hope you will be making those changes as well