Matthew Hileman & Sydney Fowler

CS 3030.001

Final Project Report

15 December 2019

**PROJECT TITLE**

The purpose of this project was to create a command-line tool of various functions used to work with Excel files. These functions include:

* + - * Importing / exporting Excel files from various other file types (e.g. csv, txt, etc.)
      * Data validation and cleanup features for common cleanup functions (phone numbers, email addresses, state codes, zip codes, dates, web addresses, character limits, etc.)
      * Compressing files
      * Sending a copy of a file to a list of email addresses
      * Removing duplicate rows based on a set of criteria
      * Data Analysis: Sum, Count, Max, Min, Unique Values, Average, etc.

To run the tool:

* + - * Open your command line
      * Navigate to project folder
      * Run “python3 main.py”

This will bring up the main menu, allowing you to choose from the various functionalities the tool provides. Once you have selected a function, you will provide the path of your Excel file, and the tool will perform the chosen function. Once it finishes, it will return to the main menu, where you can either exit the tool or choose another function.

There was a main menu plus 7 features to develop for this project. The work was divided by feature as follows:

| Matthew Hileman | Sydney Fowler |
| --- | --- |
| duplicate\_removal.py | analysis.py |
| file\_in.py | cleanup.py |
| file\_out.py | compress.py |
| main.py | share.py |

The remaining files were created as supporting files for the main features of the project and were developed by the team member in charge of the corresponding main feature:

* + - custom\_dictionaries.py
    - custom\_regular\_expressions.py
    - main\_info.py
    - menus.py
    - quit.py
    - exel\_funcs.py
    - quit.py

The code for this project can be accessed with the following GitHub link: <https://github.com/sydneyfowler/CS3030>