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Script started on 2021-12-07 13:44:39-06:00 [TERM="xterm" TTY="/dev/pts/4" COLUMNS=
k_gandhi6@ares:~$ cat exicat Suit.info
Name: Kush Gandhi
Title: Operators: Not just for Classes anymore! (Lab)
Course: CSC122-001
Levels: 2.5
Description: Takes user input by finding a match of card
and outputs the correct or incorrect.
k_gandhi6@ares:~$ exicat exicat Suit.h
#ifndef CARDS_H_INC
#define CARDS_H_INC
#include <iostream>
using namespace std;

//types of cards
enum Cards
{
    hearts,
    clubs,
    diamonds,
    spades,
    other
};

//function to search for type of cards
Cards searchCard(string cardSuit)
{
    //able to store the substr card
    Cards newOther = other;

    //inititalize the types of cards to strings by letters
    string s = "spades",
           h = "hearts",
           d = "diamonds",
           c = "clubs";

    size_t strLen = cardSuit.length(); //finds the length of string

    //convert string to lowercase to compare the strings
    for (size_t i = 0; i < strLen; i++)
    {
        cardSuit[i] = tolower(cardSuit[i]);
    }

    //now to the given string with substr
    //and set them to newOther from other
    if (cardSuit == h.substr(0, strLen))
    {
        newOther = hearts;
    }
    else if (cardSuit == c.substr(0, strLen))
    {
        newOther = clubs;
    }
}

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    }
    else if (cardSuit == d.substr(0, strLen))
    {
        newOther = diamonds;
    }
    else if (cardSuit == s.substr(0, strLen))
    {
        newOther = spades;
    }
    return newOther;
}

//function to display the message for the playing cards entered
void cardDisplay(Cards newOther)
{
    switch (newOther)
    {
        case diamonds:
            cout << "Ooo...diamonds. Don't cut my montier with those!" << endl;
            break;
        case hearts:
            cout << "You have a heart! Dont't wear it on your sleeve...!" << endl;
            break;
        case clubs:
            cout << "Ah, a club! Don't beat me up!!" << endl;
            break;
        case spades:
            cout << "So, you have a spade! Dig me a hole out back, won't you?"
                << endl;
            break;
        case other:
            cout << "I'm sorry, I don't recongnize that suit...Please try again."
                << endl;
            break;
    }
}
#endif
k_gandhi6@ares:~$ exicat Suit.cpp
#include <iostream>
#include <string>
#include "Suit.h"
using namespace std;

int main()
{
    char chr;
    string cardSuit;//user input
    Cards card;//set the enum type
    cout << "\t\tWelcome to the Card Suit Entering Program!!!" << endl;

    do
    {
        cout << "\nWhat is the suit of your card? ";
        cin >> cardSuit;
    }
}

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    card = searchCard(cardSuit);//search card function
    cardDisplay(card);//display message function
    cout << "\nAnother card? ";
    cin >> chr;
} while (chr == 'y' || chr == 'Y');

    cout << "\nThank you for using the CESP!!"
    << "\nEndeavor to have a great day!" << endl;
}
k_gandhi6@ares:~$ cat exiCPP Suit
Suit.cpp***
In file included from Suit.cpp:3:
Suit.h: In function 'Cards
searchCard(std::string)':
Suit.h:34:30: warning:
conversion from 'int' to
'__gnu_cxx::__alloc_traits<std::allocator<char>,
char>::value_type' {aka 'char'} may change
value [-Wconversion]
   34 |         cardSuit[i] = tolower(cardSuit[i]);
      |
k_gandhi6@ares:~$ cat exi./Suit.out
Welcome to the Card Suit Entering Program!!!

What is the suit of your card? c
Ah, a club! Don't beat me up!!

Another card? y

What is the suit of your card? CLUBS
Ah, a club! Don't beat me up!!

Another card? y

What is the suit of your card? heAR
You have a heart! Don't wear it on your sleeve...!

Another card? y

What is the suit of your card? dia
Ooo...diamonds. Don't cut my montier with those!

Another card? y

What is the suit of your card? SpAdEs
So, you have a spade! Dig me a hole out back, won't you?

Another card? y

What is the suit of your card? spadess
I'm sorry, I don't recongnize that suit...Please try again.

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Another card? n

Thank you for using the CESP!!

Endeavor to have a great day!

k\_gandhi6@ares:~\$ cat Suit.tpq

1. Does it matter if your operators are class members?

Should they be const? Do they need to be friends?

- No, it does not matter if the operators are not in a class. They would still work the same ways as do as if they were in a class. The only const should be the output function.

2. How can you match the word the user types against the suit names?

How can you match only the number of characters entered?

(Note the matches are case insensitive...)

- In my program, I made a function where it takes the user input. In the function I made for loop to lowercase the string because the versatility of user input option. Then I used a if else if to compare the length of the string to it's substr to find a match from whatever the user inputted. Finnaly, then set it to the newOther variable.

3. Might your program benefit from use of the string or Stringclasses?

- Both would work for this program because you can look at the string or by c-strings. Depends on how you interpret the situation.

4. What other operators might prove useful for your enumerated type in a full card game program?

- Some other operators that might be useful is operator==, operator+, oprator-, operator!=, operator>>, and operator<<.

k\_gandhi6@ares:~\$ exit

exit

Script done on 2021-12-07 13:46:37-06:00 [COMMAND\_EXIT\_CODE="0"]