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2/24/24

CS210

Project 3  
  
  
This C++ program is designed to read data from a file, perform operations on that data, and provide options to interact with it through a menu-driven interface. Here's a breakdown of its design and functionality:

Data Handling Class (DataHandler):

Manages the data read from the file, which consists of items and their frequencies stored in a map<string, int>.

Provides methods to:

Read data from a file (readDataFromFile).

Find the frequency of a specific item (findFrequency).

Print the list of items with their frequencies (printItemList).

Print a histogram of item frequencies (printHistogram).

Save data to a file (saveDataToFile).

Menu Options:

The displayMenu function presents a menu to the user with four options:

Find the frequency of a specific word.

Print the list of items with their frequencies.

Print a histogram of item frequencies.

Save data to 'frequency.dat' and exit.

Input Validation:

The getValidIntegerInput function ensures that the user inputs a valid integer choice between 1 and 4.

Main Function:

The main function orchestrates the flow of the program:

It initializes a DataHandler object and reads data from the file.

Enters a loop to display the menu, get user input, and execute the corresponding operation until the user chooses to exit.

Depending on the user's choice, it calls the appropriate method of the DataHandler object.

Exits the program when the user chooses to save data and exit.  
  
  
A computer screen with a black background

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A screenshot of a computer

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