Survey Creator,

Project subsection #

By

Blade Arnold

Baa215

***“On my honor, as a Mississippi State University student, I have neither***

***given nor received unauthorized assistance on this academic work.”***

*Student Signature\_\_\_\_\_\_Blade Arnold\_\_\_\_\_\_*

CSE1002 Introduction to Computer Science and Software Engineering (Intro to CSE)

Class Section 01   
Litany Lineberry   
11/18/2020

#### Write name of your Group member serially and list the programming language of knowledge or experience of each of the group members.

#### Full Name: Blade Arnold

#### Knowledgeable in Programming language: C++

#### Write manager of your group: Blade Arnold

#### Write the Problem Specification, Understanding of the Problem and Formulation of Model for the project.

#### Project’s Problem Specification:

Give a clear definition of the job to be done and the requirements that must be fulfilled. You may use any parts of the project assignment that you feel are needed, and you may wish to explain some points further.

**This program will allow the user to create a simple survey, enter the question, collect data, and analyze the data.**

#### Understand the problem and Formulate the Model

In this section your job is to explain your understanding of the problem that you described in the above section. Then formulate a plan as a model to tackle the problem based on your understanding.

**This program will take in survey information and sort it into the desired properties that the user wants. First, I will create the layout of the program. I will create lines of code that form the question box and the answer box. Then, I will write in the code for the program. I will fill in the lines of code that fit and are needed to make the program function properly. For example, order the answers that are given. Next, I will test the program and will fix any problems that might occur. Last, I will evaluate the solution of the program to make sure it is the outcome I wanted.**

#### Program Design and Write the program (Development):

Always remember that designing your program before you try to implement it will help you produce a good product. Therefore, the program design is an important step. The exact method of design you will need to use cannot be generalized for all programs, so we will provide design issues with each assignment.

Put either flowchart, Pseudocode, workflow diagram (conceptual sketch that show your design idea) etc.

Put the correct working code or program that you wrote for the project in a separate file along with this report. Also append content of the program file after feedback section in this report.

#### Testing:

Testing is a planned process. You should be thinking about how you are going to test your program before you even start writing any code. You need to think about where errors might occur, and how you can check to make sure that they don't.

This section should explain those ideas as they apply to your program. You need to explain what things you tested and, how you chose your test cases, and how you decided what the expected outputs should be.

For my test case I used cout on almost every if statement. Most of the test cases would confirm that the program went through all the steps and made sure everything executed properly. I tested if my getlines would work and if all the if if/else, and else statements would work. I chose to test them by just putting cout statements. I would input the wrong or right inputs to see if the program will take the correct paths and output the correct cout statements depending on the path I wanted the program to take. I decided that the expected outputs should be what that path of the program was leading to. If the program was going down the creating a survey path, I would have the program cout statements that went along with the program.

#### Test Cases (optional):

The actual test cases that you use should be presented in a table form to showcase the actual tests that you perform to verify that your project is complete, and it does as it is supposed to be doing.

For example,

|  |  |  |
| --- | --- | --- |
| **Test Case Number** | **Input Values** | **Expected Output Values** |
| 1 | grade 1: 38  grade 2: 85 | average: 61.5  letter: D |
| 2 | grade 1: 0  grade 2: 20 | average: 0.0  letter: F |
| 3 | grade 1: -1  grade 2: 60 | error |
| 4 | grade 1: 60  grade 2: -1 | error |

The results of these test cases should be provided in an appendix to the report (called a test log).

#### Sample Execution (Required):

#### Paste one screen shot of the execution window of your running program here. Put enough samples (more than one) to prove that your project works in a way you have described it.

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#### Analysis and Conclusions (evaluate the solution):

In this section, you summarize your experience in the project. Be sure to answer the following questions:

* What were the goals or objectives of the project?  **The goals of the program were to allow the user to create a survey and allow the user to gather data from any number of people and display and combine the data back to them.**
* Did you achieve these goals? Give specifics on how each was accomplished. **The goals were achieved. The user can create a survey with a question and answers. The data collection also works too. The program also displays the survey and the results.**
* Looking back on the project what would you do differently in the design, the coding, and/or the testing? **Looking back, I should have implemented a clear function for the user, but when the user enters new questions and answers, the previous ones should be deleted.**
* What would you do differently in the entire project if you were working by yourself (if you’re in group) or in group (if you’re working individually)? **I probably would have sorted the program out into classes and more functions than I used. It would have made the program easier to read and made the main functions have less lines.**
* What additions would you suggest improving the way your program works? **An improvement would be a load and a save function. These would allow the user to save data and load pervious surveys and data.**

#### References: IMPORTANT

List **ALL** of the references you used in the lab. This includes any help you received from any other sources other than yourself, lab instructors, your text book, and course professors.

I could not figure out why my getline would get skipped in this program, so I had to use this site: https://stackoverflow.com/questions/6649852/getline-not-working-properly-what-could-be-the-reasons

#### Feedback: (optional)

This is not a required section of your lab report. However, if you wish to include this section we will certainly read and consider anything you tell us if future offering.

#### Code (Program file content):

Here….

#include <iostream>

#include <string>

using namespace std;

int answer5; // for the survey input

string question;// the question you type

string answer1, answer2, answer3, answer4, yes;// your answers

string getquestion();// gets the question

string getanswers();// gets the answer

int main()

{

int choice; // users choice

int condition = 1;// keeps the while loop going

cout << "Hello, welcome to a survey maker." << endl;

while (1)

{

cout << endl;

cout << "1. Create survey." << endl;

cout << "2. Create Answers." << endl;

cout << "3. Display Survey." << endl;

cout << "4. Run survey." << endl;

cout << "5. Exit." << endl << endl;

cin >> choice; // user input

if (choice == 1)// gets the users survey question

{

cout << "You chose to create a survey." << endl;

cout << "Please input your survey question." << endl;

cin.ignore();

getline(cin, question);

cout << "You have made your question." << endl;

}

else if (choice == 2)// gets the users survey answers

{

cout << "You chose to create up to three answers." << endl;

cout << "What would you like your first answer to be about." << endl;

cin.ignore();

getline(cin, answer1);// user input

cout << "Would you like to add another answer? (yes / no)" << endl;

cin >> answer4;// user input

if (answer4 == "yes")

{

cout << "What would you like your second answer to be about." << endl;

cin.ignore();

getline(cin, answer2);// user input

cout << "Would you like to add another answer? (yes / no)" << endl;

cin >> answer4;// user input

if (answer4 == "yes")

{

cout << "What would you like your third answer to be about." << endl;

cin.ignore();

getline(cin, answer3);// user input

}

else

{

cout << "You have finsihed your answers." << endl;

}

}

else

{

cout << "You have finsihed your answers." << endl;

}

}

else if (choice == 3) // displays the users made survey

{

getquestion();

getanswers();

cout << endl << question << endl << endl;

cout << "1. " << answer1 << endl;

cout << "2. " << answer2 << endl;

cout << "3. " << answer3 << endl;

}

else if (choice == 4)// runs and executes the survey and collect user feedback

{

getquestion();

getanswers();

int size;

int count1 = 0;

int count2 = 0;

int count3 = 0;

cout << "How many people are you surveying?" << endl;

cin >> size;// user input

cout << "Ok. Starting survey." << endl << endl;

for (int i = 0; i < size; i++)

{

cout << question << endl;

cout << "1. " << answer1 << endl;

cout << "2. " << answer2 << endl;

cout << "3. " << answer3 << endl << endl;

cout << "Please input your answer." << endl;

cin >> answer5;// user input

if (answer5 == 1)

{

count1++;

}

if (answer5 == 2)

{

count2++;

}

if (answer5 == 3)

{

count3++;

}

if (answer5 >= 4)

{

cout << "Please enter the correct number." << endl;

i--;

}

}

cout << "You have finished here are your results." << endl;

cout << "For " << answer1 << " you had " << count1 << " people answer this."<< endl;

cout << "For " << answer2 << " you had " << count2 << " people answer this." << endl;

cout << "For " << answer3 << " you had " << count3 << " people answer this." << endl;

}

else if (choice == 5) // exits the program

{

cout << "You have exited the program." << endl;

system("PAUSE");

break;

}

}

}

string getquestion()// code for get question

{

return question;

}

string getanswers()// code for get answers

{

return answer1, answer2, answer3, answer4, yes;

}