

Arizona State University

Grade Analytics Software

CSE 360 Fall 2019 Monday

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Introduction	2
Overview of Program	2
External Requirements	3
Getting Started	4
Example of Functionalities	5
Example of errors	9
Ending the Program	9

Introduction

This document is created to provide the user with a manual for navigating the program. In the overview section, is a detailed description of what the program does and what the purpose of the program is. The External Requirement section provides a description of the tools and software that are required for the program to run. The Getting Started section provides screenshots of the various pages the program has. Example of Functionalities provides a description of the different functionalities the program has and how to use them. In the Example of Error's section, we have documented the different errors a user can run into, and how to troubleshoot the errors, there is also a description of the error messages and what they mean as well as how to interpret them.

Overview of Program

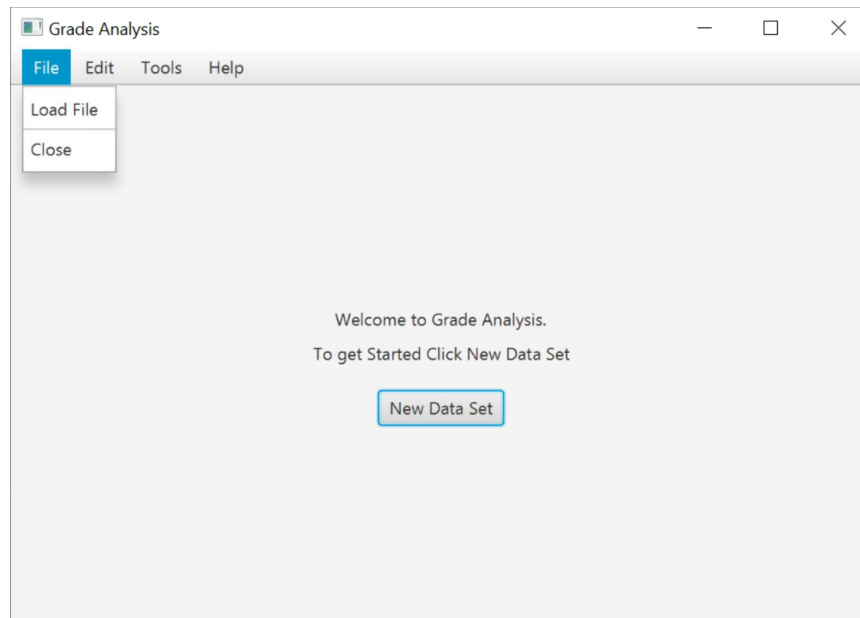
The program's purpose is to provide a tool for instructors and graders to analyze the class grade. The program also provides a horizontal bar graph for grades versus percentage in a 10% interval. In addition to the horizontal bar graph, there is also a distribution graph that describes the distribution of the grades. The program also provides an analysis of the grade data set such as the number of entries, mean, high, low, median, and mode. There is also an opportunity to get a report for printing. For navigation purposes, the user can either use the menu bar to navigate to different sections of the program or use the user-friendly process with the buttons provided.

External Requirements

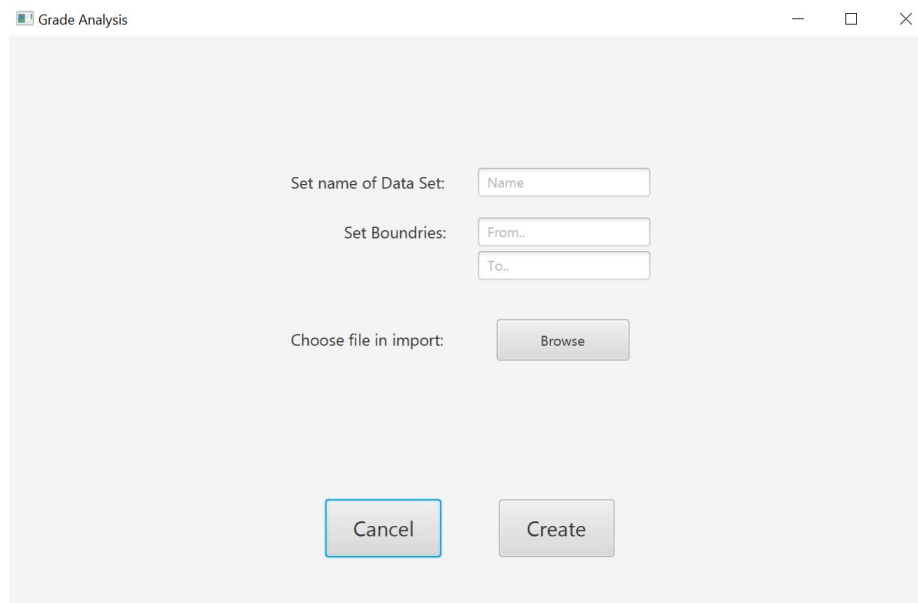
The requirements for the program to run is to have java 11 and higher installed on your computer. Other requirements are to have a keyboard, mouse, and monitor available in order to navigate the program. The user can either input the data manually through the program or browse for a .txt or .csv (comma separated values), keep in mind that the data in the .txt also has to be comma-separated.

Getting Started

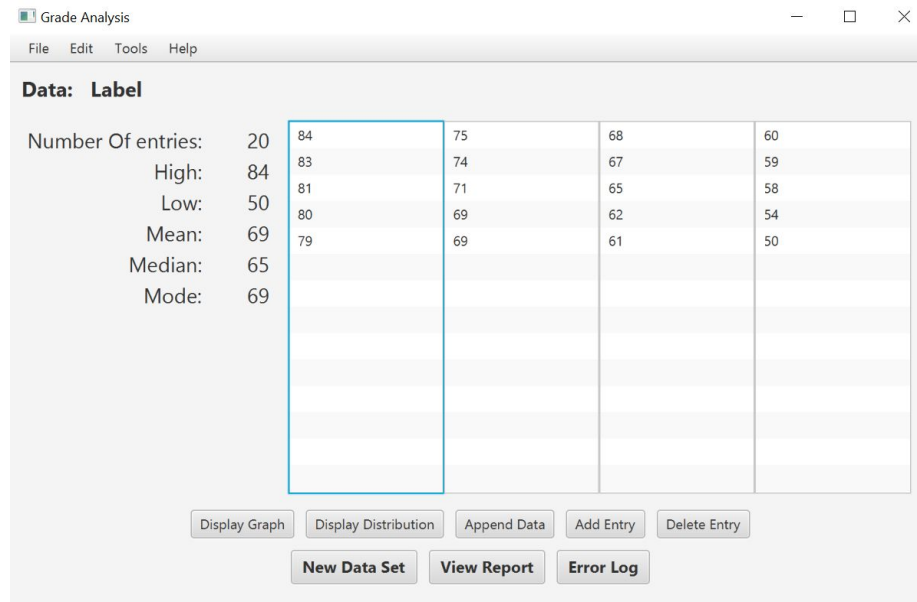
Once the program has started, click on “New Data Set” to get started.



Once “New Data Set” has been clicked a new page opens in which you will name your analysis and set boundaries for the data set.



When a Data Set has been created a new page with the data analysis will be shown

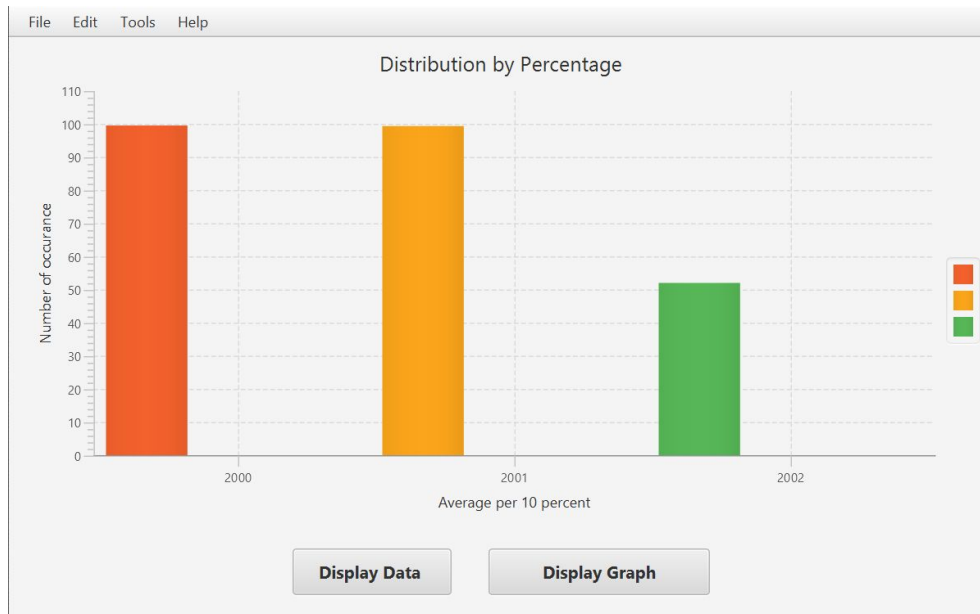


Example of Functionalities

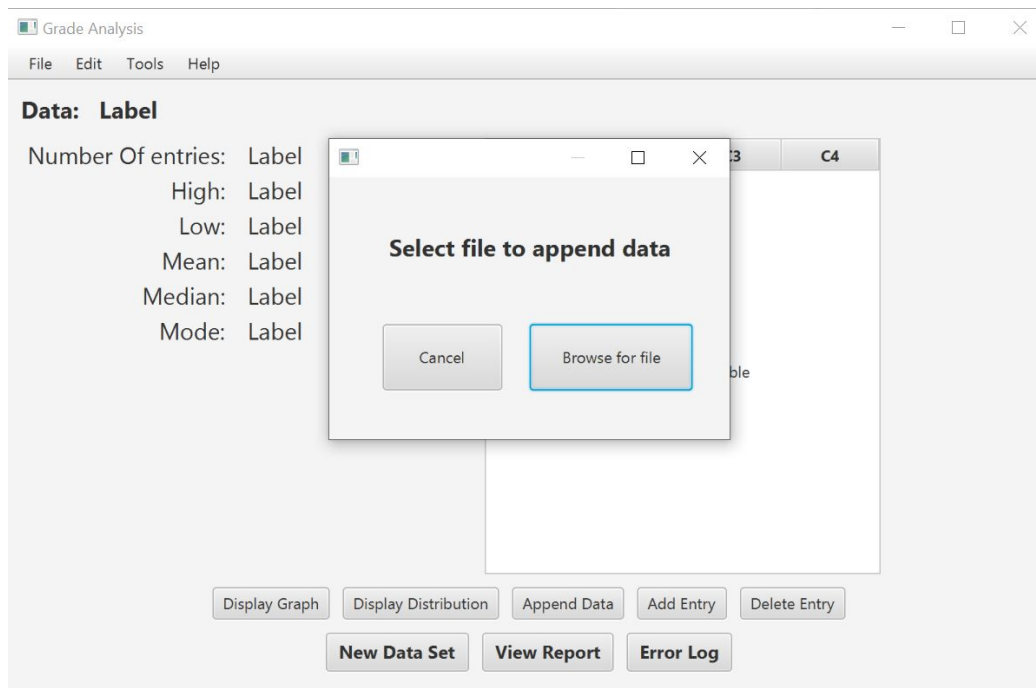
The "Display Graph" takes you to a horizontal bar graph for the grade data



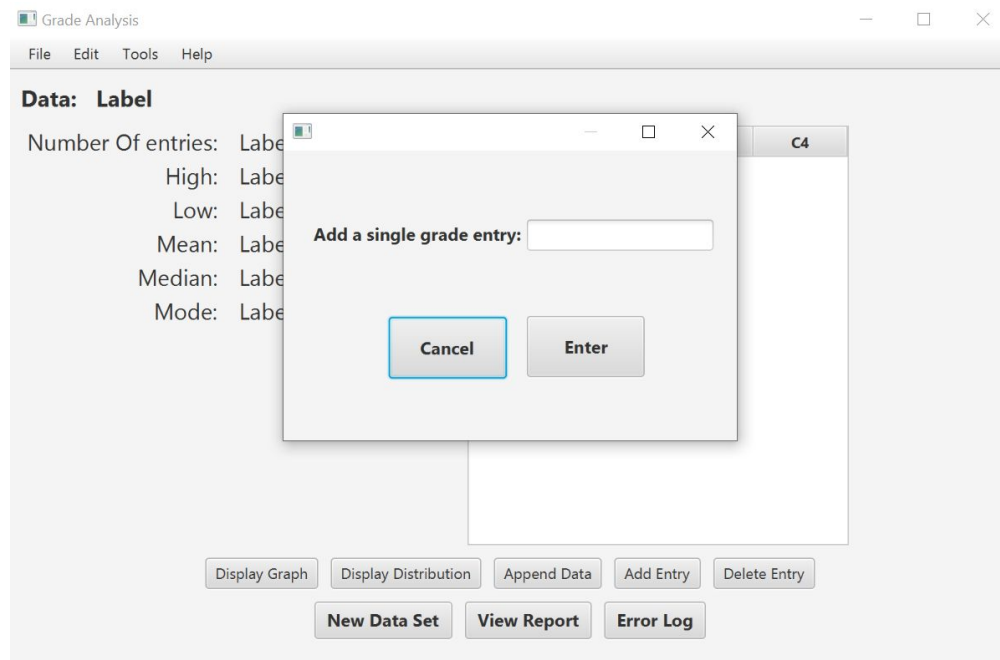
The “Display Distribution” takes you to a distribution graph.



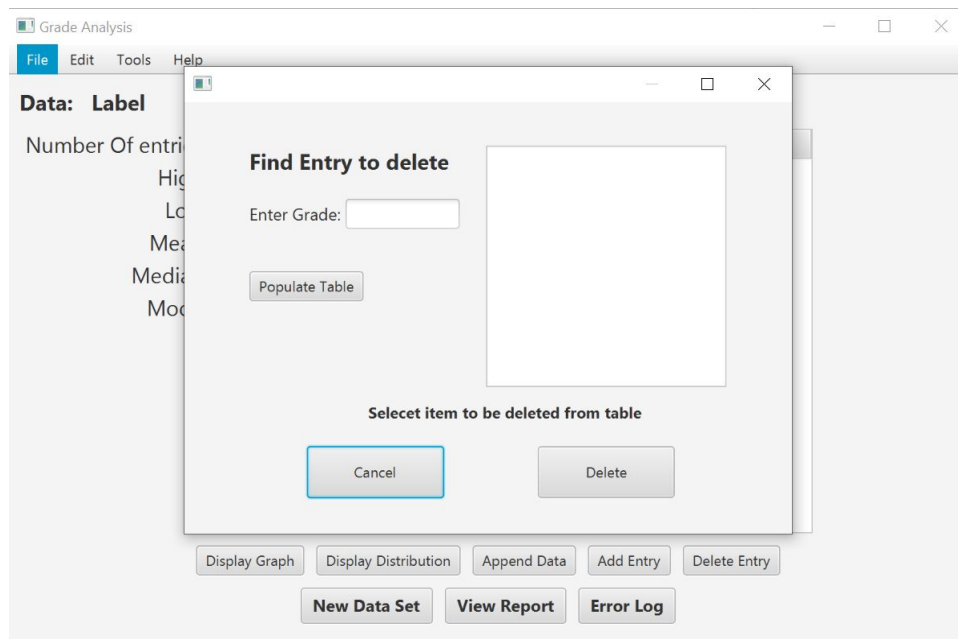
When a user clicks on the append data button a dialog box appears so that the user can choose a file to import new data to be appended to previous data.



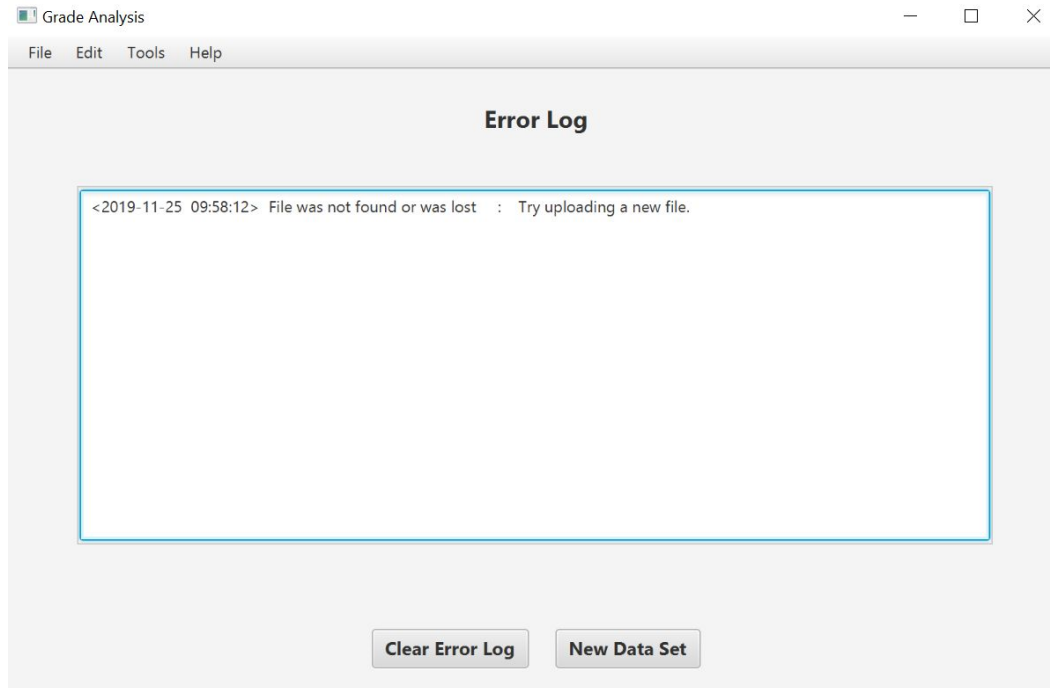
The user can also click on the “Add Entry” button to manually enter a grade to be added to the data set using the dialog box that appears once clicked.



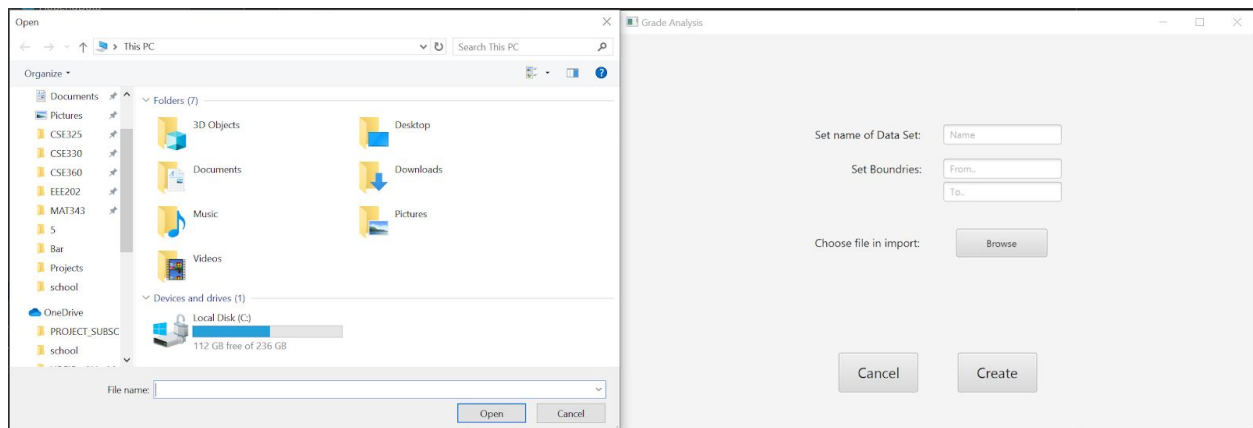
The user can also click on the “Delete Entry” button to manually search for a grade and select the grade that needs to be deleted. Again in a dialog box that appears once the user clicks “Delete Entry”.



The Error Log displays all the error messages that have been created for the user. From the “Error Log” page a user can either create a new Data Set or export Error log messages to a .txt file.



From the create new data set page there is an option to browse for a file to be used for creating the data set.



Example of errors

Error Conditions	Error Messages
No File found	"File was not found or was lost"
When a file is entered that isn't a .txt or .csv	"File type not supported, enter a .txt or .csv file"
Input data is out of bounds	"The data input is out of bounds."
Invalid Data input, such as letters or symbols	"Input Data is invalid, please enter an integer."
Trying to delete a nonexistent piece of data	"Data is not found, please try again."

Ending the Program

The program can be terminated by exiting with the x button on the top right of the windows. Entering a new data set can also end the current session, as when a new data set is entered, all functionality from the last data set will be overwritten by the new input. From the menu bar under "File" there is also an option to end the program.