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Mobile App Development
Project 1 - Milestone 4

The first project was an excellent learning opportunity for me because I experimented with techniques that we hadn't yet covered in class. Between the first milestone and now I scrapped my project multiple times while I figured out what I would need in order to implement all of the features I wanted in my app. Some of the features I discovered while building my app are the navigation controller, table views, and NSUserDefaults for data persistence.

I knew from the beginning that I would need a multi-view application, and I originally started building an app with a tab bar navigation. After learning in class that tab bar apps weren't meant to share data between views, I re-constructed my app using a navigation controller. I discovered that the navigation controller was fairly easy to implement, and it worked well for navigation between my table view cells, where I stored information about the user's rock climbing history.

The table view controller proved to be one of the most challenging aspects of my app. I wanted each cell in the table view to represent a different rock climbing session (labeled with the date), where the user could click on a cell in the table to get the rock climbing history for that day. I was able to get the table view working as I intended by using arrays to store the user's climbing history, however I had to implement an individual array for every grade of climb (V1 - V10). When the user clicks on a given row, the information for that index in every array is displayed on the next screen. This method worked, but it got very complicated when I implemented the ability to delete rows from the table view, and when I made the data persistent across app launches. One thing that I would do differently next time is to implement a collection

view instead of a table view. The table view only allowed me to display the date of the climbing session on each cell, and I would have liked to show more information, such as the location or total number of climbs.

The final technique that I used in my app, which we hadn't yet covered in class, was NSUserDefaults. I originally tried to make my app's data persistent using a property list, but I had trouble finding information about storing arrays. After doing some research I found that user defaults would probably be the easiest method for storing my arrays. I found user defaults to be fairly easy to implement, and it seems like a tool that would be very useful in my future app development .