Anti Pollution Plants Information App and Questionnaire

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Anti Pollution Plants Information App and Questionnaire

1. Description:

This program is to show the information about anti pollution plants because not many people know about what kind of plants can be used to reduce pollution.

1. a. Design or Plan

Function

Structure

Void mahogany

Void papyrus

Void moss

Int choice2

Int choice

Void MainMenu

Void question

Int menu

Mainmenu()

cin

Switch

Question(Project)

Mahogany()

Moss()

Papyrus()

b. Explanation for functions:

void mainMenu(); = For calling main menu function. It’s filled with main menu format.

void mahogany(); = For calling mahogany function. It’s filled with mahogany short information.

void moss(); = For calling moss function. It’s filled with moss short information.

void papyrus(); = For calling papyrus function. It’s filled with papyrus short information.

void question(Project); = For calling question function. It’s filled with the questionnaire. With the help of struct, the choice2 is called into the if and else programming.

1. a. What I have learn during the process:

Learn structures and functions. How to use Do while. How to use Switch and functions together. Learn how to use nested if for basic questionnaire. That I can’t use nested for functions.

b. Problem I have overcome:

After I done with the basic if and else for my questionnaire, I added validation to my questionnaire but when I enter random number, the error just won’t appear.

At first i put it under the if else for questionnaire and then I move it up but still nothing.

Then I remember that Nested if is a thing and can be used for my case. So I pulled out the validation and put it for the first thing that happen. When I enter the choices between 1 and 2, it finally work. But when I enter 3, the option to pick the answer again disappear.

So I drag the validation back into the first one I make and it’s on top and create more nested outside that. So if I enter wrong number, instead skipping me to next question, option to pick it again will be appear.

4. Coding

#include <iostream>

using namespace std;

struct Project

{

int choice; //Connected to cin to input which choices do you pick

int choice2;

};

//This is for functions for it capable to put under int main().

void mainMenu();

void mahogany();

void moss();

void papyrus();

void question(Project);

int main()

{

Project project;

const int PAPYRUS\_CHOICE = 1,

MAHOGANY\_CHOICE = 2,

MOSS\_CHOICE = 3,

QUESTION\_CHOICE = 4,

QUIT\_CHOICE = 5;

do

{

mainMenu(); //called main menu function

cin >> project.choice ;

while (project.choice < PAPYRUS\_CHOICE || project.choice > QUIT\_CHOICE)

// This will happen if you input neither between papyrus choice to quit choice in number

{

cout << "Please enter a valid menu choice: ";

cin >> project.choice;

}

if (project.choice != QUIT\_CHOICE)

// Display the membership fees.

switch (project.choice)

{

case PAPYRUS\_CHOICE: //(?)

papyrus(); //Called papyrus function

break;

case MAHOGANY\_CHOICE:

mahogany(); // called mahogany function

break;

case MOSS\_CHOICE:

moss(); // called moss function

break;

case QUESTION\_CHOICE:

question(project);

}

}

while (project.choice != QUIT\_CHOICE);

return 0;

}

void mainMenu() //The main menu function

{

cout << "Anti Pollution Plants Information\n\n"

<< "What plants info do you want to look up?\n"

<< "---------------------------------\n"

<<"1. Papyrus plants\n"

<<"2. Mahogany trees\n"

<<"3. Moss\n"

<<"4. Questionnaire\n"

<<"5. Quit\n"

<<"Choose with numbers between 1, 2, 3, 4, and 5."

<<"The one you choose is: ";

}

void papyrus() //Contains short information about papyrus plant

{

cout<<"Description:\n"

<<"Papyrus ia a tree that looks like a fan and can grow until 3-5 meter long."

<<"It grows on the riverbank and count as one of the fastest growing plants .\n"<<

endl<<"How it helps polution:"<<

endl<<"It absorb heavy pollutan inside water.\n"<<

endl<<"Other known function: \n"

<<"It can be used to create papers, baskets. In Egypt era, it can be eaten by grilled or eat it raw, and it also used for medicine for ulcers"<<endl<<endl;

}

void mahogany() //Contains short information about mahogany tree

{

cout<<"Description:\n"

<<"Mahogany tree is a big tree with height from 35-40 meters and has diameter until 125 centimeters."

<<"It can grow nicely if it's planted on briny water near the beach.\n"<<

endl<<"How it helps polution:"<<

endl<<"It can reduce air pollution from 47%-69%. It's good at keeping water and filtering polluted air. \n"

<<"It can grows on coarse ground."

<<endl<<"Other known function: \n"

<<"The mahoni tree fruit can be used for medicine. It can reduce cholestrol, reduce pain, and act as antioksidan to reduce cancer posibility."<<endl<<endl;

}

void moss()//Contains short information about moss plant

{

cout<<"Description:\n"

<<"Moss is a plant that has leaves and roots but it was imperfect or \nit has not fully developed yet\n"

<<"It doesn't have flowers or fruits.\n"

<<"It can grows on everywhere. On trees or on rocks, it even can grow at north pole.\n"<<

endl<<"How it helps polution:"<<

endl<<"The more moss grows on trees, the more cleaner the air around it. It basically \nnature measurement for clean air.\n"

<<"It also store water and absorb pollutan in air."<<endl<<endl;

}

void question(Project pro)

{

cout<<"\n\nThere is ten questions you need to answer. If you manage to answer all correctly, then you are paying attention to what written in the post.\n"

<<"Remember: there is no win or lose in this questionnaire. We just want to test your skill.\n\n ";

cout<<"First, how tall Mahogany trees could grow?\n"

<<"1. 35-40 meters\n"

<<"2. 55-60 meters\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

}

}

cout<<"Second, can moss grow flower and fruit?\n"

<<"1. Yes.\n2. No.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

}

}

cout<<"Third, on what kind of enviroment can mahogany trees grow?\n"

<<"1. It has to be on fertile ground\n"

<<"2. It can grow on coarse ground or near the beach with briny water\n"

<<"Enter your answer in number: ";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

}

}

cout<<"Fourth, which plant CAN NOT filter polutan in air?\n"

<<"1. Papyrus.\n2. Moss.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

}

}

cout<<"Fifth, where moss could grow?\n"

<<"1. On wet rainy area.\n2. Everywhere except dry place.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

}

}

cout<<"Sixth, what kind of medicine can mahogany fruit heal?\n"

<<"1. reduce cholestrol.\n2. reduce nausea.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

}

}

cout<<"Seven, which plant can grow the fastest?\n"

<<"1. moss.\n2. Papyrus.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the next question.\n\n";

}

}

}

cout<<"Eight, what diameter Mahogany tree could grown so far?\n"

<<"1. 125 centimeters.\n2. 150 centimeters.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the next question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. Try harder in the next question\n\n";

}

}

}

cout<<"Nine, What is other function for Papyrus plant?\n"

<<"1. Smoking.\n2. Medicine.\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer wrong. You are close to the last question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the last question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer wrong. You are close to the the last question\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer correctly. On to the last question.\n\n";

}

}

}

cout<<"Ten, How many percent air pollution the mahogany tree could reduce?\n"

<<"1. 47%-69%n2. 50%-79%\n"

<<"Enter your answer in number:";

cin>>pro.choice2;

if (pro.choice2 >=1 || pro.choice2 <=2)

{

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the last question.\n\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. You are close to the last question.\n\n";

}

if (pro.choice2<1||pro.choice2>2)

{

cout<<"You must enter between 1 and 2\n";

cin>>pro.choice2;

cout<<"\nDon't enter wrong again.\n";

if (pro.choice2 == 1)

{

cout<<"You answer correctly. On to the last question.\n";

}

else if (pro.choice2 == 2 )

{

cout<<"You answer wrong. You are close to the the last question\n";

}

}

}

}