Deje Perkins

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Project Three Submission

Programming Languages

The project code implements a Word Manager application in C++. The design of the code follows an object-oriented approach, utilizing a class called **WordManager** to manage and process words. The class encapsulates the functionality related to word management, including adding words, loading words from a file, exporting word data to a file, retrieving word counts, and printing word information. The design promotes modularity and reusability by encapsulating related functions and data within the class. The functionality of the Word Manager application is as follows: Upon execution, the program creates an instance of the **WordManager** class and initializes it. It then loads words from an input file using the **loadFromFile** function, which reads each word from the file and adds it to the word manager using the **addWordToManager** function. The program then exports the word data to an output file using the **exportToFile** function, which writes each word and its count to the file. After the initial setup, the program enters a main menu loop. The **runMainMenu** function displays a menu to the user, offering various options. The user can choose to get the frequency of a specific word by entering option 1, which prompts them to input a word. The program then uses the **getCountOfWord** function to retrieve and display the count of the given word. Option 2 allows the user to get the word count of all words in the word manager. The **printAllWords** function is called with **addStyle** set to **false**, which prints each word followed by its count.Option 3 provides a variation of option 2,

where the word count is printed with asterisks for visual style. The **printAllWords** function is called with **addStyle** set to **true**, and each word's count is represented by the corresponding number of asterisks. Finally, option 4 allows the user to exit the program, terminating the main menu loop. Overall, the design and functionality of the code provide a user-friendly Word Manager application that allows users to interact with word data, retrieve word frequencies, and visualize word counts.