## iOS Mini-App Project Report

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Device Name: braeburn App Title: My Bucket List

## **Usage:**

This app is a UVA bucket list app which allows users to keep track of bucket list items that they have and haven't completed yet. They can also add custom items to their own personal list.

To "complete" a bucket list item, the user must swipe on the item from left to right. To uncheck or remark as "incomplete" the user must swipe on the item from right to left. Tapping on any bucket list item will display a scene with the item title, description, and if it is complete or not. From that scene, he can edit any of these aspects of the item and save or cancel his changes. The user can also create his own custom items to add to the bucket list by clicking the + icon in the top right-hand corner of the main list scene. This brings up a scene similar to the display/edit, but without any existing information in the form fields. He can then fill out the form (the user must fill in at least a new item name in order for the save button to become clickable) and click the save button which takes the user back to the main scene with the newly added item at the bottom of the list.

## **Lessons Learned:**

This project had a lot larger of a learning curve than the android project did because neither of us have worked with Swift before. We found it was the most helpful to meticulously read the apple tutorials related to this assignment because they laid out the proper way complete most of the tasks we needed to do. It also did a great job at telling us very minor details that if we didn't follow exactly the app would have errors or crash. This was surprising because with android, it was overall much more forgiving with what code actually breaks the app or not. The biggest struggle we faced, and therefore what we learned about the most, was figuring out the proper syntax for Swift 3. It was shocking to us how much apple changed Swift 2 when releasing Swift 3 and there was either very little updated information on the updated syntax or it was so buried and hard to find. This made it so that we really had to do a lot of research and trial and error when coding certain parts of the app. It was definitely difficult and a lot of the changes would be so minor but Xcode would not know how to fix it itself or it would fix it with other incorrect code. Now I would say we have a pretty good understanding of the main ways in which the language changed between Swift 2 and Swift 3. The only other peculiar thing was that 99% of the apple tutorials were the correct Swift 3 code, but every so often it would not be and that just complicated things if the company who wrote the language didn't even have an updated version.

Besides syntax, we also learned a lot from trying to connect the visual designs of our storyboard to the code itself. We did a lot more programmatic stuff when working with Android Studio. So we spent a lot of time learning how to use the Xcode UI to connect view controllers to scenes and link outlets to our code. Once we got the hang of it though it is really impressive how easy it is to set up apps overall using Xcode.