ECPrE 491 - sdmay19-40
Weekly Report 7
11/8/2018 - 11/13/2018
Client: IBM Call For Code
Faculty Advisor: Diane Rover

Team Members:
David Boschwitz - Team Lead
Caleb Nash - Lead Frontend, Maps Guy
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 - Maps, Maps, Maps

As the maps guy, I have been continuing on my map quest. I have implemented a Google Maps API into my code, just working trying to get it implemented to result in the features that we are looking to finish. WIll be using the tutorial below as well as the code that I have written so far to further my knowledge:

https://docs.microsoft.com/en-us/xamarin/android/platform/maps-and-location/maps/maps-api

David Boschwitz -

Began work on interface and design work. I focused on developing a plan for the team to begin critically thinking about how each component will function, by creating controller interfaces for our app's capabilities as well as user stories for how each of these functions will work. For this team exercise I created a sample user story and a sample capability interface.

Helped aid in expert interviews. I took on the role of secondary interviewer in our expert interviews this week. I added in relevant questions outside the script to get the interviewees to expand on the information they were explaining when I thought extra clarity would be valuable. These interviews were very fruitful, and gave us ideas to research response mechanisms used by the red cross (such as volunteer resources, instant command system by FEMA), as well as for a forms feature for responders to get information in custom forms filled out by civilians.

Robert Schedler -

Had a short meeting with Dr. Rusch discussing the mesh networking authentication. Dr. Rusch said she had not heard of any authentication method, but she would look into it. I also started to design the back end of the phone app.

Austin Keen - UI/UX Mockups and XAML Research

This week I focused on developing the rest of the initial UI/UX mockups. These mockups were for the map view, menu view, and chat room view. I tried to keep a consistent design for each, using a specific color scheme and format. I still need to continue communicating with Caleb on how the map API will look in the application, and then I will change around the views as necessary. I have also communicated with Justin on developing some questions regarding the UI/UX design for the focus groups, because then we will better know how to design the application to suit the needs of the potential users.

I have also begun researching XAML, and have determined that it is very similar to HTML. I will continue researching the similarities of XAML and HTML to best implement the designs that I have drawn up. I have never used XAML before, therefore this will be a learning-as-I-code type of design. My next research into XAML will cover displaying APIs and other non-static variables.

Logan Fladung - Conduct interviews and research News feature

This week I held interviews with two Red Cross employees where we discussed our project and the features we plan on implementing. During the interview, they mentioned the processes and things they wish they would've had during deployments. They also gave us resources to follow up with to continue user research.

Justin Kaufer - User feedback model & Maps framework

This week I began constructing the user feedback model that we will use to do functionality tests on our features. We are seeking to get actual user feedback on their use of the feature, allowing us to make changes accordingly for the UI/UX aspect of the application. Our target audience is people with less technical experience but we will be testing all demographics, in order to assure as much constructive feedback as possible. Again, we will be using Qualtrics for this surveying.

I also began working on the framework for the map feature of the application. This will act as skeleton code for when we start implementing the feature. We started doing this with all of our features to get a sense for the functionality flow and user stories that we will be implementing. Once we have all of the user stories established we can compile them to create the connections between features and within features.

Pending Issues
There are no pending issues

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Caleb Nash	Location App	6	31
Justin Kaufer	User feedback model Maps framework	5	29
David Boschwitz	Core/Mesh/Database Prototyping Component Design User Research/Expert Interviews	6	35
Logan Fladung	News API Research Interview Protocol Development	6	26
Austin Keen	UI/UX Mockups XAML Research	5	31
Robert Schedler	Mesh Networking	5	28

Plans for Coming Week

David Boschwitz -

I will continue to follow up on research leads from the expert interviews. I plan to do this by signing up as a red cross volunteer, and doing more research on the instant command system and instant action plans by FEMA.

I will continue to push technical design work by creating user stories and interfaces for key components. I will begin to turn this into a component design and UML diagrams as well as the user stories become more developed.

Caleb Nash - continuing my work

Just will be continuing my work for integrating maps into our application. This is a big part of our application and I am making sure to take my time in implementing the right features. This break I will have a lot more freetime to dump into this project, so I am hoping to make big strides between now and the next weekly report, which will most likely be completed right after thanksgiving break.

Robert Schedler -
I plan to continue my conversation with Dr. Rusch. We are also planning on have some interfaces created shortly so I will need to work on those as well. My interfaces I need to make are specifically related to the back end of the app.

Austin Keen - Further XAML Research and UX/UI Focus Group Questions

I plan to continue my research of XAML, like stated above. I will research API display, and printing from a DB. I will also be writing up some questions for the UX/UI focus groups that will be done in the future.

Logan Fladung- Analyze interview results and plan out News feature functionality

Now that we've held a couple successful interviews, we can use the feedback to plan out use cases. Additionally, after discussing the news feature, we'll begin writing out the interfaces and function flow of that section.

Justin Kaufer - User Feedback Model & Map Framework

This next week I will work towards completing the framework for maps so we can create flow charts and user stories to present as part of our technical aspect of the final presentation. This will also set us up to begin implementing features either over winter break, or when we return. I will also work towards completing the user feedback model so once we finally have an initial prototype for a feature we are able to test it out. Once an initial draft of the model is complete I will ask Diane and Nick for criticism on what I should change to get the best research possible.