

Weekly Update

This week we continued to work on database functionality and researched into what we are going to do about the live stream.

Setting up the photo page to display photos from the database was our main focus of this week. The database contains a table that has a foreign key associated with the Users account. The page calls all photos in that table and will display them in a grid view. The main thing I had trouble with was Xamarin doesn't necessarily always do things the same as I've been finding (the version in the documentation sometimes has slightly different syntax). An example is some things I found the image class has the sources built in but in actuality ImageSource is a class. So, I spent most this week learning the differences and applying what I want to make it work. So, once I have the grid view set up this page is done, and the Pi is really our main focus until the live stream is set up. We will most likely be streaming to the audio and video to an https so viewing it in the app will be easy as Xamarin has built in features for viewing that. I've found several ways that we can stream the audio and video in real time such as:

- <https://www.linux-projects.org/uv4l/>
 - This method seems to be complicated, but several people have given in depth tutorials on it and it streams in real-time.
- <https://hmbd.wordpress.com/2016/08/01/raspberry-pi-video-and-audio-recording-and-streaming-guide/>

- This link goes into great detail in the ways you can do this as well as possible problems that other people have encountered while setting them up

Another thing that I worked on this week was making the account accessible on all the pages. This was relatively easy to do. All I had to do was create a new constructor for each page that accepted the Account class that I created. So, all I have to do is pass that parameter to every new page I create since each page is nothing more than a class.

Brittany – Application Development

Trey – Raspberry Pi

Jesse – Research and assistance in other areas as well.