REFLECTION

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The original idea for this app came to me when I wanted to track my grades to organize assignment in timely fashion and calculate grades. I did spreadsheets but that required for me to turn on the computer – phone seemed the perfect place to do it – but a task-based app didn’t do any calculations.

I had a little experience in iOS development through the coursework using Objective-C. My original plan was to use Objective-C but after learning swift and comparing the similarities between the two languages Swift seemed like the better choice and it looked exciting. Reflecting back I’m glad that I ended up writing the almost the entire app in swift. There were a few tie-ins to the core data framework, which is still handled in objective-C. As far as languages go I learned swift really fast because of its similarity to python and its familiarity of style from objective-C.

I learned a lot by exploring the new language but where I really expanded my knowledge, by doing a complete project from start to finish, were the design aspects of the code. Some design patterns that I hadn’t understood completely in the past, and then as I dove deeper into the design of what I had visualized for this application, it all started to fit together. I understand why certain design patterns are implemented when a situation calls for it. I implemented extensions into this application, which is an improved feature for swift, previously extension were called categories in Objective-C. They became such a crucial part of the application as it acted like the middle layer between the model and the controller.

A huge advantage of using Core Data, implemented with the use of extension, is that you can have the extension of the class do all of the heavy lifting by having class methods and implementation with computed properties in the extension. The model class, the entity, has all of the properties and the extension acts like the collaborator, and when the model needs to be updated you can easily make changes to the model. The change is made in core data then core data will overwrite the model class with the new changes and your model extension remains unaffected.

Working on a project where I had to cover all aspects of design was a very satisfying experience. I handled the three major area of software design user interface, database and the logic. All three layers were demanding in there own way. Core Data was demanding because this was only for the second time that I had used core data and this time around it was a lot more involved. But at the same time I do see the advantage of core data with expandability – you can grow your database really fast and efficiently. The user interface was a bit challenging because of my own lack of artistic ability, what I think I did well was the usability of the layout and response within UI, but making it look good to the user eyes took a bit of an effort.

If I had to do it over again I would try to stay focused on the requirements, because while doing this project sometimes I tended to stay within one certain focus for a lot longer than needed instead of keeping the overall project in the macro view. I had a very enjoyable experience working on this project and I plan to add features and improve it in the near future.