

Quarterly Mobile Apps, Business Intelligence, & Database

BILT Meeting June 17, 2014

Meeting Minutes

Intro by Ann Beheler

Ann Beheler – I would like to start this meeting by asking Matt, how do you use mobile apps at AMX?

Matt Glover – We custom development for Windows 8 types of applications. We develop applications that will share with the sales team; this allows teams to set goals. It is a touch-enabled application, and it puts us above our competition. When you look at what we produce with Windows 8, it is very polished. It has given us a great reputation within the industry. In addition, for Apple iOS technologies, we develop application where you can see how you can apply interactive technology into your business space. We develop applications that show you exactly how to do that so that it gives you a good customer experience. The world is moving towards this interactive technology.

Ann Beheler – We have had BILT meetings in the programming space and we have gone over the KSA for the entire space. Mobile App space has been changing quite a bit over the time period that we've been in business. Last time we met, we mentioned that they would like to come up with a list of what needs to be included in the very first mobile apps certificate. While we have only two businesses involved right now, they are very knowledgeable so we are in good company. We appreciate Matt and Adrian joining us. The role of the business people is to give us the answers to our questions. On mobile apps, there is this thought that a high school kid has a great idea, he could be a million dollar earner. What is your feedback on that? How much programming do you think someone needs to have before writing mobile apps?

Matt Glover – The challenge is that it has little to do with formal education. If you want to be a millionaire building mobile apps, you have to have a passion to do it. Our college instructors are laying down a good foundation but it is the willingness of a student to transcend that. I would say that most are duds and one will be a diamond. It all gets to if this is their passion or their quick way to a million dollars; that makes a difference in the product.

Ann Beheler – Are you saying that they need to have basic programming?

Matt Glover – Yes. They need to know how it works to make it happen. The creative people that think of these mobile apps needs to be able to think outside the box, but they need to know what the box is.

Adrian Mendoza - The fact that there is a lot of excitement in mobile apps is important. If we nurture that excitement, it would make a difference. I like Matt's comment about passion because anyone can put something on the app store. Your students might all have accounts on iTunes or Google Play in a year or already have one. Every faculty member should have an account with iTunes and Google Play;

they need to show students that they did it, so the students can do. Students can see that they don't need someone to hold their hand to make this happen.

Ann Beheler – Are you agreeing with Matt that we should teach fundamentals?

Adrian Mendoza – Absolutely. I think they need to know the fundamentals of programming and design. There are many people who try to put something on iTunes but can't because they don't know iTunes guidelines for mobile apps so they get rejected.

Ann Beheler – This grant is over 9/30/2015 so we cannot make too many changes. We can affect the colleges, in order to get changes started. We're not going to necessarily see the results from what we do today. Collin has three different mobile apps tracks: Android, iOS, and Windows. We haven't brought the Windows one through the BILT yet but let me pull it up for you all to look at.

Review of Mobile App Tracks – attached

Ann Beheler – The student that we're serving is either a freshman in college or more likely close to 30 year olds that already believe they are a programmer. Bunker Hill has a certificate that has iOS and Android in the same certificate. Conceptually, what do you think? Do you think we should require people to do both?

Matt Glover – I agree with Adrian's earlier comment. I don't know what the fundamentals of programming or how it is written because that might be embedded in that course work. The difference between old school programming and mobile app programming it is all about the experience and less about what the app does; although if the app does not do what the person wants, then they won't download it.

Dan Downs – We did put a course on UIDesign, you can find it on the Bunker Hill list on Row 9. It is called Interactive Design Techniques.

Matt Glover – I did see it on Bunker Hill but I didn't see it on Collin's list.

Ann Beheler – It's embedded into the first two programming courses.

Dan Downs – That course is focused on the information that someone with little programming knowledge needs. There is a running project throughout the course. I just wanted to say that it is included.

Ann Beheler – Does it matter if we require them to do both Android and iOS? Or is it okay to give them choices to get a certificate in iOS, a certificate in Windows, and a certificate in Android. Does it matter if it is all in one or separate?

Adrian Mendoza – I think that an interactive design technique course should be required and early on in the program. I do like the idea of keeping separate tracks because if there is a student that wants to learn programming, they can choose their track. I also think it is important because you are not releasing

old information. If we're talking about releasing this in 2015 or 2016, why build curriculum that might not be around then?

Dan Downs – Where do you see a beneficial course that connects some of these platforms together with web applications? We decided at Bunker Hill to do a web application course, with web application are becoming a faster way to develop an application. It touches on a lot of different platforms.

Adrian Mendoza – I think that would be great. You'll have people build applications on web applications and deal with how to code things different from there. I think it is great because it feels like a different channel.

Dan Downs - I just wanted to make sure that in that module since it is part of this program, it would have some value.

Adrian Mendoza – Absolutely, user experience won't change between an app and a web application. You're still going to have to deal with things such as patterns either way. I think this is the perfect place for someone to take what they have learned and see how it applies to iOS. I think that is a great place for it. I might even rename that to Mobile Design Techniques.

Ann Beheler – Would you have a mobile design techniques course and then a programming fundamentals course, then strike out into a choice of Android, iOS, or Windows – if it is there.

Adrian Mendoza – You are talking about apples and oranges between Android and iOS. If you wanted to do anything, the basics of mobile apps course could be a survey in which you do a project for both of them. You really need the intro course to tell you what development direction that you want to go in. The reality is that choosing between programming for Android or iOS is almost like a religious choice; you have programmers that have developed with Java and won't ever go to Objective-C or vice versa.

Matt Glover – I would agree; having a basic UI and an introduction to mobile app development, and giving them a smattering of how you design, the basic layouts, and the basics of being a mobile app programmer before you get into the programming itself. I think that would allow students to make a choice. The challenge is that there is some zealously with each of the types of flavors. If you are an open source person, then you will be focused on the Android market. If you are an Apple zealot, then you will be more focused in the iOS market. If you're in the business of providing solutions for businesses, you will be working in the Microsoft market. Whether you are going commercial or consumer, each of those different decisions can be made at the UI Introduction class that shares all of the different venues. I do believe that Microsoft market has stalled, and isn't as mature as Apple iOS but Android also has some stalling. My money would be where I could get the best value for a business applied technology; if it is with iOS, I will be investing money in the iOS market, and so on.

Dan Downs – I think that is why the Bunker Hill web course could be something that can build on that gap.

Ann Beheler – Collin has that too. The difference that I'm seeing is that Collin doesn't call the mobile design techniques as a separate thing; I believe it is rolled into the programming fundamentals course.

What I'm hearing is that you want the mobile design technique course that focuses on the UI that isn't focused on any particular market (Microsoft, Android, or iOS). You wouldn't mind having a web apps course that goes into the programming market that the student chooses. Is that what I'm hearing?

Matt Glover – Absolutely. When you look at the classes being provided by Collin, there is no excitement in the names of the courses. Bunker Hill has the right names to bring that excitement from the student. The other thing that I saw on the Bunker Hill list is that a student can also get into the database aspect as well. Really, any application or UI that we have, it is all about the data. I think that is great.

Ann Beheler – They got a new certificate in terms of the technician that supports big data as well that will be coming out soon.

Matt Glover – The one thing that I'm noticing on both of them is the lack of security. I'm not sure if security is embedded into the classes. Everything that I am dealing with is security on a daily basis is securing from an app level security to a device level security. Malware security is also really important. All of that is important to understand how to maintain our data loss prevention.

Ann Beheler – Adrian, do you agree?

Adrian Mendoza – Absolutely. I think especially if you are going to work for IT in an enterprise, is important. Any application that has the level of storing customer information, it is critical to understand what security is.

Ann Beheler – Do you both agree that it is nice to have the tracks so that they don't have two courses in iOS or Android if they don't want it?

Matt and Adrian – Absolutely.

Matt Glover – There are almost polarizingly different technologies and how they are developed. Trying to get someone that is learning a new technology to skip tracks and learn another one, it would just draw in confusion. I would rather they stay down one track until they foundationally got it, and then move on to another if they choose to.

Adrian Mendoza – I totally agree with that.

Ann Beheler – Okay, so I'm wondering if we want to spend some time going into what should be covered in the mobile design technique class. The web apps class and the others are fairly clear. Do we agree on that approach?

Group – Yes

Ann Beheler – Okay, what should be covered in the mobile design technologies class? I know you have all mentioned user interface.

Adrian – I think user experience needs to be covered, how to wireframe your app, how to prototype it, user interface. Then separate out, the various platforms (Android, iOS, Windows) and the web

applications that are shared by all of them. I think you should also mention how to choose the platform that is best for you. When I mention how to prototype, I mean a quick way to prototype the design of their app – rudimentary knowledge of how to show your app to people.

Matt Glover – I agree with everything that Adrian just mentioned. I think there also needs to be a focus on capacitate touch and resistant touch.

Adrian Mendoza – I think a lot of that can be done right, if it is handled in the introduction to mobile user experience because you have to go through concepts of different touches.

Matt Glover – I agree. I really like the way we build our classes, to make it so that each student can add whatever the milestone achievement to a portfolio so that they can tangibly show that portfolio for hiring managers. They can share the experience, trials, how they got past the trails, etc. If we start it early and build upon it, once they have their certificate, they will have a portfolio of experience.

Adrian Mendoza – I absolutely agree with you. Any design, any app, has to be on a mobile device or in the App Store. Every project that they do needs to be on the App Store. If they put things on the App Store, they can pull out their phone and show a hiring manager their work on the spot. I know that a couple of years ago, I spoke to a group of people about having a smart phone in order to get into this industry. I think they can show a hiring manager that they are a mobile app developer and they know how to use the platform.

Ann Beheler – Anything else that needs to go into this class or any other characteristic that you want to point out?

Adrian Mendoza – I think if a lot of it can be covered in the survey design course, it will make a lot of the web application and mobile app classes go a lot smoother. I think the key thing is that as long as the classes enforce the basics and the fundamentals of UI across the courses, getting everything integrated will be critical.

Matt Glover – I think it is important that the apps don't have to stand on their own. If they have APIs that are housing the data that is leverage. That would help them with the cloud based technologies. Then you overlay security elements in the UI, API, foundations of *** It will be a capstone in tying everything together.

Ann Beheler – We hear that all the way through. Dan and Phil do you have questions at this point?

Dan Downs – I really appreciate the feedback on our courses. I tried to incorporate a number of what you just mentioned. Do you have any suggested for the current capstone project in that course? I currently have students create a business presentation for their app idea. In their presentation, they talk about the APIs they use, they have a drawn prototype. As they move into their design approach, they have to present their marketing. They meet with another member of the course to discuss it all before presenting. Does anyone have feedback on that?

Adrian Mendoza – I think it is a great approach. It really is critical for students to understand that programming is not just about sitting in front of a computer. It emphasizes the importance of marketing and talking about your app. Great job.

Matt Glover – The one thing that I want to let you know is that I like your approach and idea. Because of the interactive approach of touch, they might want to incorporate YouTube so that they can take small snippets to show what they mean by their action. It will then create a full picture of the idea.

Dan Downs – One piece that I wanted to include into the course, is mobile advertising and how to monetize the application experience. Does that belong in the course?

Adrian Mendoza – I think it's difficult because it opens up a whole separate track on how and where you set it up. There is an entire culture out there of pay-per-click downloads that feature other messages that aren't ads.

Dan Downs – I noticed that there is a whole advertising bureau that created standards for mobile app advertising. Could you say that mobile app advertising is almost down the line of a mobile marketing course?

Adrian Mendoza – Yes, really down the line it would be its own course. The majority of revenue is coming from in-app purchasing.

Ann Beheler – So you can make an awareness of it on the basic level 1 certificate.

Adrian Mendoza – I think that in the future that could be a hybrid business technology course.

Ann Beheler – We'll have minutes that we'll get out to you but I'll also send out a summary of what I got from this meeting.

Meeting adjourned 10:06am