**William Schaefer November 15, 2020**

**C Programming Language Professor Merlo**

**Project 2 Analysis**

* I spent a cumulative total of roughly 30 hours working on this project.
* I received help from my uncle on this project.
* There were several difficult parts of this project for me. The first setback I experienced was when I was having difficulty creating the linked list. Also, I was uncertain about what to do when I noticed there were global variables in one of my source code files. Additionally, another predicament arose when I was coding for the Check Digit on the ISBN. I kept getting a segmentation fault when I tried to run the program.
* I decided to sort books containing the same title by author’s last name to support the extra credit command.
* My project has five source code modules. I have the module containing the main method, the module that reads in data, the module containing code for the linked list of books, the module containing code for an additional linked list I created to store rejected lines and my module containing textbook code. I chose to create my modules this way because my main method was becoming lengthy, and I wanted to better organize my code.
* I think this project is worthy of extra credit because I attempted both the –r command and the –a command on the PDF, and they are both working. When I ran my program without the extra credit commands, I discovered they were coincidentally in alphabetical order by title and by author. I tested the extra credit commands by creating a series of new text files, copying and pasting the original data into them and making minor changes to the files, all to make sure the program is working. When I was working on the extra credit, I learned how to use command line parameters from the following website: <http://farside.ph.utexas.edu/teaching/329/lectures/node23.html>