

Taking the contents of a vector and placing them in a text file

Asked 11 years ago Modified 11 years ago Viewed 171 times



I'm working on an assignment for my computer science class, its a first year course as I'm a beginner and I am having trouble with a certain part.

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A quick explanation of what my assignment does is: It takes information from a text file and puts it in a vector while the program is running, and you can add names to it or remove names from it, and once you are done you need it to save the information, which means you have to take the information back out of the vector and replace it into the text file.



I haven't learned of a way to take information out of a vector and back into a text-file, I saw that a classmate of mine posted on here a few times but he was pretty much dismissed so he told me to ask the question for myself.

We were given a bit of the coding for our program and honestly I have got no clue on how to make the function take the information back out of the vector and into the text file updated.

What ive included:

```
#include <iostream>
#include <string>
#include <vector>
#include <fstream>
```

here is the function in which it would save into, any help would be greatly appreciated.

```
void quit_program(string strFileName, vector<string>&vecThisStudent)
{
    //write the body of the function
    //Hint: this is the function you should write the vector's content back to the
    file.

    cout<<"Thanks for using the program. Program terminated"<<endl;
}
```

As you can see we were even given the hint on what the function was supposed to do, but anyone I have spoken to from the class hasnt had a clue on how to get it done (or they dont like me enough to tell me)

If the entire program is needed, I can post it. It looks almost identical to my classmate who posted earlier, but that is just because we were given the majority of the code and we just had to complete a few different things, and I've just been stuck here for the last 10 hours or so.

My read_file

```
int read_file(string strFileName, vector<string>&vecThisStudent, fstream
&inFile)
{
    string strFirstName
        string strLastName;

    inFile.open(strFileName.c_str(), ios::in | ios::out | ios::app);

    while (inFile >> strFirstName >> strLastName)
    {
        vecThisStudent.push_back(strFirstName + " " + strLastName);
    }

    return 0;
}
```

c++

vector

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edited Dec 2, 2013 at 8:06

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asked Dec 2, 2013 at 7:52



Steve Jackson

3 ● 3

- 1 Hint #2: You need to iterate over all the elements of the `vector` to output them. Outputting the elements to a file looks very similar to outputting all the elements to the display via `cout`.

– Joe Z Dec 2, 2013 at 7:54

@JoeZ What does it mean to iterate over all the elements? – Steve Jackson Dec 2, 2013 at 7:58

@SteveJackson If you were given this assignment, I'd assume you'd have already covered this in class. Do you know what `std::vector::begin()` does?

– Angew is no longer proud of SO Dec 2, 2013 at 8:01

Show the code where you read the data. Writing is is pretty much the same thing but you're writing instead of reading. – Retired Ninja Dec 2, 2013 at 8:03

- 1 From the question and your comments I'm afraid I'm going to have to suggest you go talk to your professor. Clearly you have been ill-prepared for this assignment. Good luck!

– Lightness Races in Orbit Dec 2, 2013 at 8:06



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Split the problem into sub-problems. Keep splitting to a smaller pieces till each piece is manageable.

In your case sub-problems I would be comfortable working with are "C++ performing action at program exit", "C++ container serialize", "C++ file IO".

The first one will give you [C: Doing something when the program exits](#), the second - [ostream iterator usage in c++](#), and finally the third one - [Writing in file C++](#).

As a final step you just need to combine all three back together.

And Steve, do not blame your professor or your destiny. Being a good programmer is as hard as being a good surgeon, as hard and as rewarding, but requires quite a bit of dedication to grow from mediocrity to a sharp Swiss Army Knife. At your first job interview you'll see how much worse questions can be than ones asked in these assignments.

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edited May 23, 2017 at 10:25



Community Bot

1 • 1

answered Dec 2, 2013 at 8:04



bobah

18.9k • 2 • 41 • 74



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Seeing your lack of C++ knowledge, I would REALLY suggest watching some tutorials about C++. If you don't know what a for-loop is/how to use it, you will have MAJOR problems with future assignments.

[Here are some great series of tutorial.](#)

There's no such thing are taking the contents of a file (or vector) and placing it automatically into a vector (or file).

But to read or write data, take a look at [this page](#).

The general idea of reading a file is:

1. Iterate though the file and read each input one by one.
2. Place that input into a vector

The general idea of outputting data to a file is:

1. Iterate though the data (ex: every element of that vector)
2. Output that data (ex: that element).

By iterating, I mean running through the data (usually by a for-loop):

```
int write_file(string strFileName, vector<string>&vecThisStudent, fstream
&outFile)
{
    outFile.open(strFileName.c_str(), ios::in | ios::out | ios::app);

    for (int i = 0 ; i < vecThisStudent.size() ; i++) {
        //Use this line to output to console
        cout << vecThisStudent[i] << " \n";

        //Use this line to output to file
        outFile << vecThisStudent[i] << "\n";
    }
}
```

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edited Dec 2, 2013 at 8:26

answered Dec 2, 2013 at 8:00

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Lord Zsolt

6,557 ● 9 ● 48 ● 77

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I understand the reading and writing part, and I've done that part of my assignment, but I have no clue in the world on how to iterate the data and then output the data – [Steve Jackson](#)

Dec 2, 2013 at 8:02

Take a look at this video to understand what a for-loop is: youtube.com/watch?feature=player_embedded&v=sBO8yvyvBI0 – [Lord Zsolt](#)

Dec 2, 2013 at 8:04

nevermind about defining outfile misread the function thought it was the quit program function not readfile – [Steve Jackson](#)

Dec 2, 2013 at 8:24 ✎

In the function header, just like in read_file. Then you call that method the same way you did with read_file. – [Lord Zsolt](#)

Dec 2, 2013 at 8:27

I thought you were working with the quit_program function because thats where the function takes the information from the vector to the file, and the read_file function reads what was on the file originally – [Steve Jackson](#)

Dec 2, 2013 at 8:28



Use ofstream <http://www.cplusplus.com/reference/fstream/ofstream/>

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Open File..



Write data using <<

(<http://www.cplusplus.com/reference/ostream/ostream/operator%3C%3C/>)



Close file..



I am not sure what exactly you stuck with..

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answered Dec 2, 2013 at 8:08

In my program I have 6 functions, including int main, I have read_file, display_all, add_name, delete_name, quit_program. I have to take the data from the text file, put it into a vector and then either add names or delete names, and then at the end put the information that is now in my vector including the new names into the text file – [Steve Jackson](#) Dec 2, 2013 at 8:12 ✎

He's stuck with for-loops (iterating though a vector), which is pretty much a building block of every program, so he's either a) a lazy student or b) he has a shit professor who expects him to know programming already. – [Lord Zsolt](#) Dec 2, 2013 at 8:13

@LordZsolt I'd like to say its a bit of both, I've had ADHD since I was about 5 years old, the prof assumed everyone understood the basics even tho this is a first year class and did arrays, vectors, loops, if statements in one class so some of the knowledge went in one ear and out the other – [Steve Jackson](#) Dec 2, 2013 at 8:15

@SteveJackson yeah I hate those profs who expect you to know everything. I've updated my code, take a look at it. Though if you will have to learn programming (if it's not just a 1 semester class), you should watch the tutorial series I've posted in my answer, it starts from the very basics and explains everything really well. – [Lord Zsolt](#) Dec 2, 2013 at 8:20
