**Documentation for Corner Grocer Item-Tracking Program**

The Corner Grocer Item-Tracking Program is a C++ program that looks at food store items bought records. This tool helps the Corner Grocer figure out how often people buy certain items so they can better arrange their store so customers have a better experience.

**Design and Functionality**

The program utilizes a class-based design with the following key components:

**Class ItemTracker**

This class contains the functions for keeping track of how often a thing appears. It has a secret member called itemFrequency that stores the names of items and how many times they have been bought.

There are public methods for loading data from an input file, making a copy of the data, getting the item frequency, printing all frequencies, and making a graph of the item frequencies.

**Menu System**

The program features a simple text-based menu allowing users to:

Retrieve the frequency of a specific item.

Print the frequency of all items.

Print item frequencies as a histogram.

Exit the program.

**File Handling**

The program reads from an input file named CS210\_Project\_Three\_Input\_File.txt and creates a backup file named frequency.dat. This ensures data persistence and easy access for future analysis.

**Code Example**

Below is a snippet of the main functionality of the program, showcasing the frequency retrieval method:

int getItemFrequency(const string& item) {

return itemFrequency[item]; // Return the frequency of the specified item

}

**Screenshots**

Below are screenshots of the program in action:

**Screenshot 1**: Program Menu

A screen shot of a computer

Description automatically generated

**Screenshot 2**: Frequency of Specific Item

A screen shot of a computer

Description automatically generated

**Screenshot 3**: Histogram of Item Frequencies

A screenshot of a computer program

Description automatically generated

The Corner Grocer Item-Tracking Program does a good job of meeting the client's needs. Because it is well-designed and works well, it gives retailers useful information about how customers buy things, which helps them decide where to put things in the store.

**References**

Southern New Hampshire University. (n.d.). *CS Visual Studio export tutorial*. Retrieved October 16, 2024, from <https://learn.snhu.edu/content/enforced/1698451-CS-210-13466.202481-1/course_documents/CS%20Visual%20Studio%20Export%20Tutorial.pdf?isCourseFile=true&ou=1698451>