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//Conversion Calculator Program

#include <iostream>
#include <iomanip>
#include <cmath>

using namespace std;

//Creating constants for menu choices
const int CHOICE_1 = 1;
const int CHOICE_2 = 2;
const int CHOICE_3 = 3;
const int CHOICE_4 = 4;

//Function prototypes for displays
void displayMenu();
void titleFunc();

int main()
{
    //Declaration and initialization of variables
    int choice = 0;
    double fahrenheit = 0;
    double celsius = 0;
    double feet = 0;
    double pounds = 0;
    double meters = 0;
    double kilograms = 0;

    //Sets decimal places to two
    cout << fixed << showpoint << setprecision(2);

    //Do-while loop for menu
    do
    {
        displayMenu();
        cin >> choice;

        switch (choice)
        {
            case(CHOICE_1):
            {
                cout << "Please enter the length in feet: ";
                cin >> feet;
                if (feet > 0)
                {
                    meters = feet / 3.281;
                    cout << feet << " feet is equal to " << meters << "
meters." << endl << endl;
                }
                if (feet <= 0)
                {
                    cout << "Error - Invalid length entered. Please enter a
number greater than zero!" << endl << endl;
                }
                break;
            }
        }
    } while (choice != 0);
}

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    }
    case(CH0ICE_2):
    {
        cout << "Please enter the temperature in farenheit: ";
        cin >> farenheit;
        if (farenheit > -459.67)
        {
            celsius = ((farenheit - 32) * (9 / 5));
            cout << farenheit << " degrees farenheit is equal to " <<
celsius << " degrees celsius." << endl << endl;
        }
        if (farenheit <= -459.68)
        {
            cout << "Error - the temp cannot be below absolute zero (-
459.67). Please reenter." << endl << endl;
        }
        break;
    }
    case(CH0ICE_3):
    {
        cout << "Please enter the weight in pounds: ";
        cin >> pounds;
        if (pounds > 0)
        {
            kilograms = pounds / 2.205;
            cout << pounds << " pounds is equal to a mass of " <<
kilograms << " kilograms." << endl << endl;
        }
        if (pounds <= 0)
        {
            cout << "Error - weight must be a value greater than zero."
<< endl << endl;
        }
        break;
    }
    case(CH0ICE_4):
    {
        cout << "The program is exiting....." << endl << endl;
        break;
    }
    default:
    {
        cout << "Error - invalid option. Please try again." << endl <<
endl;
    }
}

} while (choice != CH0ICE_4);

cout << "Thank you for using the Conversion Calculator!!" << endl << endl;
return 0;

}

void displayMenu()
{
    cout << "Menu of options:" << endl;
    cout << setw(32) << "1. - Convert feet to meters" << endl;

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        cout << setw(38) << "2. - Convert fahrenheit to celsius" << endl;
        cout << setw(37) << "3. - Convert pounds to kilograms" << endl;
        cout << setw(26) << "4. - Exit the Program" << endl;
        cout << "Please enter your menu option: ";
    }

void titleFunc()
{
    cout << "CE - Return" << endl;
    cout << "Copyright 2021 - Howard Community College All rights reserved;
    Unauthorzied duplication prohibited." << endl << endl;
    cout << setw(49) << "Welcome to the Conversion Calculator Program" << endl <<
    endl;
}
```