This final module was the most I have learned about programming in a short period of time. I picked out a final project that I thought was ambitiously above my programming capabilities at the moment to have some challenge, but I already have some ideas on how to approach building the project from scratch. It is yet the most complicated program I have written from scratch so far without one of those guided tutorials online that helps you build generic projects. I have learned so much in terms of organizing and designing the implementation of a project, debugging multiple files simultaneously, and the discipline of focusing on one implementation at a time.

Week one of the final project was I think the most difficult part of the process. Starting something from scratch can be very challenging without enough knowledge on how to start a project. So, I spent the whole week researching, reading documentations, watching tutorials, and gathering all the materials I would be needing for my final project. Only until I got comfortable and got a whiff on how to approach the project I chose, I then start getting my hands dirty and write some code. I started out by implementing the driver class of my project, the Board.java, which will be the main engine of the board game. Since I decided to follow the MVC pattern, this Board class will be the model of the program.

Week two was a little rough. I wasn’t happy with the implementation of the game so far because it’s too buggy and “dirty” with “.println’s” all over the place, so I decided to go back to square one. It wasn’t a wise decision especially with a time constrained project of this scale without much knowledge, but there was no way for me to keep on going without messing everything up even further. I reimplemented the Board.java differently from before with some salvaged code from the old version. This time, I built a test class along with it to see if the implementation is in the right track, since Its hard to know at this early stage of the process if its working. Some sleep deprived days later, I successfully reimplemented the engine of the game and laid out a basic GUI.

Week three was the most progress I have made in the project. I finished implementing some other classes that comes along with the Board class such as Move, Piece and Player classes to complete the bare bones of the engine. I am starting to get the hang of my project and picking up some speed with complete control of what is going on. There were still few bugs in the code, mainly “NullPointerExceptions” and “IndexOutOfBounds” because of the problem with referencing a variable or class that I thought was a complete a copy but really was just a shallow copy, that once dereferenced or “deleted”, it will mess all the copies I have made of the variable or class.

The final week was relatively easy because all I have to do is clean up my code and improve upon the GUI and some other features of the game. I also fixed some small issues that I left lying around a couple days ago and handled few possible exceptions. Although I think the program isn’t where I want it to at the moment, I am really happy with what I have achieved so far and will definitely put this in my resume, which is my very goal at the beginning.

There was a lot of AHA! moments while build my final project, but there was even more frustration from buggy implementations. Regardless, I enjoyed and whole process and this class in general and am definitely more knowledgeable of Object-oriented programming than I first wrote my Java program in module one. All the modules from creating a simple method, to creating our very own custom classes, and to the advanced topics such as exceptions handling and creating a GUI prepared me well for the final project of the course I chose. It was a bit over the top to plan to create something this complex while still learning the basics of Java programming, but somehow, I managed to get it through and was extremely happy with the results I got. Definitely worth the sleepless nights.

As for my reflection about the entire class, it was really fun having those short exercises where we manipulate the pixels in every picture. That part of the course widened my perspective about how things work under the hood while examining the smallest grain of an image. I always wonder how Adobe Photoshop do it as well as other photo editing applications to have such precise editing capabilities at your fingertips. Furthermore, I like the idea of having a simulated class room participation or a virtual group reading where we comment and annotate an e-text book and share our ideas with our group. It was really helpful in an environment where we don’t see each other at all. Last but definitely not the least, the timed Technical Interview Practice and explain videos were my favorite part of this course as it prepares us to the real thing, which I think is the most important part. In conclusion, I like the class very much but I just wish we got more time to get to the audio part of the bookClasses.