Paris Martinez

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Final Project: Doctors Without boarders

This code begins with bringing in different libraries that allow the randomization of the algorithm and choices of the user.

#include <iostream>

#include <string>

#include <cstdlib>

#include <ctime>

using namespace std;

Initializing the language and specialization voids to call them in the main function.

int language(int);

int specialization(int);

int main () {

The 2-d array is used for the different languages and countries to link them together later in the function

string countries [5][10] = {

We create a list of 5 rows by 10 countries which resemble countries that predominately speak one of the languages};

Initialize and get the user's choice by input, of a number displayed to them in the menu.

int choice;

Ask the user about their language preference

cout << "What is your preferred language?" << endl;

cout << "-------------------------------";

cout << endl;

Display the menu to the user of their choices

cout << "1. English" << endl;

cout << "2. Spanish" << endl;

cout << "3. French" << endl;

cout << "4. Portuguese" << endl;

cout << "5. Arabic" << endl;

using the variable choice to hold the value of the user’s first choice and Call the void language(choice) to use it in creating the randomization

* (Refer to the function int language (int n) )

choice = language(choice);

Initialize secChoice to hold the choice of the second menu option

int secChoice;

cout << endl;

Ask the user their specialization displaying the options of the program

cout << "What is your specialization?" << endl;

cout << "-------------------------------" << endl;

cout << "1. Pediatrician " << endl;

cout << "2. Family Medicine"<< endl;

cout << "3. General Surgeon"<< endl;

cout << "4. Internal Medicine"<< endl;

cout << "5. Gynecology"<< endl;

Using the variable secChoice to hold the value of the user's second choice and Call the void specialization(secChoice) to use it in creating the randomization

* (Refer to the function specialization (int m))

secChoice = specialization(secChoice);

cout << endl;

Call the library srand and use the time function to randomize the countries so that it will be a different outcome each time

srand(time (0));

initializing R and using the rand() % 10 to create choose the country

int r = (rand () % 10);

cout<< "Congratulations you're going to: " <<endl;

Calling the array countries, and passing “r” and “choice – 1” will use the “choice” the user made to go through the function int language(int n) to this line of code to randomize it which was done in the initialization of “r”

cout<< countries[choice-1][r] << "!" << endl << endl;

This prints out the probability of sample space

cout << "The probability of sample space is the languages and the number of specializations multiplied = 10 \* 5 = 50."<< endl<< endl;

This is the probability of being chosen for language and specialty

cout<< "The probability of choosing one combination is 1/50 or 2%." << endl;

}

This Void int language(int n) is used for the switch case and prints out the confirmation of the choice.

int language(int n)

{

cout << endl;

Prompts the user to enter their choice

cout << "Enter your choice below: "<< endl;

cin >> receive and hold the choice in the variable “n”;

switch(switch case initialize that “n-1” in order to receive accurate data)

{

In the case of choice 1 or case 0

case 0:

Print out “English Confirmed”

cout << "English Confirmed." << endl;

break;

In the case of choice 2 or case 1

case 1:

print out “Spanish Confirmed.”

cout << "Spanish Confirmed." << endl;

break;

In the case of choice 3 or case 2

case 2:

print out "French Confirmed."

cout << "French Confirmed." << endl;

break;

In the case of choice 4 or case 3

case 3:

print out "Portuguese Confirmed."

cout << "Portuguese Confirmed." << endl;

break;

In the case of choice 5 or case 4

case 4:

print out "Arabic Confirmed."

cout << "Arabic Confirmed." << endl;

break;

}

return n;

}

This Void int specialization (int m) is used for the switch case and prints out the confirmation of the Second choice or secChoice.

int specialization (int m)

{

cout << endl;

Prompts the user to enter their choice

cout << "Enter your choice below: "<< endl;

cin >> >> receive and hold the choice in the variable “m”.

switch (switch case initialize that “m-1” in order to receive accurate data)

{

In the case of choice 1 or case 0

case 0:

Print out "Pediatrician Selected."

cout << "Pediatrician Selected." << endl;

break;

In the case of choice 2 or case 1

case 1:

Print out "Family Medicine Selected."

cout << "Family Medicine Selected." << endl;

break;

In the case of choice 3 or case 2

case 2:

Print out "General Surgeon Selected."

cout << "General Surgeon Selected." << endl;

break;

In the case of choice 4 or case 3

case 3:

Print out "Internal Medicine Selected."

cout << "Internal Medicine Selected." << endl;

break;

In the case of choice 5 or case 4

case 4:

Print out "Gynecology Selected."

cout << "Gynecology Selected." << endl;

break;

}

return m;

}