

Kyle Shevlin: Hey everyone, and welcome to a new episode of Second Career Devs. I'm your host, Kyle Shevlin. Second Career Devs shares the stories of people who have changed their lives by changing their careers to software engineering or web development. As I like to say, it's about the road less traveled and the lessons learned along the way. This episode I'm joined by Mark Noonan, who went from studying ethnomusicology and working as a job coach at a nonprofit, to doing hackathons and working as a web developer. Be sure to stick around after the outro for some interesting parts that didn't quite make it into the interview. I think you'll really like it. Now before we get into the interview, a quick word from this episode's sponsor, Infinite Red.

Kyle Shevlin: This episode is sponsored by Infinite Red, a US based consultancy specializing in React, React Native, mobile applications, and web design. Infinite Red is deeply involved in the React and React Native open source communities, with projects like Ignite and Reactotron. Their team is so good with mobile development that they contribute to the React Native core project and they publish a React Native newsletter with over 10,000 subscribers. Maybe you'll be their next one. If you have a project and need design or engineering help and are looking for an experienced team that can take it all the way from concept to completion, you need to get in touch with Infinite Red at infinite.red. That's right friends, they have a .red top level domain. That's infinite.red. Make sure to mention you heard about them from Second Career Devs.

Kyle Shevlin: While you're reaching out to them, you should also check out Chain React, the React Native conference hosted by Infinite Red right here in my hometown of Portland, Oregon in July. Let me tell you, there's no better time of year to come to this fine city, and you'll be hard pressed to find a better reason to do so. Over 500 developers from all over the world come to this conference to give and listen to the best React Native talks out there. Yours truly had the fortune of leading a panel last year, and this conference was incredibly well run and enjoyed by all I met. Check it out at infinite.red/chainreactconf. That's infinite.red/chainreactconf. Now, back to the episode.

Kyle Shevlin: Hi Mark.

Mark Noonan: Hi Kyle.

Kyle Shevlin: How you doing?

Mark Noonan: I'm doing all right, how about you?

Kyle Shevlin: I'm doing well. I'm so glad that I can get you on the podcast. I know we've been chatting a little bit on Twitter for awhile, and I'm really excited to share your story with the audience. You have quite the eclectic story.

Mark Noonan: Yeah, there are a lot of steps and a lot of twists and turns in me becoming a developer, but I'm also just happy to be here as well. I've listened to the podcast, so I've kind of ... It was part of my journey in figuring out that this was something I think I could do, so it's really nice to actually be on here with you.

Kyle Shevlin: Well I'm really thankful that Second Career Devs could be a resource to you and a resource to other people, so I'm more than glad. I'm ecstatic that we can have you come on here and fulfill a full circle of things. That's awesome. Why don't you take a moment and introduce yourself to our audience? Tell them what you used to do and what you're doing now.

Mark Noonan: Okay. I'm Mark Noonan, and my most recent job before I switched to development was as a program manager at a nonprofit. We served adults with developmental disabilities. I mostly worked at, supported employment with them. Now what I do is I'm a web developer at a company called Content Thread in Atlanta.

Kyle Shevlin: That's awesome. I believe we've also talked about some other things that were in your past that I hope we get a chance to bring up, but that's really cool that you do that. You still do a little work for them, right?

Mark Noonan: Yeah, so when I transitioned to the new job, I took about a month to go from full time at the program management ... The company's called People Making Progress. I was full time at PMP, and I found Content Thread and I really liked them, but it's a difficult thing to get yourself out of a small nonprofit. It's hard to just give two weeks notice and drop out of people's lives like that when you're working with a small number of clients. So this company that I joined was able to offer me like, "Hey just take a month and work part time with us, and then fade your way across to full time."

Mark Noonan: That was great and it gave me the opportunity to pick some parts of what I do at PMP and stay involved. I help a little bit with fundraising, and with clients that I work with who have jobs that are outside normal business hours, I can drop in on them in the morning or in the evening, see how they're doing and make sure that those relationships are still kind of moving along well, even if I'm not there actually running things in their programs anymore.

Kyle Shevlin: That's really awesome, and I think that really displays a character that I really appreciate about you, and I'm sure other people appreciate it too. It shows thoughtfulness and care, and that's amazing. I've worked in some small organizations in my life before, and it's definitely, it's possible to be devastating to have someone just leave very quickly, so to have the opportunity to be able to essentially migrate from one thing to another seems both helpful for everyone involved, PMP and yourself moving to this new job. We'll definitely put PMP in the show notes if you want to send me a link. I would love to spread the word.

Mark Noonan: Yeah, that would be great. Yeah, it's a terrific organization. You know, the point of making those transitions can be quite scary, and when you're maybe uncertain about how things are gonna go, it's tough to let everything go all at once about your old life and your old relationships, which I think sometimes can happen if you're very involved in something like I was at PMP, and so as a personal support thing for myself doing well at the new job, part of it was knowing that I had not, that unfinished business that I had at PMP and loose ends, I wasn't just leaving those hanging. I was going to be able to keep in touch and follow through on some of those things that hadn't settled yet when I left, which is really comforting for me starting the new job as well.

Kyle Shevlin: That's great. You know, I don't think every person making a transition would be in a situation where that's helpful and useful. I mean some of the guests I've had on the show like a clean break, it's been a great thing for them, and I think each person needs to realize what works best for their situation, but I'm really glad that you were able to do that. I wanna take a moment and go back in time a little bit before this, because just to the audience, I often get a great email from these people who are reaching out to me wanting to be on the show, and Mark, you have an incredibly diverse background. You didn't study social work to end up in a nonprofit. What did you study to get through school and get your life started?

Mark Noonan: Where I grew up, which is in Ireland, you make some really crucial decisions when you're about 15 years old. You're in high school, you're getting ready for your final couple years of high school and you have to start picking what college you'll go to and what courses you'll apply to. At that point I had an interest in programming, but really the month I was making the decisions, I'd gotten stuck on something and I just thought I wasn't smart enough to figure it out. We didn't have the resources that we have now. So I was really into music, and at the time I was kind of good at music and writing and English, and these things were going well for me. So I wanted to pick for college something that I was gonna enjoy and get satisfaction from, and maybe thought afterwards I'll become a teacher or do something like that that I'm interested in. So sort of not having a lot of resources around programming stuff and feeling quite well supported and like I could go and enjoy college and meet nice people doing music and English, that's what I went to study.

Mark Noonan: I really, I loved it. I found it to be a great experience, and I found a little bit of web development knowledge that I'd picked up, like a lot of people, doing Myspace sites, doing little personal html and CSS stuff. I found that that knowledge was applicable when I would be in college and I would be in the drama society and we need a website, or various things would crop up that I could help with, so I never really lost the interest in what's the next thing I can do with the internet or a computer to help an organization I'm in or to help myself or to get something done. That kept me engaged in a kind of background way with programming.

Kyle Shevlin: That's really interesting. Not everyone who comes on the show has a history with coding. Some people do, some people don't, but I find it fascinating that you kind of had this experience, you enjoyed it, but I think you went through something so many people go through, especially people who are trying to make a change, make a shift. They end up feeling inadequate. They end up feeling like they lack a degree of intelligence that they need or something like that. That's so unfortunate. It's a shame that it happens, and I mean just looking at your life, I mean that changed the next, I'm gonna guess, decade or so if I'm getting my timelines right, or how long was that?

Mark Noonan: Yeah, completely. This was around the year 2000 is when I was sort of deciding this stuff. That got me into, yeah, into college in Dublin studying English and music and having a great time, and getting into theater and taking some of that seriously for awhile. We were in a band and we put on charity shows, and sort of just exploring these things and not feeling under a lot of pressure at that point in my life to make a bunch of money or anything, had some time to play with. What came of that was at the end of my time in college, I had met the woman who would become my wife, and so that sort of became part of planning and strategizing what we were gonna do.

Mark Noonan: I was really interested in this ethnomusicology course, which is in a different city, and so we had to organize our lives to let her do what she wanted to do, which was in Dublin, and then let me do what I wanted to do, which was in Cork one year after the other. In between, I had a job, right after I got my English and music degree, I got a job at a mortgage brokers as an administrator, so just helping people keep track of files and applications and a little bit of selling life insurance, really bottom rung. Then the financial crash happened and took the energy out of that company, and about 15 or 20 people were let go.

Kyle Shevlin: Not just the energy, the money. It was gone.

Mark Noonan: Yeah. yeah. There was a certain amount of denial. It was a relatively small company, but there was a certain amount of denial about how the business was not all mortgages, which it's technically a true thing, but many of the things that aren't mortgages were heavily mortgage adjacent, so when that ended, the thing that I found out about from a friend of mine was he was about to leave a job as the assistant to a disability officer in a different college in Dublin, in [Tallaght 00:12:44]. That job was a really really big change for me, because I'd never really thought about working in disability support.

Mark Noonan: The job that it was was to be Gary's assistant, who was the disability officer there. He himself has a disability, so I was not doing clerical independent work for him. He is impaired with his movement, so my job for him was to do some typing and help open doors, and help with some planning of getting around because he was using a wheelchair. It was so interesting for me because I was helping him, but his job was to help the students with disabilities at the college,

so I was exposed to the resources that people have that help him and the sort of attitude of what is a disability and how can we compensate for things and let people flourish and do the stuff that they want to do.

Mark Noonan: Yeah, even though I went back to music, I never lost track of seeing and learning what I had learned with Gary, and recognizing as I went forward, you notice things in a little bit of a different way once you've spent time with somebody who needs a wheelchair ramp or an accessible door or something everywhere you go, so that sort of changed my perspective on the internet as well and on accessibility online, and what I was interested in doing.

Kyle Shevlin: That's awesome. That's really interesting, and I hope we can bring that back up when we start talking more about what you're doing now. But you did go back into music. You got a Master's in ethnomusicology, correct?

Mark Noonan: Yeah, ethnomusicology, which is the study of people and music, and it's a really broad area. What I was really attracted to at that course was the main teacher I just thought was really great, and they had all sorts of instruments and practical courses you could take in music I'd never gotten to play before. They had a sitar, one was sitar. One was gamelan, which some people know, some people don't. But they had this ... It's a Javanese, what they had was a Javanese gamelan, and that's an orchestra made up of different shapes of kind of brass gongs basically. I like to talk about gamelan. I'll spare people the in depth stuff about it, but it's you hit stuff with hammers.

Kyle Shevlin: Send me a link and we'll put it in the show notes.

Mark Noonan: Great, yeah. So you have these little mallets and you're hitting these gongs, and some of them are bar shapes and some of them are big round gongs, and there's maybe 20 people involved. There's a bunch of old traditional music and there's a bunch of really new cutting edge compositions that are being composed right now. It's really cool, but it's very different to the tuning of Western music, so it can be a little hard on the ears until you adjust.

Kyle Shevlin: Ah, does it have like ... It's non 12 semitones, maybe micro tonal to Western ears, that kind of thing?

Mark Noonan: Yes, and there's this intentional misalignment by just a few degrees so that you get this shimmering effect, but it's like when two guitar strings are just a little bit not in tune.

Kyle Shevlin: Right, you can hear the wave differences, the phasing.

Mark Noonan: Exactly. Gamelan is specifically set up to maximize that quality, and it's not ... You kind of have to get ... It's an acquired taste.

Kyle Shevlin: Well, maybe you can share a link with me that we can put in the shows notes. Maybe some devs out there will find it interesting coding music, who knows.

Mark Noonan: Yeah, I gave it a try at work actually. It wasn't a huge success.

Kyle Shevlin: It wasn't effective? Fair enough, fair enough. So you earned this degree and you kind of had to make an interesting life choice after that, if I'm not mistaken.

Mark Noonan: We moved to Atlanta is, yeah, at the end of that year, we'd been in Ireland for a little while, so we moved to Atlanta to be with my wife's family who are from here. Her dad is a musician, and so I got a job working for him. He's a folk singer and a storyteller. He plays concerts all over. He needs office support for selling his CDs and things.

Kyle Shevlin: Yeah, because he's kind of a big deal, right? He's not just some small person living out of a van doing this, right?

Mark Noonan: Yeah. He wouldn't describe himself as a big deal, but in certain folk music communities, people know him. He wrote a song called Christmas in the Trenches, which is fairly well known even if you don't know him. John McCutcheon is his name. That was a job that had many facets, including being a tour manager for awhile and dealing with customers over the internet, helping to run his songwriting camps and organize things for him. So that left me with a little bit of time, it was not a full time job, where I just wandered into People Making Progress as a job coach. One of my in-laws' friends was working there and they just thought, "Mark's a nice person. He's probably gonna be okay at doing this work." That job was huge in developing me as a little bit more of a problem solver, maybe getting me to be a bit more proactive, because I was seeing things that I felt like I could influence in a positive direction.

Mark Noonan: Yeah, that was a very different kind of ... Sometimes just having the right manager can make a huge difference. I felt like I had supervisors there who valued what I was learning when I was out in the field working, seeing things. A lot of my work was supporting people who were dishwashers, maybe somebody with Down Syndrome or something who works in a dish room or a grocery store, things like that. But I also felt like the people at PMP were interested in other ideas that I would have as I was there, and it just ... I switched to doing that full time and retained a little bit of an office connection with John as an office manager, and gradually took on a little bit more responsibility with his website and stuff like that over time as well.

Kyle Shevlin: Interesting, so you're kind of doing these two jobs at once that have very different qualities about them. One somewhat has a tie to what you studied, folk music and music in general. That had to be somewhat interesting, but you needed a very diverse skillset to handle that job. Then you're working at People Making Progress at the same time. Was there ever a time ... Was it difficult

doing two things at once? Was it enjoyable at the time in your life? Did you care much more about one or the other? Was it about equal? What can you share about balancing those things at that time in your life?

Mark Noonan: Yeah, it had a couple of effects. Working in a nonprofit doesn't pay particularly strongly compared to other industries, and so for a long time it was a practical thing of just financially needing to keep both of those jobs and also having each employer understand that that was the deal. PMP, everybody does a lot, you wear a lot of hats at a nonprofit like that, but they were supportive and understanding of the need to be flexible now and then so that I could meet my obligations both places without being overwhelmed as a person and failing at both places.

Mark Noonan: So I think it's ... I was lucky in that I had understanding from both sides of doing a reasonable amount of work, and so I was able to keep it up without really having to think of, "Is this too much? Or do I need to try and stop and change something?" Until eventually I reached a point where I did have to think of that, and I was already growing some programming skills in various ways, and that gave me an avenue to go to something different, and reduce my workload and still sort of have a normal-ish schedule and life and stuff like that.

Kyle Shevlin: Well let's dive into that then. You did this for quite some time, this balancing act between two vastly different jobs. You clearly have a deep passion for the work that you were doing at People Making Progress. I think it's very evident in how you speak about it, how you wrote about it to me, and what you're sharing to everyone. But you mentioned there started to come a time where a change was necessary. I think everyone in the audience may experience that at some point in their life, or might be experiencing it right now. What was that moment like or that time period like where you started to feel that change happening and start to make that change?

Mark Noonan: Part of it was getting excited about development work. I always felt like eventually something was gonna change about that situation because it's a lot of hours to be doing in your life, so I didn't think that was really a permanent thing. But a few years ago, I started doing creative projects with programming, doing poetry that was interactive, and just little experiments, and they were a real struggle to get working because I didn't understand JavaScript. I didn't really, I knew that I needed to use JavaScript to make words change and move on a page, and that's what I had heard that I needed. I have friends who are developers who kind of nudged me over and over towards like, "Hey, learn JavaScript, and maybe learn Ruby," or whatever when I would ask questions. But it took me a long time to get hooked on really learning JavaScript and becoming serious about actually understanding it and working it into what I was able to do.

Mark Noonan: That sort of curiosity led me to learn a little bit, and then when I realized that what I was learning to move words around on the page was also applicable elsewhere in web development, it sort of opened the door to fix some problems that I was seeing in People Making Progress' various workflows. So I worked on something to kind of consolidate our scheduling because my boss would type out these emails, like 20 people every week by hand. This is all going towards this project that I did that was just like a single page app. She could go to a web page and type out the schedule and then dispatch the emails to everybody else without having to open up her Yahoo Mail internet client that was and is her favorite internet mail experience, but it's not a great one for writing emails. It's kind of slow and clunky.

Kyle Shevlin: Interesting.

Mark Noonan: Yeah, it's what happened, and it also let us generate this bonus of everybody's schedule all together for the managers.

Kyle Shevlin: Nice.

Mark Noonan: It took a lot of confusion out of my life as a manager. I felt good about making a difference like that in our company workflow. I don't know if it was a huge deal to other people, but it made that little piece of our lives easier. I gradually realized these are skills I can really apply more and more, and I wandered into a free code camp meetup, which again, that was the perfect environment for me at that time.

Kyle Shevlin: That's awesome. Let me take a moment there, because I think that's a really great story. You're just doing this fun project, this interactive poetry, which by the way sounds really interesting, and you're dealing with some challenges there. But I love that your mind was already able to construct that these skills are applicable elsewhere. You've hit on what seems to be a common thread in a lot of the guests on this show, is that they take these skills and they're immediately able to apply it to some problem that they have at their current job. In a sense, they're transitioning before they've ever even stepped in a code camp or really done a lot of lessons or that kind of thing.

Kyle Shevlin: I think that's awesome. Email automation in that way, I think that's really cool, and definitely something that could be a fun little project for a lot of people to do, maybe for the business they work at, maybe something they have personally or that kind of thing. I think that's great and I'm so glad that you shared that. Now that last bit you hit on seems to be a big turning point for you, and possibly for a bunch of listeners here, that stumbling into a free code camp meetup. How did that happen and what happened from that point?

Mark Noonan: I think this was podcast related. I think one of the things I was doing was starting to listen to developer podcasts and things like that, and I think I heard

Quincy Larson somewhere describing what freeCodeCamp is, and I went, "Well let me look at this." Going through it, I looked at the curriculum and I looked at that there's a nonprofit project at the end of it, and well there's one other piece before that, which is I took CS 50, the Harvard free edX course thing. I didn't do all the assignments for it. I just was trying to figure out more baseline computer knowledge, and that was really really interesting, and that was probably what prompted me to study programming more, because I felt like I had a grounding and understanding it. That led me to the podcasts, which then led me to Quincy and freeCodeCamp. The first thing they have you do when you join freeCodeCamp is become a member of some specific communities. Join the form, follow someone on Twitter, and become a member of your local city's freeCodeCamp Facebook group.

Kyle Shevlin: Interesting.

Mark Noonan: Yeah, I wouldn't have even known it was there. The website just says, "Go to Facebook. Look for your city and join that group. When you've done that, come back here and click the button, and you can move on to the next challenge."

Kyle Shevlin: That's incredible. That's great, connects you with a community right away, which hopefully connects you with not only people who are going through the thing that you're about to go through, but support, you know? That's what so many people need when they're making a change.

Mark Noonan: I didn't really know the impact it would have. I just knew that was the next thing it was telling me to do before I move on, so I didn't have to evaluate whether this was a good idea. It was just like, "Yeah. This is what we do. Join the community."

Kyle Shevlin: What kind of impact did that have on you? What kind of impact did having a community have on your development?

Mark Noonan: Several different, different things happened at the first meetup. One was that I met other people who were learning and realized that we're all in the same boat and we're all uncertain about our skills. We're all trying to figure some stuff out. There are some people who are really really new who haven't done any programming before that I was able to help with something maybe, and then there are lots of people who are more experienced than me who I can ask for help and not feel shy or judged. Just be like, "I'm having this specific problem right now," at this coffee and code meetup and we're here for four hours. Being able to just share that problem with somebody else who's there who can join you and gather all the same context and show you where you need to go next is so different to Googling your way to a solution, because often, especially at the beginning, the thing you're missing is not easy to express to Google.

Mark Noonan: There can be some foundational things about just how your computer is set up or that you don't really understand Git yet or something like that, that it's very hard to get enough information into Google or into a stack overflow question or something to express what's going on. Whereas the person sitting beside you who's helped other people, who's been through this themselves, they're gonna be like, "Oh yeah, you got the wrong version of this thing installed," and unstick you right away.

Kyle Shevlin: That's awesome, because when you're first learning, one of the difficult skills to learn is how to properly word your Google searches, like how to get the vernacular correct to get the kind of results that you want. If you don't have that built up lingo or experience, it can be really frustrating. You can spend hours on something that's really a very minute change in your environment or your code, and I think that's awesome that you were able to have someone there to kind of guide you. So, you're doing these free code camps. How long ago was that that you started doing this?

Mark Noonan: I think this was 2016. This was about two, 2015, 2016 kind of generally a period of starting it and then doing some exercises and getting myself to the first meetup that I went to.

Kyle Shevlin: Okay, so you started doing these free code camps back in 2016 and doing some other things. What started to move you from just learning about it to maybe moving on to doing more things, getting more experience?

Mark Noonan: There was a fluke that happened at the very first meetup that I went to. I went to the appropriate coffee shop and I looked around, and there was a group of kind of likely looking people with laptops at a table. I'd never been to any meetup from meetup.com before. I was kind of nervous. I was just not sure how people acted, what the deal was, so I went over and started talking to these people. I gradually realized they are not the freeCodeCamp meetup.

Kyle Shevlin: Plot twist.

Mark Noonan: Yeah, I know. It wasn't like, I just assumed they were, I didn't ask. I was just like, I went up and I said hi. So they were just talking to this stranger, but it turns out there was a committee meeting for the local Code for Atlanta people, so I was like, "So wait, is this the freeCodeCamp meetup?" The woman I was talking to, Brandy, she said, "Well no. That's not what this is, but we do run our own meetup and you should come next week." I was like, "Oh my God."

Kyle Shevlin: That's amazing.

Mark Noonan: So then I went over to the other table that had a bunch of people with laptops that I then saw, and I was like, "Please tell me you guys are freeCodeCamp." They said yes.

Kyle Shevlin: Well look at that, some brazen confidence or courage or whatever you wanna call it turned out to be an opportunity in disguise. You get connected with this, is it Code for Atlanta or Code for America? What did you say?

Mark Noonan: Code for Atlanta is the local Code for America brigade.

Kyle Shevlin: Okay, very cool. So you also get hooked up with them. What came about from that?

Mark Noonan: I went to, it took me a little while to go to one of their meetups, and they were just getting ready to announce that there was gonna be a series of hackathons that were related to MARTA, which is Atlanta's public transport people. I knew what hackathons were, mostly from CS 50 where they have one in their course. I was like, "That looks cool." People go and just work for a weekend. It really reminded me of my college drama society where we were building sets every weekend and there's a lot of pressure but it's fun. So I was like, one of the things that I definitely had in terms of my professional experience was a deep knowledge of problems with MARTA.

Kyle Shevlin: I have heard things about Atlanta's transit, so.

Mark Noonan: Yeah. I worked with people who rely on the powered transit service, and it had many problems. But the story that sums it up for me is I was at the doctors office once, and it was an old woman across the way from me. She took out \$5.00 and she's like, "Do you have change for \$5.00?" I said, "Well no. I've got \$4.00 though." She goes, "That's fine. I just don't wanna give them the extra buck." I was like, "Who are you talking about?" She's like, "MARTA. They don't give change. I do not want to give them an extra dollar, they're terrible. You can have the dollar."

Kyle Shevlin: That's a broken system.

Mark Noonan: Yeah.

Kyle Shevlin: Okay, so the powered transit has a lot of problems. What are you doing about it?

Mark Noonan: So I go to the first hackathon and I'm talking to people beforehand. Again, they force you at this event, in order to get your food you have to hand in a card that proves you've talked to some people.

Kyle Shevlin: Okay, okay.

Mark Noonan: It's a good way to get developers, because you have to write down three things you've learned about a few people in there, so it's just a really good device to

force all these nervous hesitant people who may show up at an event like this to-

Kyle Shevlin: Interact.

Mark Noonan: Do some introductions. In that process, I actually met two people who, one was an iOS developer, one was a really general developer. We formed a team for the hackathon with my friend [Narando 00:36:17] from freeCodeCamp who was also there. It really blew my mind how I could describe what I knew about the problem and people could go to a whiteboard and start drawing screens. [Darchon 00:36:31] who was one of the team members starts making this app on his computer, but it's showing up on the phone. There was so much about it where I'm like, "I kind of understand web development, but I don't know what's happening now."

Kyle Shevlin: Okay, okay.

Mark Noonan: I was really thrilled to see ... Much of what we were trying to do was solve that MARTA had a phone based system for finding out when your bus would show up, and so often you could be waiting on hold just trying to figure out if your ride that was pre-booked specially for you was gonna be there if it was late. So as I was describing these things, the other people I was working with were eagerly turning it into very specific user stories, and what screens we would need, and what we could do to display that information.

Kyle Shevlin: Interesting. You were a project manager before you knew you were being a project manager.

Mark Noonan: Yeah, and I had, I was like ... Because they have a web interface, I wanted to show MARTA who were there doing judging, I wanted to show them, I'm like, "Hey. In your own website, here's where you should put this information so that ..." Because I knew that somebody was just reading it from a screen on the phone.

Kyle Shevlin: Right, right, right.

Mark Noonan: You could see other things when you logged in as a user, but you couldn't see the estimated time of your bus.

Kyle Shevlin: That seems like missing information to me.

Mark Noonan: Yeah, it's important to have that information. The website's been replaced. There's a whole other story about this process which we were a little bit involved in improving, but the ... I was able to make changes just right there in the inspector, injecting, "Hey. Here's a button that if you click it, it would show this." To visualize for somebody from MARTA, "This is what you could do if you

just were able to wire everything together, or if we had data from this powered transit service," which was not part of the dataset for the hackathon. Which was really annoying to me, because it's an area where they were failing quite badly, and they're doing better now, but if you're going to the community to sponsor a hackathon to get help and you're missing this, you have three parts of your service and one of them is for people with disabilities, you need to include that part in your data and in your prizes and in your appeal for what you want.

Mark Noonan: So they did that for the second of the three hackathons. They actually anonymized a bunch of data. It's all kind of HIPAA protected scary stuff, but they went through the trouble of creating an anonymous data set describing the comings and goings for their buses for like 2000 trips that turned out to be really useful for us to understand what was going on.

Kyle Shevlin: That's interesting. I mean you make a really great point that unfortunately I think has to happen again and again and again, and that's the inclusion, right? A total inclusion of all the people involved in a scenario. You had to advocate for having this data not be treated as some auxiliary dataset, but as part of the whole picture. It's also interesting to me that you were able to make that advocacy because of your very life experience. Most people don't have the kind of experience you have had working with those people, and it's really fortunate and amazing that you were in a situation where you could enact change because of your experience. I think that's really cool. Now you went on to win this hackathon didn't you?

Mark Noonan: So we won something else. There were several events that happened through Code for Atlanta, and our general team for this project continued after the first hackathon and gained some momentum at the second hackathon that MARTA ran. We got some new team members and took another crack at it now that we had the real data in the dataset. At those we got honorable mentions. We didn't win t-shirts or drones or things, which is extensively the goal, but we did build a relationship with MARTA. It was this really amazing time where Code for Atlanta runs on two civic hack nights a month. Once a month or twice a month, we'll meet up in the evening somewhere, and we'll do, whoever's around and whoever's got projects, we'll pitch the projects they're leading and people will join in and help.

Mark Noonan: For the period between these hackathons, MARTA was sending their employees to these civic hack nights, and not just somebody that was a burden to do, but it was like people who were the actual developers that worked there who were curious and upper management who were interested as well. We began to develop a relationship directly with MARTA as a sort of ongoing project, which led to a pilot with them of just the piece that we made, again, injected into their UI, where somebody could login and look at when their next trip is coming.

Kyle Shevlin: Very cool.

Mark Noonan: So yeah, I feel like I'm skipping over so much nuance to what it is to work with a big slow moving organization like that, and how sometimes it seems like nothing's happening and then all of a sudden we have an opportunity to a demo and deploy something in a couple of weeks. The story there has a little bit more to it, but all of that was ... To me, getting people to listen and adjust their expectations for what their software should provide to people with disabilities, that was huge. That was way bigger of an outcome than I would've expected.

Kyle Shevlin: I think that's incredible that you were able to, especially at the stage in your career that you were at, this is still a transition. All right, I mean that's something to be incredibly proud of right off the bat, and a huge win, even if it did come with ... To be frank, you got some great experience with bureaucracy right? Big organizations, sometimes things move slowly, and I think some people, especially transitioning into this career, they get frustrated. Because as developers, we develop this superpower where we realize we can change the world around us, whether it's in our home or our communities through the power of programming and code, but we forget that not everyone is ready or there are factors in place that don't allow us to maybe move at the speed we want to.

Kyle Shevlin: Sometimes that's actually an important thing. You're talking about there being, the dataset needed to be anonymized, right? That's on purpose. That's important in that way. I think sometimes we developers, we lack the kind of organizational patience that we might need. I think it's a good tension to have, I think it's great to be the kind of force that pushes things forward, but it's also good to recognize being patient allows us to really understand the needs of all the stakeholders involved and then move together and make progress on something.

Mark Noonan: Yeah, absolutely. I do think that some of me being able to navigate that process comes through my experiences at PMP, where you know, what I would try to do, which is quite difficult, is go into a business and convince them they need a new employee who's got a disability and that I know the perfect person for them. Most of my work was maintaining jobs. It's a lot harder to create a new job, and everything does move very slow. You can spend six months working with someone to find them the job that they will end up in, but you can not burn bridges along the way. You can't get discouraged when things don't work out at 10 places in a row. You just have to understand that if you're in the right place at the right time with a good attitude and you're able to say, "Yes I can solve this problem," a lot of getting there is being patient through things that don't work out.

Kyle Shevlin: Interesting. Let's talk about that a little bit. I mean you were a job coach at PMP for quite some time. Talk to me about job coaching yourself as you were making this transition to trying to find your first dev role. I'm sure there were challenges. What did you do to prepare? What kind of life hacks did you give

yourself, maybe mental hacks or whatever, to help you get through this challenging time?

Mark Noonan: That's funny. Yeah, I did use some of the lessons that I learned at PMP in deciding, especially deciding what was gonna be a good fit for me. We as a company focus on a lot on not just throwing someone into the first job that comes along, but really trying to get a sense of how does this person see themselves, how do they want to see themselves, and what environment is a good one for the type of person that they are to be in. I recognized I needed interview experience, and I interviewed for jobs that I wasn't sure I would really thrive in, but I knew at a certain point there was no way to wait for the perfect job and then never have been in a technical interview when I went for it.

Mark Noonan: So I tried to do what we would do when job coaching people, of practicing the kinds of things you definitely need to mention in the interview, and looking at myself and my experience as a whole package, not just, "Hey. I've done these development projects," which need to be there, but also the personal skills and the exposure to different kinds of people that I've had over my life is, I feel like it's really an asset when you're working with other developers, other teams, other clients and you have to have empathy for their situation and not push too much on whatever you thought you were gonna get done that day. There's a lot of supporting other people that's a huge part of being a developer, and I recognized that through listening to a lot of interviews with developers and understanding the horror stories, the things people are afraid of, where you hire somebody who's really good, but he's bad with people and it's just hard to get your business done.

Mark Noonan: Long story short, I feel like I learned to work well and communicate with a lot of different kinds of people and meet them where they are, not try to conform other things to what I would like them to be, and just structure my job search in terms of I'm looking for something that feels right pretty much when I get to it, not counting on something changing after I get there.

Kyle Shevlin: Yeah, that makes a lot of sense. If you don't have good vibes going in, what are the chances of having good vibes a couple months into the job or not?

Mark Noonan: Yeah.

Kyle Shevlin: Why don't we talk about the job that you're doing now? You're working for a place called Content Thread, right?

Mark Noonan: Yeah, Content Thread.

Kyle Shevlin: Tell me what you do.

Mark Noonan: I joined there as a front end web developer. It's a company where most of our websites are built on Adobe Experience Manager, and that is kind of a niche thing, or at least I'm discovering that it is. But it still has the same building blocks as every other thing in web development. So there's components, there's a place for your JavaScript, there's a place for your CSS. You've got Markup. There's a lot of a Java backend for a lot of stuff, which is foreign to me, so there are places where I'll go, maybe tracking a bug or something, and I'll suddenly find myself in a Java file and not knowing, "Well here I am," and having to pass it off to somebody else or very tentatively make a change. But a lot of it is familiar front end web development stuff.

Mark Noonan: We also, we have some View applications and some little integrations between AEM and View, which really suits the kind of learning that I did. That's the thing I went deep on when I was starting to look for a job. You kind of have to pick something to get really good at, and I picked View, and that was appealing to this company because of the work they'd already done, but also I find it satisfying and nice to work in, so it's a good job.

Kyle Shevlin: That's awesome. I hear a lot of good things about View. I haven't spent too much time personally working on it yet, but I'll make sure to leave a link in the show notes just for people who want to check out that framework. So that's very cool. How long have you been at Content Thread now?

Mark Noonan: I joined there in August of this year, so just going on five months.

Kyle Shevlin: Nice.

Mark Noonan: Yeah.

Kyle Shevlin: Well congrats on landing that first job and making this transition. I think that's awesome for you, obviously awesome for your family. What things, what advice would you give to other people who are maybe in a similar boat? They're working hard, maybe they're even doing freeCodeCamp and stuff, what would you want to share with those people?

Mark Noonan: So yeah, I thought about this a little bit, and one thing that is easy to miss in a conversation like this is the 20 times where I started taking programming seriously and it went nowhere. There's not this point where you put your mind to it and also the conditions in your life are perfect. I had to have a supportive partner who was able to adapt to the kind of things you have to do when you're learning, which can sometimes be a lot of time in freeCodeCamp and a lot of time in [untime 00:52:17] or whatever courses you have that you're working on.

Mark Noonan: I would advise people that if they're trying to force something to happen, but their life is not structurally consistent with getting that to work right away, to not panic. Sometimes the difficult thing, the complicated situation will go away

after a month or two and your interest is still there, and it's okay to not freak out and feel like you have to do X number of hours every day. You can often maintain your interest in a lower key way and pick it up as soon as the opportunity, like a crack opens up that you can get it into.

Kyle Shevlin: I think that's incredible advice. Well, very thoughtful Mark. I really appreciate you sharing that with the audience. In fact, not panicking is probably just a really good skill for developers to develop, because some day you're gonna get faced with a problem you don't know how to solve, and your instincts might kick in and you need to be able to overcome them. That's just excellent advice. Thank you for sharing that. You mentioned earlier that you had a challenging and difficult time with coding when you were a young kid, around 15, and that challenge effectively changed the course of your life. What do you think about that now looking back as someone who's now persevered through making a change and a transition? What's that make you think about your now and your former self and who you are today?

Mark Noonan: Now I feel like we're better at telling people who are new to development up front, "Hey. You're gonna get frustrated. You're gonna maybe cry sometimes. You're gonna tear your hair out and we've all done that." The experience that I had, I kind of remember it really clearly. I was reading a book, I think it was Visual Basic or something, I had typed into things but what was supposed to happen wasn't happening and I couldn't see any way forward or any mistake I had made. I had gotten to a certain point where everything was working as I expected, and then just that next step could've been anything. But the key that unlocked my ability to be patient with learning freeCodeCamp and being frustrated was at some point I realized that whatever the computer is doing, somewhere it got told to do that.

Mark Noonan: It's not like I was wrong or not smart enough or whatever. It's like okay, the thing's not working, the thing's not moving back to the other direction. So somewhere something, either my code or library code, or operating system code, it's not magic. There's nothing in here that can't eventually be understood if you have enough time to explain what's happening. We don't always have the time to figure those things out, but it made me much less frustrated to understand that whatever's going on, it's in there somewhere. It's not unfigure-outable if you have enough time.

Kyle Shevlin: Right. That's a really great lesson to learn and a great lesson for our audience. Thank you again for sharing that. That's really good advice. I always have essentially one final question for my guests, and that is what do you see your future being? I know you're really, really new in your career, so maybe what are your aspirations over the next few years as you develop your skills in this new career of yours?

Mark Noonan: I feel very content, very much like I made the right choice in making the change when I did and in the company that I found, so I sort of ... Content Thread is a place I feel like I can do a lot of growing and has some of that same kind of you feel good going into work and you work with kind people atmosphere that I found at PMP. Helping share what I know with new people who join Content Thread and helping in the community, I feel like in the short term, that's in the next few years, that's really what I wanna do is settle in and use my skills to be good at my job, but there's also ... There are several other things that I think are pretty cool happening outside of work or potentially able to be done with the coding skills that I'd like to bring to fruition as well.

Kyle Shevlin: Awesome. Well I wish you the best of luck on pursuing all those goals, and I hope that your experience at Content Thread and anywhere you end up at any point continues to go well. Thank you for joining me today on the show and for sharing your story with everyone.

Mark Noonan: Sure. You're welcome. I'm happy to do it.

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Mark Noonan: Bye.

Kyle Shevlin: Okay, you can keep talking. I'll just cut this out.

Mark Noonan: There was one more thing that we sort of, we got close to, but that story of all those hackathons is so long. We did a project where we won \$40,000 and donated it to charity.

Kyle Shevlin: Holy moly.

Mark Noonan: Yeah, the fourth thing was-

Kyle Shevlin: Interesting.

Mark Noonan: Yeah, so maybe we can replace or whatever some of that with the main idea of being, you can go to hackathons and win money and give it to charity and make a really good impact on charitable organizations even if you don't get to help them with their code or whatever. You can do good simply by winning money and giving it to charity.

Kyle Shevlin: Yeah, absolutely. That's incredible. What charity did you give it to?

Mark Noonan: We split it up between People Making Progress and a company in Georgia called Disability Link, and then a little bit went to Eric, one of our team members, went to his hometown in Mexico to fund some laptops for coding education there.

Kyle Shevlin: That's incredible.

Mark Noonan: Yeah, that was kind of the big thing at the end of our experience, and we had agreed in principle at the beginning of this, we knew it was gonna be a long, it was not a hackathon, but it was a longer competition. We're like, "Whatever we win, we're gonna split it up and divide it to charity. We'll just pick our charities now and write it all up and sign it," not knowing that we would win \$40,000. That's that.

Kyle Shevlin: That's incredible. Thank you for sharing that.