

## **ECPRE 491 - sdmay19-40**

### **Weekly Report 6**

11/4/2018 - 11/8/2018

Client: IBM Call For Code

Faculty Advisor: Diane Rover

#### **Team Members:**

David Boschwitz - Team Lead

Caleb Nash - Lead Frontend

Justin Kaufer - Research & QA

Austin Keen - Designer & User Experience Lead

Bobby Schedler - Lead Backend

Logan Fladung - Subject Matter Expert & Graphics

#### **Past Week Accomplishments:**

##### **Caleb Nash - Completed Location Finder**

This week I fully completed the location finder app on Android that I have been working on for the past week. We can and will most likely be using this to get the users current location to help get them data that is relevant to them in the form of news when we don't want to boot up the maps and we can save on some resources that way.

##### **David Boschwitz -**

Create interview protocol: I participated in the meeting in which we talked about how to create our interview protocol for expert interviews. Also how to best do our surveys to ensure that we are creating our best app.

Started brainstorming how to design the component interaction within the app. At this week's meeting we started discussing major issues within how the app components should interact with each other.

We've also discussed how the flow of the app will work and major technical issues during the meeting. This includes identity verification. This has been a heated debate on how to implement different methods of identity verification..

Participated in the expert interview call, took notes and asked a few follow up clarification questions. We found the biggest elements that we have looked over: financial support, and instant action plans.

## **Robert Schedler** - Mesh Networking

I worked on researching mesh networking. I tested using an app called pigeon messenger. This app allowed android phones to communicate with each other using wifi direct. This was a good proof of concept, but does not use Xamarin, so a new solution will need to be found. It is an excellent step in the next direction

## **Austin Keen** - UI/UX Design Specifications and Looking To The Future

This week I focused on working with David and Caleb to decide how we would like to design our application for map views. We decided to use layers, and to just have check boxes to decide what relief sources the user needs to view. This will be an easy design, where it will just be a map view and check boxes, with no fancy stuff. I will have a full mock up of the UI design for next week, as well as begin on working with XAML to design the application's UI.

I also met with Nick, our advisor, to discuss the UI/UX design, and clarified what I had assumed that we will need to use focus groups to fine tune our UI for all users. We will need to gauge a wide range of users from those who are technologically comfortable to those with little technology experience.

I have never used XAML, so I will be researching how to best build this application using best practices when coding in XAML. Like stated above, this will grow and develop as the project moves forward, therefore, my main goal will just to get general designs completed, then to build on from there.

## **Logan Fladung** - Research News API and develop interview protocol

This week I research different sources we could gather news from with the intent of finding one that can provide information to people affected by disasters. Additionally we had a meeting with Nick where we developed an interview protocol for when I begin interviewing Red Cross employees. This will be used to validate our requirements and potentially revise our currently planned features.

## **Justin Kaufer** - User feedback model and Testing research

This week I met with our advisor Nick to go over a user feedback model to test our UI/UX once we get initial prototyping complete. We brainstormed ideas for initial screening surveys, as well as methods to test the usability of the application. After my creating the first draft of these items I will ask for feedback from Nick and Diane to ensure that the team is getting as much helpful feedback as possible when conducting these tests. We will be using qualtrics for the initial screening survey.

I also continued my research on testing in Xamarin for us to use in our project. I focused again on the UITest package since we are the least familiar with it. I found a lot of useful videos that I will share with the team that show how to setup and implement these projects in our application. It seems as if this will be a very effective way to automate UI testing in our application, so now I am focusing on figuring out the easiest way to implement it and also relay it to the entire team.

<https://blog.xamarin.com/test-cloud-video-series-using-c-and-uitest-to-create-your-first-mobile-test/>

This link was probably the most helpful in showing the setup and usefulness of the package.

### **Pending Issues**

There are no pending issues

### **Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Caleb Nash	Location App	5	25
Justin Kaufer	User feedback model UI testing research and design	6	24
David Boschwitz	Core/Mesh/Database Prototyping Component Design User Research	6	29
Logan Fladung	News API Research Interview Protocol Development	6	20
Austin Keen	UI/UX Design Specifics UI/UX Meetings w/ Advisor	5	26
Robert Schedler	Mesh Networking	5	23

### **Plans for Coming Week**

#### **David Boschwitz - Design work, Database Work, Expert Interviews**

I will work on continuing to design the interaction of different components. I will create interfaces for the database, chat and core capabilities. I will also start implementation of the database based on the specs that we have outlined for the database.

I will also help Logan with expert interviews and be on the call.

**Caleb Nash** - Attempt to integrate google maps

Working towards my current goal of using google maps has been the goal for the past two weeks, and I have been building and maintaining some smaller applications that will help me in successfully implementing this larger project.

**Robert Schedler** - Mesh networking

Will create a new prototype for mesh networking using our target platform of Xamarin, and create a design for the ad-hoc communications to follow. Will create a new project in Visual Studio and create interfaces for referencing.

**Austin Keen** - Finish Mock Up, and Begin XAML Research and Development

I should have the general base mockup completed by next week, and will begin researching XAML and learning how to best build this application with it. I will be working close with Caleb and David once again to perfect our image.

**Logan Fladung** - Continue News API research and begin interviews

A News API or multiple will be selected as a primary source(s) of information to be passed to our users. The structure of how this will be done will be discussed in future meetings. There will be an interview tomorrow using the newly developed interview protocol.

**Justin Kaufer** - For the upcoming week I will create an initial draft of the user feedback testing model which includes the screening survey and some methods for users to test the application. I will also continue implementing the test projects, and hopefully be able to write some tests for the prototyping we are doing. Caleb and I will be doing research on the map api and trying to construct a prototype, so this will most likely be where I start testing.