

Unknown Speaker 0:02

I don't think so

Unknown Speaker 0:07

cool.

Unknown Speaker 0:10

Dang. I think I will start first. I'm Zach, and

Unknown Speaker 0:16

I'm the team's leader of this project of flow,

Unknown Speaker 0:24

flow diary, yeah, flow diary, quite a weird name, but we think we may change it later, like, okay, yes, and

Unknown Speaker 0:33

I'm going to

Unknown Speaker 0:36

kind of lead the direction of the project. And here are my teammates. Do you want to

Unknown Speaker 0:45

Yeah, sure. So I'm Xu, Xu, and

Unknown Speaker 0:51

I am responsible for communicate with the

Unknown Speaker 0:56

sponsor and

Unknown Speaker 0:59

and help you understand that how our project flows, so like the progress and how the structure we're thinking for this project. And, yeah, I think that's my major risk,

Unknown Speaker 1:15

my major things to do, Hi,

Unknown Speaker 1:19

I'm Xu Tang, and I'll be responsible for taking notes during meetings and our own, like, stand up meetings each week.

Unknown Speaker 1:31

That's my main responsibility for now, and they'll see

Unknown Speaker 1:37
after the project begins.

Unknown Speaker 1:40
Yeah, that's all from.

Unknown Speaker 1:46
Sounds great. And my name is Allison. So have any of you had me speak in any of your classes before? Yeah, I was seeing your I was seeing what's that close quote?

Unknown Speaker 2:01
So it's for, oh, yeah, he's for software engineering, for the project, for

Unknown Speaker 2:10
for kids that

Unknown Speaker 2:13
like building a study tool for them. Was that the with one show, yeah, the one with control?
Great.

Unknown Speaker 2:24
Perfect. And the other two of you have, have we met before? Is this our first time? Oh, we have met before. I believe last semester we are, like, took the class with one Xu so, oh, you did, yeah. You both did. Yeah, okay, Oh, perfect. Okay, awesome. No, I'm excited. Sorry. I've just taught grade ones and twos all day, so my brain is tired, but I'm so excited to move forward with you guys. So you know a bit about my background. So if you have any questions, feel free to ask. Yeah, I really appreciate, appreciate that, like on a Friday afternoon, you are waiting to have a little meeting with us, and so for the rest of the meeting,

Unknown Speaker 3:10
we'd like to know a little more about the Users context and their daily reality, like how the how the kids are, and what a typical day looks like for them.

Unknown Speaker 3:29
And after that, we'd love to have some,

Unknown Speaker 3:36
have some of your insights about the core needs, the pain points of this project, and after that, me and my me and my teammates, we already had a little discussion about how these projects may be look like in future. So we will show some of our thoughts and concerns.

Unknown Speaker 4:01
And

Unknown Speaker 4:03
this is first part of meeting, I guess. Do you like to

Unknown Speaker 4:08
first, to

Unknown Speaker 4:10
introduce us a little more context of these projects first? Yes, let me just get up the project,
because was in December that we had kind of brainstormed some things, so I'm just Finding it
right now.

Unknown Speaker 4:35
Okay,

Unknown Speaker 4:40
sorry, just one second here.

Unknown Speaker 4:54
Okay, um.

Unknown Speaker 5:01
Okay, so this is about

Unknown Speaker 5:06
So the project that we have,

Unknown Speaker 5:10
I'm sorry, Tim, I'm just looking for your snapshot that you gave each group because it might be a
little different or probably more clear than mine. I can just email that to you now if you want.
Thank you. If you Yeah, I don't know why yours isn't popping up right away. Um,

Unknown Speaker 5:45
there you go.

Unknown Speaker 5:49
There we go. Thank you.

Unknown Speaker 5:54
Okay,

Unknown Speaker 5:57
so we're working with nonverbal students who have poor work or have poor working memory
face sometimes insurmountable challenges in sharing what they did and where they were in the

day. The goal of the project is to develop an AI system that incorporates passively collected data or low effort, actively collected data from a smartwatch or phone to help the student build a visual diary of their day to share with their family or support network. Okay, perfect.

Unknown Speaker 6:25

So I have a few students that I work with every day that are non verbal when they come home. So the question was asking about,

Unknown Speaker 6:37

how could we use AI and the technology data that we have to kind of share a snapshot or a part

Unknown Speaker 6:46

a summary of what happened that day

Unknown Speaker 6:49

and when students enter school, if they are non verbal, or they have

Unknown Speaker 6:55

challenges That would

Unknown Speaker 7:00

that they would have challenges that kind of would

Unknown Speaker 7:06

prevent them from kind of sharing with their family or recalling what they have done.

Unknown Speaker 7:13

They would probably need some sort of pictures or some sort of prompts.

Unknown Speaker 7:20

The reason I say this is a lot of our students who have this profile would be working with a adult, like an education assistant, or someone who might be directing them where to go or what to do, and it would be very it

Unknown Speaker 7:36

could possibly be different than what The class is doing. And then in that manner,

Unknown Speaker 7:43

if the student is not with the class, there's typically a reason for that. So

Unknown Speaker 7:50

I'm curious, and I'm wondering how we could use location data to kind of trigger some memories, or could we use location data where it could kind of pop up a view of what where they are if they went for a walk, or anything like that, because our our students wouldn't be able

to share that. And it might have been a really, a really great walk. It might have been just something to tell the parents that could kind of support this connection of, hey, I was away all day. What did that look like? Did you have a good day? Did you have a bad day? Our students can't really

Unknown Speaker 8:30

sometimes it's because they don't have the language, sometimes because they don't have the memory or the experience, or they don't have the correct words or pronunciation for those words, so it might sound different to us than it does to what it sounds in their head.

Unknown Speaker 8:46

Typically, what we do with students right now is, I have three students who are nonverbal in my school that are on my caseload, and we send a picture home with the students, so we archaically have our cell phones out. We take a picture of this student engaging in stuff around them. The reason we do pictures is, first of all, it can. It can give us the idea of what else is around them. Like, oh, so and so. Like, there was two other friends that went on this walk with you. Or, Oh, I see it was sunny when you went on the walk. So it wouldn't just be a picture of their face that we're sending home. It's a picture that shares a lot of other things that the parent could kind of look at and share with them.

Unknown Speaker 9:34

Often we do this, and I'll have someone come and take pictures of the students swimming when we go swimming every Tuesday,

Unknown Speaker 9:42

so things that show that their child is engaging and enjoying what they're doing throughout the day. There's often times where 10 years ago, students were maybe not even invited into the class.

Unknown Speaker 10:00

Classroom, or they were forced to go to different programs, or in parts of the country,

Unknown Speaker 10:06

they're forced to go to schools because they have a designation, and it's not the parents choice. So we have all sorts of different experiences with

Unknown Speaker 10:16

with what could be happening in school,

Unknown Speaker 10:19

and it would be really great to see how technology could aid instead of us taking the picture and then we go to our printer, and we have to fight with the printer during the day to get the picture out of the photocopier. So

Unknown Speaker 10:36

any sort of way to kind of first eliminate, one of the problems with how we do it now is that now an EA or anyone working with a student has a picture of someone else's child on their phone. That's like,

Unknown Speaker 10:51

that's not okay, but there's no other way to do that. We don't have cameras. We don't have iPads that we can just pull off and, like, start taking pictures and

Unknown Speaker 11:02

we it

Unknown Speaker 11:04

would be really interesting to see what sorts of specifically visual prompts this could give the student or the parent in terms of location tracking.

Unknown Speaker 11:15

But I'm open to kind of understanding or or seeing something different. I There's no idea in my head of what this could look like, which is really exciting to me. Do you have any specific questions about baby profiles of students, or what nonverbal means, or anything like that?

Unknown Speaker 11:33

Okay,

Unknown Speaker 11:34

okay, you first Yeah. Have so for each student, they're like accompanied by one teaching assistant, is that so even with our app, they're still with one teachers like alongside with them during their class time or school time at least, from about kindergarten to about grade four, depending On the severity of how their diagnosis affects them often, if they are students that would run away from school, or they have seizures, or they have specific things that were would require an adult to be right there, if it's more of a learning disability or a student, like if we have students that need to Support and using the washroom or any sort of mobility or feeding, they often have an adult with them when they get older. Those services kind of deplete and decrease as they get older,

Unknown Speaker 12:33

but definitely their needs and their communication patterns could still stay the same.

Unknown Speaker 12:38

They just have kind of less services as the years go on and then into high school, it's even less. Yeah,

Unknown Speaker 12:47

so just one question that

Unknown Speaker 12:51
so

Unknown Speaker 12:54
our original thoughts was to like,

Unknown Speaker 12:58
was to like designing a location sharing app that allows the student and the parents and also the
their teaching assistant to like,

Unknown Speaker 13:10
connect it so they can like, make friends on that social app and get a real time sharing location
And like we I think we can, like, put the photo taking

Unknown Speaker 13:25
functionality into that app, so it doesn't actually store the students picture into their teachers
form, so it's actually stay in The database or something else. So,

Unknown Speaker 13:41
but that comes with one question, that the photo must be taken with, taken by the teachers.

Unknown Speaker 13:50
So and also without the students consent, we cannot like

Unknown Speaker 13:57
like so we have to have the student consent to assess their like location, and also we're trying to
assess their heartbeat or like their stress level or something. So they're like, for example, Apple
Watch or anything that can be connected.

Unknown Speaker 14:17
So, yeah, that's the one problem we're thinking,

Unknown Speaker 14:23
so even when I think picture, I wonder if it could be like a Google image, like, if it could be
something like, what's already available through AI so, like, if you put in someone's address and
you're going there, it's just a stock photo of, like, the last time the Google machine came and
took a picture. So sort of visual prompt would be great it wouldn't have, yeah, it would be great if
it didn't have the picture of the student in it. Because, yeah, we have all sorts of then

Unknown Speaker 14:56
we would have a lot of barriers in terms of, like, we.

Unknown Speaker 15:00

Do with any sort of information is, we wouldn't want a student's picture without their consent, or also, yeah, storage issues with using children is, is not something we'd want to address either. Yeah,

Unknown Speaker 15:18

I see so you have proposed. One solution is to, like, get the surrounding information, like a picture from Google Map, or some some other providers to make it a visual prompt for the children and their parents. Cool.

Unknown Speaker 15:39

It could also, I think,

Unknown Speaker 15:42

be used as kind of like,

Unknown Speaker 15:45

so a lot of our students have schedules. Of, like, even in high school, you have a schedule of what room you're supposed to be in in a big high school, or something like that. Like, I wonder if there's ways that we could even put in some information at first and it's like, Oh, if they deviate from that plan, it's like, oh, you weren't in that class. Why?

Unknown Speaker 16:06

And like, well, this is actually where you were when you were supposed to be there, or something like that.

Unknown Speaker 16:12

Again, no expectations on what this could look like. But it's all very interesting.

Unknown Speaker 16:18

Yeah. So have you heard of app called Xeni. Or,

Unknown Speaker 16:24

Can you spell it for me,

Unknown Speaker 16:26

z, e, n, i, y,

Unknown Speaker 16:39

I have, is it kind of like, find my friend? Yeah, exactly. But you also have, like, a Snapchat functionality. So basically,

Unknown Speaker 16:52

yeah, people can talk with each other. So we're planning to develop app like that, and also have more functionality to add, for example, the focal taking and also the virtual prompt, all built

inside of that app. And yeah, and so basically, this app can, like, see exactly where the students were on the map and how long they have been, like staying at a place. For example, if he's at a swimming pool, you will show like, 40 minutes he has been staying on the swimming pool. And we can also check their like moving time, like the speed they're moving, so we can know if he's, like, riding a bike or something like that, and yeah. And you can also like,

Unknown Speaker 17:47

yeah, also see, like, when he arrives a place and left a place. So basically, this is what that app are doing. So we're planning, like,

Unknown Speaker 17:58

building inside of the app. And,

Unknown Speaker 18:03

yeah, do you think is good for the project, or to have, like, other thoughts about it? No, I mean, it makes a lot of sense. I think it's, it's,

Unknown Speaker 18:16

I'm gonna have to try it. But, yeah, it's, it looks really cool. It looks like it'd be a great tool to use in schools as well.

Unknown Speaker 18:23

I'm open to it.

Unknown Speaker 18:27

So I guess a useful thing to think about is what,

Unknown Speaker 18:33

What need do you have? Or does the what need Can you fill that isn't currently filled by an existing application. And I thought a helpful thing might be to consider, what do some of the sort of stories look like? Like for a few typical examples of what, what would it mean to at the end of the day be able to share what happened? So some, just like, made up or real examples from a student's life of like this is what we mean to be able to say what you did during the day, because,

Unknown Speaker 19:03

I guess I wanted to make sure that there's clarity on like, when we talk about location, are you talking about macroscopic like, which part of the city were you in? Or were we talking like, did you go to the art room? Did you go to the gym, that kind of thing?

Unknown Speaker 19:18

Yeah. Yeah, exactly. So our thought was to like, in the end of the day, like, for example, when the student left the school and arrived home, the app will automatically, like, consume all the

data, for example, like, where the student have been today and from the timeline. And you can generate,

Unknown Speaker 19:44

like something called a footprint. And we can let, for example, like some AI agents, to conclude the students whole life. And you can provide the teachers.

Unknown Speaker 20:00

Then the parents some insights about what the student have been doing all the all day,

Unknown Speaker 20:07

yep, so looking at it through a very like kind of microscopic lens of yeah would be Yeah, would be exactly what we're looking for. I haven't Is there a way to share my screen?

Unknown Speaker 20:20

Yeah? I think share content top right. Okay,

Unknown Speaker 20:26

so I'm one,

Unknown Speaker 20:31

okay,

Unknown Speaker 20:33

so what I so I like the app that you're using, and this is an app we use in schools a lot. Oh, where did it go?

Unknown Speaker 20:42

It's called Choice works. So this is what a person's day could look like,

Unknown Speaker 20:50

and this is how we will kind of show it to a student.

Unknown Speaker 20:54

Like this would be what their night would look like, eat dinner, have a bath like I wouldn't expect it to kind of go and be that minute in terms of tracking different places of the house. But because schools are quite large, I think there would probably be that possibility. But if it had something where it sequenced from the top of the day, school day to the bottom of the day, I think that would make a lot of sense, and kind of recorded like how long they were in that room.

Unknown Speaker 21:23

The reason we use these types of visual schedules is, again, for students who don't understand written word or language. Are you sharing it now? We're not. Am I Oh, am I not? Yeah. Oh, dear, okay, sorry, I am okay. Why is it not letting me why?

Unknown Speaker 21:46

Um,

Unknown Speaker 21:47

it's giving me a pop quiz here. It says, share content presenter mode. I just want it to share like my screen

Unknown Speaker 21:56

would that. So my choices for presenter mode are content only stand out side by side, or reporters under presenter mode. Do you see a screen where it says share, Link screen and then window?

Unknown Speaker 22:10

I see the window part. Yeah, you can click on that and then choose the window you want to share. Okay. Oh, this looks very different than zoom. Sorry. Okay, I will,

Unknown Speaker 22:22

oh, I need a password. Apparently, okay? Is

Unknown Speaker 22:38

it not letting you? Well, it's, it says Quit and reopen everything.

Unknown Speaker 22:48

So I don't know if you can see that. If you want to just Google choice works

Unknown Speaker 22:55

app,

Unknown Speaker 22:57

and I can put that link in here. If it's not going to let me, I'm yeah, for some reason, it's it, it won't let me, or the permissions are weird or something. But

Unknown Speaker 23:16

now I just sorry I'm not that savvy on teams. How do I even just

Unknown Speaker 23:26

share something with you here? So even if you just put in your Google choice works app, so works is built like choice, and the word works is one word, and if you google app, it'll pop up

Unknown Speaker 23:42

or looking at it? I don't think

Unknown Speaker 23:44

you'll be able to see it on my screen. So if you see it, it kind of says what the key features of this app are. And there should be a visual beside it that kind of shows some step by step pictures that are kind of cartoon looking

Unknown Speaker 23:59

so what we use this a lot with learners, and what we use this for is showing them what their shape of the day will look like, visually kind of and for people with brain injuries, with people with who are needing to have executive functioning skills, have visual supports, we put things in lists. We also put things in list just as regular students, as regular people, right? And we usually go for a shape of the day, it'll go chronologically from like when you would first arrive at school until school is done and you go home.

Unknown Speaker 24:33

So so having a list kind of like that. So a bit, if we could somehow meld this in I think that would be really cool. And I think that would make your app different, because you'd kind of be combining two apps together.

Unknown Speaker 24:48

And the reason we like this like, again, I don't want the cartoon pictures or anything. We really want it to look like as real life as we could

Unknown Speaker 24:58

because then we can use it for.

Unknown Speaker 25:00

All ages. So any sort of stock pictures or anything we could have, but the idea of sequentially walking through someone's day with visual pictures can really help trigger memories or trigger words or anything like that. Even the idea of if it can find the location and put one word underneath, like, maybe it's Hillcrest pool, or we just can have it on a level that just says pool, like I went to the pool and then I went to the mall. So there is some language tied with this memory of something that's occurred to help them trigger their memory, or to help them learn the word of where they were.

Unknown Speaker 25:39

So it's not just about letting the parents know about their day. It's also about helping them to,

Unknown Speaker 25:49

like, express their day life as a practice.

Unknown Speaker 25:54

I think if it could do both, you'd like, blow my mind, and it would be really cool, like,

Unknown Speaker 26:00

if it could be used as a teaching tool and a tracking tool, like there's nothing like that,

Unknown Speaker 26:07

like you're melding two worlds together, and that would be that would set you apart, I think,

Unknown Speaker 26:14

cool stuff.

Unknown Speaker 26:16

So, yeah, having a look at at something like that might be really neat, in terms of even looking at like that as a way for a student to journal. So then we're getting into mental health supports, because we know the research on journaling is that can help us calm down. It get and if some, if there's some way, like on an apple, watch where, like, Oh, you went into math today and your apple, watch your heart rate increased. Like, oh, did something happen? Like,

Unknown Speaker 26:46

I don't know. I'm just shooting out ideas. I wouldn't know how to start any of this. But one of the things in the features in the app, that is choice works that we use with a lot of students on their iPad is

Unknown Speaker 26:58

where it describes the app, it also says visual so the key features of the app are the visual schedule, which is the pictures in sequential order. Then it says a feelings and waiting board. But if, somehow, if we could have it that it could track when a student is doing something atypical for them at that time, or something like that, or

Unknown Speaker 27:24

or they noticed they had to wait longer than usual. Like, it could pop something up and be like, oh, like, are you needing a strategy? Or are you like, something's different about your routine here.

Unknown Speaker 27:39

So there is customization. So on this app, it has these pictures, but you can put real pictures in. You can put real voices in. So even just looking at people's work, of like, having a choice of visual pictures, but adding the audio to it, where it's like, somewhat like choices of a child's voice, so it can mimic what when the student and parent can hear what the shape of the day looked like, and it would actually be used as a modeling tool, as well as to share, like you were saying, that educational component.

Unknown Speaker 28:15

But again, these are just ideas. I am totally open, like I'm I'm impressed already.

Unknown Speaker 28:25

All right,

Unknown Speaker 28:27
so

Unknown Speaker 28:29
are there any ethical constraints that we need to be aware of? Do you think,

Unknown Speaker 28:38
yeah, I think anytime you're dealing with children in the public education system, we do have consent forms,

Unknown Speaker 28:47
um, I'm curious, like if a child goes off

Unknown Speaker 28:54
campus or some or school, like we have consent forms for that in school, where it's like a field trip form, but We also just have blanket consents, because in my district, we can walk to the beach. A family's donated a farm, so we walk down the street to the farm like we have a very we have forest all around us, so the students can walk there.

Unknown Speaker 29:15
So right now, as far as I know, any parent could have one of those, like air tags in a child's backpack,

Unknown Speaker 29:25
so they don't need consent to have that sort of thing. But if we're creating an app,

Unknown Speaker 29:34
I mean, if it's between a parent and a child, I can't think of any reason why it wouldn't be like putting an air tag in your kid's backpack,

Unknown Speaker 29:46
yeah, because there's no third party clicking yet. So, but we do need to analyze the data so it will go somewhere.

Unknown Speaker 29:56
So I would probably look at, um.

Unknown Speaker 30:00
Yeah, there's lots of like, child find apps, things like that, and maybe looking up ethical or what the agreement looks like for parents sharing their data of their child

Transcribed by <https://otter.ai>

Speaker 1 0:00

Yeah, there's lots of like, child find apps, things like that, and maybe looking up ethical or what the agreement looks like for parents sharing their data of their child because there are like, different child tags, different child locators that, yeah, analyzing the data, there's, I'm sure there's some sort of permissions or something you would need for that, but as far as bringing it to school, I don't think there would be any ethical concerns or anything like that, unless we're also using a Support Worker, which that data we have forms for, like, sharing data with the school, things like that, but it could be optional.

Speaker 2 0:46

All right, so of the rest of team, do you have anything to add? Or, Oh, Tim, sorry,

Speaker 3 0:57

I have another question, like, if I'm understanding your like previous talk about how the teacher had to take picture of the children like, and that's like in some way controversial In this case. And so should we even consider the like, the customization in our app, like the teacher can take picture of this neurodivergent children, and,

Speaker 1 1:35

yeah, sorry, nope, thanks, sorry, yeah, I don't think so. I think it would be too hard just Yeah, at this point, I think if it, if we can do it with more stock photos, and that's something that you could always expand into or look at later, but I think it would be a huge barrier and a huge conflict for so many reasons, because we wouldn't want to be storing pictures of children anywhere to even analyze the data like that would be. That would be a big barrier, and I think that would turn a lot of parents off.

Speaker 3 2:12

Yeah, how about like the pictures on the surroundings, without like the children's faces?

Speaker 1 2:17

Well, if they're just talk photos, and it's just their location, and it was set up and put on by their parents. Tim, unless I'm missing something, I don't think it would be any different than an air tag. Yeah.

Speaker 4 2:31

So I guess one thing to think about is you what the what the hardware requirements look like, and certainly getting into taking live recordings during the day opens up whole new areas they have to wear, even if it like audio or video or photo. Then you have a lot more concerns about what controls do you need on that? So you can imagine something where all you're recording is information from like a tracker or some, some wearable or carried device that the child has that can get positional information. Maybe, if you were talking about the other thing, if you wanted to include biometric data, basically things that just the information just belongs to the child, that's fine. And I guess I clarify on what Allison was saying. You were saying stock images, but you could just mean pre loaded images, like you could have a library of these are the images that go with activities the child do. Here's a picture of the child's reading area. Here's a picture of their

gym, or what have you. And so the prompts can be visual, and they can be custom and visual, but pre loaded, they don't need to be acquired during the day, opening up all sorts of issues about, how do you make sure that you're only capturing what you should be and storing what you should be?

Unknown Speaker 3:56

Yeah, that's really good idea.

Speaker 2 3:59

When we were like initializing our ideas, we kind of really love ourselves, but we weren't sure if that's valid. And thank you for mentioning it like we really appreciate that idea.

Speaker 4 4:12

Yes. And I guess another thing to think about from the context of this is, in term, we don't have a lot of budget to spend on hardware. There's some there's some room. If, if what you want to get is sufficiently general purpose that it could be, like, reused later in a robotics class or something, and particularly if it's off the shelf, then that's could be doable. But that's a thing to think about when you're choosing, like, what kind of hardware approach are we going to be taking?

Because again, I will caution that, and imagine Allison back this up, probably like first graders the second graders, they can't carry a phone with them all day. Like it's just that that's not going to work. They they won't have it. They will lose it. They will break it. So if it's going to be for early elementary, then it's got to be some. Thing really a robust and simple like what Allison was talking about of just like the air tag or a tracker or a watch strap or something that could be buckled to a child. But for later ages, a phone is more reasonable, particularly if they get to in the high school, the students may have phones that they're using for other educational activity as well, but if you want, particularly if you want to target the younger demographic, you should put some thought into thinking about, Okay, what's, what's our actual hardware solution going to be? And again, and it doesn't have to be just the wearable. You can imagine some sort of beacon system that also requires, then you get, need to get more permissions involved with that, but that's more doable, of like, if you needed to have a beacon in different classroom that the student goes to, that's presumably something that would be feasible with the cooperation of the school.

Speaker 2 5:56

Sorry, could you explain a little bit about what is be consistent?

Speaker 4 6:01

So have you ever seen like when the security guard goes around and they record that they've arrived at a place by they touch there's a little thing embedded in the wall, and they touch it. So you can imagine something where, if you wanted to have precise localization of where somebody is, and you don't have good enough GPS localization, but you could have something that can detect, hey, we're, like, Bluetooth, or whatever. We're within three meters of this particular emitter. That means that we're in the like, the reason the resource teachers room, or we're in this classroom, or in the art class, or we and wherever they might be, that that's a way

that you could get customized relevant positional data that might otherwise just be, well, our GPS said you were somewhere in this location. We think that maybe for some reason, you just seem to jump from one end of the building to the other and then back. But that could just be noise. So that's an approach that you could take

Speaker 1 7:01

and something, Tim, correct me if I'm wrong, if. But like, I've been trying to play with the idea too, of, like, NFC tags and how they correlate into education. So kind of the idea, like, it is a tag, like a key fob, and when a student gets to this tag, it's like, pre programmed to, I mean, adults use them all that can use them as well. It's like it would be you would tap your phone onto your wall, and all your computerized lights might come on, or it might prompt you, Oh, you're home. You hit the NFC tag. It records the time you got home into your journaling app or something like that.

Speaker 4 7:46

Yeah, so that was what when I, when I wrote up the like, took your description and wrote it up for the students. I put in the the low effort, passively collected, because they're actively collected. Of there's some stuff that you can get from, like we said, just tracking, but there are things where, if it's a simple enough thing that a student can learn of, just like when I get to the classroom, I tap my watch against this spot on the wall, that kind of thing could be incorporated for some learners, not for others. But that's the kind of thing that you can, you can you can be creative about of what does it look like in terms of how you gather the data that you're looking for. So there's there's the limits. Like I was saying, don't expect second graders to be able to like, enter stuff on their phone throughout the day, but they can learn at least like as a part of routines that it involves some sort of check in mechanism.

Speaker 2 8:43

So talking about the the hardware, the devices we have access to, like me personally, I don't have an air tag or something like that, even like a watch to track my position. I just have a phone. Well, I don't know about my teammates, so I'd like to ask, Are we able to get some access to some of these kind of technology advices?

Speaker 4 9:10

Yeah. So yeah, we can. We can talk about that offline and maybe involve the higher people with the budget. But we can talk if we, if we come up with ideas of what, what you would want, how you would use it, and, like I said, if the price point's low enough and it's sufficiently generic that you can imagine the university wanting to have it left over, then, then it's probably doable.

Unknown Speaker 9:37

Yeah, and also not

Speaker 1 9:38

in the things, oh, sorry, one of the things that's on Amazon is like a two pack of air tag bracelets for kids. So for \$12 you put the air tag in it, and air tags are about \$25 each, and it's like a

bracelet that kids could wear. And it's like Kid proof. Oh, it's pretty so that's kind of the. That's That's pretty affordable. I mean, speaking as the dog owner, dog owners have air tags on their dogs all the time. It's pretty much the same idea.

Speaker 4 10:10

And there is to the thing of we, because of the context of this, course, we can't do a lot of actual validation with actual human subjects, but so you could get away with building something where you used your phone as a sensor, and you sort of, you build a system, and you said, Okay, well, in this case, we're using our phone as an example, but what we would actually have is something that contained, like the minimum required GPS, Bluetooth, NFC reader, or something like that that was in a wearable for now, I'm strapping a phone to my wrist to emulate what the process would be like, because the actual hardware probably isn't the focus of your research. It would be more the system that you build it out of. And so you can, you can still do the research and describe and prototype the system, even if you do need to use a phone, but, like, say, I would say, but don't put the effort into building a really great app on the phone for the user if, if it's not intended that it would actually involve phone interaction, necessarily

Unknown Speaker 11:15

agree with that. So basically,

Speaker 1 11:17

unless it's the parents that have, like, if that air tag, or if that NFT tag or something, could go to a parent's phone and make the picture of the day, but honestly, the technology we have at school, like the air tag, would be fine, but and even if we could, like, bring it to an iPad, we have iPads accessible, like, those are all over the place because they're cheap technology for schools. Yeah.

Speaker 5 11:41

So basically, so you means, like, for students, they're wearing air tags or Apple Watch or something that can check their location. And after they finish their day, the GPS information will be sending to our for example, our real app, which is sending to our database, and it generates the location images and their

Unknown Speaker 12:10

daily footprint, like the

Speaker 3 12:13

virtual diary, so something like that.

Speaker 1 12:20

That would be kind of my guess is, yeah, like, what would a parent use the most? And would probably be an iPad or a phone. I wouldn't specifically make it a phone app. Like most of our kids, who are nonverbal, have iPads used for communication systems, and they use them also as technology, assistive technology for writing or dictating words or or anything like that.

Speaker 2 12:48

Okay, right. So one last question. Like, about, about the for, for professors here, like for if we want to integrate it with some AI, do we have any budget for the APIs instead?

Speaker 4 13:11

Potentially, we do, and we do also have, we have some existing resources of some hardware and software that we do already have access to. So that's, that's something we can look at and find out whether the thing that you're looking for is something that we already have, or whether we would actually have to spend money on it. But the university has a lot of licenses for a lot of things.

Unknown Speaker 13:38

All right, if,

Speaker 2 13:40

if nobody wants to say anything more, then we can wrap it up and maybe talk about when we are going to have our next meeting and Something like that.

Unknown Speaker 13:55

How do they shoot Xu Tang, oh,

Speaker 3 14:02

uh, sorry. What do you mean? Like, we schedule our like, next me,

Speaker 2 14:08

oh yeah, sorry, I forgot it. It's not your job. It's like, Xu, Xu.

Unknown Speaker 14:14

Oh yeah. So, yeah, I'm fine with any time.

Speaker 2 14:19

So, so, oh yeah, right. Like, I want everyone's schedule about when you're you guys are available, and maybe we can schedule bi weekly meetings to report some of our progress to.

Speaker 5 14:37

Yeah. Is Friday afternoon? Fine, like this time,

Speaker 2 14:45

if you're you don't feel like exhausted every Friday, like

Speaker 1 14:52

so for me, anytime after 330 on any day, but Mondays, so Tuesday, Wednesday, Thursday. Friday, anytime after 330 is fine. If it's a daytime, then there would be specific days. So I don't

know if you want to meet as a group and just say, propose a few days or times or and then I can kind of say this would be the best whatever works for you guys. So this day and time also works fine.

Speaker 3 15:25

Like, is it like bi weekly? Or like, every week,

Unknown Speaker 15:34

I think from the campus, it's bi weekly.

Speaker 3 15:42

Then the Yeah, this bi weekly is all good with anytime I have a thing on like 30, like seeing seven days. So if it's weekly, I cannot wait. Do you guys want

Unknown Speaker 16:02

to put together a schedule and just let me know?

Speaker 5 16:05

Yeah, send an email to you, yeah, yeah. Sounds great.

Speaker 2 16:10

Yeah. Thank you so much. And thank you good weekend.

Speaker 1 16:16

Thank you, you guys too. Enjoy bye. Enjoy bye.

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