Calculating Time

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Yagna patel
Batch : 21
Enrollment no. : 21162101020
Subject : ESFP-||

Overview

This project is made using C++ attributes such as class-object, while loop, and file-handling concepts.

Goals

1. To find the number of days.
2. To see the difference of age between 2 people
3. To know days left for your birthday in any specific year.

Details about C++ attributes used in the code

1. Class : A class in C++ is the building block that leads to Object-Oriented programming. It is a user-defined data type, which holds its own data members and member functions, which can be accessed and used by creating an instance of that class. A C++ class is like a blueprint for an object.

2. Object : An Object is an instance of a Class. When a class is defined, no memory is allocated but when it is instantiated (i.e. an object is created) memory is allocated.

3. Loops : Loops can execute a block of code as long as a specified condition is reached.Loops are handy because they save time, reduce errors, and they make code more readable.

4. File handling : File handling is used for store a data permanently in computer. Using file handling we can store our data in secondary memory (Hard disk).

Code :

```
// TO KNOW THE DIFFERENCE OF AGE
// TO KNOW NO. OF DAYS LIVED
// TO KNOW THE NO. OF DAYS LEFT FOR YOUR NEXT BIRTHDAY
#include <iostream>
#include <fstream>
using namespace std;
class times
{
    private:
    int tdd,tmm,tyy,n;
    int dd, mm , yy;

    const int mdays[12] = { 31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31
}; //array with every month
    public:



    times()
    {
    ofstream fa;   //ofstream file to only write in the file
    fa.open("projectc++.txt",ios::trunc|ios::ate|ios::out|ios::in);
//opening the file

        while(n!=4){  //exit if 4
    int days = 0, m1 = 0, years = 0, m2 = 0, months = 0,y1 = 0;
    cout << endl <<"Choose you number as per options"<<endl;
```

```
cout << "1 - Number of days lived"<<endl;
cout << "2 - Difference of age "<<endl;
cout << "3 - Days left for next birthday!!"<<endl;
cout << "4 - Exit"<<endl;
cin >> n;

    if(n==1){     //case 1
cout << "Today's Date : ";
cin >> tdd >> tmm >> tyy;
cout << endl <<"Your birthdate : ";
cin >> dd >> mm >> yy;}
if(n==2){    //case 2
cout << "younger person : ";
cin >> tdd >> tmm >> tyy;
cout << endl <<"elder person birthdate : ";
cin >> dd >> mm >> yy;}
if(n==3){  //case 3
    cout << "your birthdate dd/mm :";
cin >> tdd >> tmm;
cout << "the year you want to see in :";
cin >> tyy;
cout << endl <<"Today's date : ";
cin >> dd >> mm >> yy;
}
years = tyy - yy;          //finding difference in years
```

```
    while(tmm > 0){  //converting years and months in days
        tmm--;
        m1 =  mdays[tmm] + m1;

    }
    while(mm > 0){  //converting years and months in days
        mm--;
        m2 =  mdays[mm] + m2;

    }
    months = m1 - m2; // finding difference in months



      y1 = years;
    while(years>3)  //finding minimum no. of leap year and adding a day
for every leap year
    {
        years = years - 4;
        days++;
    }

        days = (tdd - dd)  + (y1*365) + (months);
        if(n==1){
        cout << "\nNumber of days lived (approximately) :"<< days<<"
DAYS"<< endl;
        }
        if(n==2){
```

```
            cout << "\n approximately elder person is  :"<< days<<" days
older";
        }
        if(n==3){
             cout << "\n approximately :"<< days<<"days left";
        }

    if(n==1){
        fa<<"\nCase "<<n;
        fa<<"\nNumber of days lived : ";
        fa<<days<<" days";
    }
    if(n==2){
        fa<<"\nCase "<<n;
        fa<<"\nDiffrence of age\n";
        fa<<"elder person is : "<<days<<" older";
    }
    if(n==3){
        fa<<"\nCase "<<n;
        fa<<"\nNext birthday!\n"<<"approximately : "<<days<<" left for
your next birthday";
    }
    }
    fa.close();
    }



    };
```

```
int main()
{
    times obj;
    return 0;
 }
```