

## M2 Interactive Usability Test

## Jason Gerbes' Reflections

As part of the Applied Human Computer Interaction paper, my group performed a usability test on M2 Interactive. M2 Interactive is an augmented reality application, constructed by Luminary Promotions in Auckland. Luminary were commissioned by M2 magazine to create the app as a companion to the January 2015 issue of their publication. My role in the project spanned from research to participant testing, document creation and web design.

The app was designed to be "simple enough to not need tutorials, as the fast paced lifestyle of an M2 reader does not have time for that" (A. Rabadan, personal communication, 19 March 2015). We decided to test the application based on Luminary's tutorial-free design intentions. Each of the six study participants were provided the running application and a copy of M2 magazine. We did not give them any guidance on using the application, and encouraged them to figure out how the app worked on their own.

Although the M2 interactive application does not include a help menu or any tutorials, a small instructional guide is located on page 8 of the magazine. We watched as each of the participants flipped immediately past the guide and attempted to scan non-interactive pages. When we asked the participants why they did not read the guide, the most common response was that it looked like an advertisement that they did not wish to read. This was found to be one of the most prevalent failings of the application.

The User Interface of the application was equally unintuitive. The menu screen presents three options 'Explore,' 'M2 Men' and 'M2 Women.' The 'Explore' button starts the augmented reality experience, whereas the other two are simply links to the corresponding M2 website. We found that the participants did not understand the purpose of the 'Explore' button, and most instead tapped 'M2 Men' or 'M2 Women,' depending on their personal gender. The M2 buttons took the participants off the app and into the web browser. It took most participants a matter of time to realise that the website was not the purpose of the app before returning to it and tapping the 'Explore' button. Similarly, some of the augmented reality content also removed the participants from the application.

Almost all participants were unsure when they could/should interact with the augmented reality content. Some content was static and opened a webpage when tapped, and other content could be interacted with (e.g., driving a bulldozer). We found that once participants had accidentally tapped on non-interactive content, they were less interested in attempting to interact with future content. I believe that they were unhappy about being removed from the application and wished to avoid the risk of it happening again.

It appeared that users who took their time with the application, and had a longer experience, encountered less issues. Users that had a higher level of engagement with the app consistently had less recorded issues, though our small sample size may not be able to accurately prove this fact.

The issues we observed during the testing of M2 Interactive are examples of poor usability design. Many of the issues can be rectified with a help screen/tutorial and more meaningful and predictable buttons. A user who does not have a copy of M2 magazine has no way of knowing the purpose of the application, which is unideal. It seems that the app was designed to be only an extension to the magazine but, by not considering the app as an independent product, the usability suffers greatly.

As a Bachelor of Computer and Information Sciences student, human computer interaction is something that I must take into strong consideration in my work. I have learned through the M2 Interactive usability test that usability design must be tested with against the actual users of the system. What may sound technically good to a software engineer may actually suffer poor usability design for its users.

I am studying a double major in Computer Science and Software Development. During my time at AUT University, I have been tasked with several software development projects. As none of my projects have been published outside of the university, I have not needed to orient them to a typical user. After having witnessed the struggle that the participants had with M2 Interactive, I can imagine a similar concern with some of my prior work if they were released to the public. Many of my past software applications had buttons named similarly ambiguously as the 'Explore' button in M2 Interactive. I also did not include user instructions in much of my work. It is possible that users of my applications would have a similar struggle as the participants of this study.

The usability of an interactive device extends beyond the way it looks and its functionality. To practice good usability design, you must be mindful of the type of people that will use the device, and ensure that those people understand how to interact with it.