Report for Final Submission

What We Did

During this phase our primary concern was polishing the app for the final release. This involved making the code base more usable for coming developers, performing more thorough testing, and general debugging. We also needed to be certain that our disability support was of high quality as providing support for those suffering from social anxiety is the core purpose of our app.

Testing

By this stage all major functionality had already been achieved the testing we needed to do was for finding subtle bugs and improving the user experience. To do this we employed willing volunteers where possible. In order to get the best idea of usability we tried to keep explanation of the app to a minimum with new testers as it is important for us to know that the app is easy enough to navigate and get started with without explicit instructions; it would be part of how we knew that our UI was well designed.

When testers were not available, and to keep testers' replies focused on UX, we did our own testing as well. This consisted, primarily, of using the app as wrong as possible. Push every button, then push it again, and again in a different order. Tap text fields, swipe everything at various speeds, all in the attempt to find bugs before our testers did.

This quickly let us discover the fact that the breathing exercise could be started repeatedly yet had no way of being stopped other than leaving the view. This also showed us that most of our text boxes were editable and scrollable when we only wanted this for a select few where user input was desired.

Disability Support

At the end of the beta report review forms were given to people with social anxiety disorder. This was done again, and the results can be seen in the latest review forms. These review forms were developed so the group could get an accurate feedback on whether or not the application would assist someone with social anxiety. The key points to take from this survey are: Willingness to use the app again and likelihood to refer to others with social anxiety. What the results have told the group is that, although a low proportion would use the app again, they would recommend it. If one user's life of the application is improved, that can only be seen as a positive. If other's get recommended to use it, and their lives are improved, that would be an even better outcome.

Debugging

Our debugging was centered around making aspects of the user experience and interface behave in the way expected by the user. The reasons for the mismatch were not always clear, however, and this caused the solutions to be non-obvious as well. Perhaps one of the trickier aspects of this was making the date (and time) a journal entry was generated appear in the related journal entry and a significant part of what made it tricky was the combination of obsolete types and incomplete documentation. Another challenge in causing elements to behave in the way expected was to make text box entries be confirmed/completed when the

user selected the enter/return key on the on-screen keyboard. We ended up being unable to do this as the return key functionality varies from device to device.

An interesting challenge in debugging was improving the user experience if the breathing screen. The problem was that the pulse would start pulsing out immediately after pulsing in but having a long pause after pulsing out before coming back in. This was due to the original implementation using a pulse out animation shorter than the time allotted to it, causing a pause, then the animation reversing. The pause was then duplicated at the beginning of the animation instead of the end, resulting in a double-length pause in the middle. Setting the animation to be a full loop was the ultimate solution and part of making this process functional was discovering that the timing function used was non-linear.

There were, however, disparities that merely required knowledge of the XCode user interface to solve. The prime example here is that we had several informational text boxes that were editable and scrollable due to the default type assigned to them. It turned out that the fix for this was hidden in a simple tick box in a drop down menu in XCode.

Lecture's Recommendations

Coming from beta we received detailed feedback from our lecturer and from this we were able to the glean some details regarding the app that were overlooked prior to the beta submission. The dominating theme of this feedback was that the code could be cleaner, better documented, and generally trimmed.  Much of this was due to poor style guideline enforcement during prior stages of the project with scenes named by number instead of by function. For much of this the fix required was relatively minor and in some cases, such as changing file names, the tools that come with an IDE were what prevented problems from being beyond minor, like chasing down every instance of a filename or variable by hand.

Final Comments

The development process of the application would be the easiest part if it was just the group member's own thoughts and processes. Trying to include User requirements into the application made it a lot more difficult. If this tasks was to be done again, the group would have more contact with the end users on a more constant basis.