S. Matthew English

U#: 2013950101

Assignment II Report

Application Summary:

'Chessmen of Iapetus' is a two player Chess platform. Players interact with the pieces by touching them and then moving them from their original square to the square which the player desires to relocate the fore mentioned piece.

Motivation:

I am an avid Chess enthusiast so when we were presented with this assignment I knew at once what I wanted to create, my own Chess platform. Initially my ambition for this project was to implement one of the open source Chess engines such as Houdini, or Stockfish in an iOS applicatyion of my own creation, however this task proved to be beyond the scope of my abilities at the current juncture, incidentally this was the first time I have programmed using xcode or objective-c (not including our laboratory exercises). This goal was further stymied by the fact that I was working on this project by myself. In retrospect I now see this as a mistake since I forwent a valuable opportunity to practice the dynamics of working in conjunction with others to develop an application, an important skill.

As our first project was created using the Android environment I wanted to push myself on assignment II to gain some expertise developing for iOS and xcode. In general I see that there is a nontrivial learning curve associated with transferring skills in Java and the Android platform into Objective-C and xcode. Now having taken this step and spent a considerable amount of time and effort cultivating the knowledge of this new language and environment I feel empowered to go forth and develop much more intricate solution for Apple devices.

Background Research:

I have multiple Chess application on my phone that I use frequently. The best one is Chess Masters it has quite a beautiful UI and many valuable Grandmaster games to learn from. Some problems with this game are that it lacks many of the games from my two favorite players Bobby Fischer and Mikhail Tal, which I find quite interesting and instructive. Additionally this app is not free, this is a serious shortcoming. This app could be improved by making it free and including a wider repository of past Grandmaster games, also the addition of commentary about strategy, and breakpoints showing possible variations would be very interesting. Additionally, Chess Masters provides some great chess puzzles.

The worst Chess application, in the history of the universe (unconfirmed but highly likely) is called [Chess Free](), the settings consist of impossibly hard and ridiculously foolish which is extremely frustrating to myself and I would assume to most other users as well. Moreover, it is absolutely littered with advertisements for useless things that I don't need or care about, I find this highly repugnant. One positive thing about this app is that it is free, it is also quite popular, I have seen people playing this on phones and tablets on the metro and around campus. Chess Free provides no puzzles.

[Mate Puzzles Free]() is a game that purportedly provides interesting chess puzzles, I find that the majority are much too easy and therefore uninteresting, they also frequently repeat themselves.

I think it's obvious that if an app could combine the great features of Chess Masters, and even improve upon them, whist making it free of charge, like Chess Free, and maintaining a large collection of challenging and interesting puzzles, unlike Mate Puzzles Free, it would be very popular.

In developing my own Chess application I wanted to gain a more nuanced conception of what necessarily goes into creating such a Chess platform, since I feel that creating a Chess platform and ultimately creating a Chess engine would teach me very much about sound chess strategy and help improve my game against human and mechanical opponents.

I wanted to create something that is free of charge, features a highly attractive layout and an intuitive design, supported by a Chess engine with an incrementally more sophisticated range of difficulty levels. I see the application I have created as the critical first step in this process.
One of my primary interests in Computer Science is artificial intelligence, Chess engines are the most simple and actionable form of artificial intelligence, is also an important further source of inspiration.

Design:

The design process required searching the web for appropriate images, then cutting them out and positioning them on the board. I wanted to choose attractive pieces.
I had to choose the layout for the board and decide how to create it, a formidable challenge since I had never previously attempted something of that nature. I also had to create a layout capable of moving between multiple pages.

The movement of the chess pieces required solving the challenge of how to respond to user interaction.

Features:

I had to devise a way to generate the chess board and the pieces on the board, ensure that pieces could be moved easily, snap automatically to the center of the square to which they were moved and that they could take other pieces seamlessly.

Contribution:

As a solo project I completed all the work on this assignment myself.