GROUP 6

C++ PRACTICAL ASSIGNMENT

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| --- | --- |
| SERIAL NO | NAMES |
| 1 | OSUCHUKWU CHRISTOPHER IKECHUKWU |
| 2 | SYDNEY SOLOMON TAMUOMIC |
| 3 | ONYEJEKWE THANKGOD .C. |
| 4 | LIVINGSTONE CHIMA SUZIBE |
| 5 | AGU JONATHAN NKEMAKOLAM |
| 6 | OMEAGU BLESSING MERCY |
| 7 | AMOGU EMMANUEL UCHENDU |
| 8 | THANGOD NWAEKE |
| 9 | DIKE CHIGOZIE STANLEY |
| 10 | PROMISE UDOCHI |
| 11 | OPARAUGO GIFT CHINAZA |
| 12 | CHUKWUEMEKA CHIDOZIE KINGSLEY |

Grop 6

Develop a Digital Clock using C++

WHAT YOUR GROUP IS TO SUBMIT

1.”Binded” copy of your group work

2. The binded copymust contain the names of students in your group in the front page

And your github URL written just down the page

3.The “binded” copy must contain your flowchart or pseudo-code before the code

4. the “Binded copy must contain your code.

5. One laptop to demonstrate that your group work is executing error free

THE PSEUDOCODE OF OUR WORK

The steps to create a digital clock in C++ are

* Start
* Step 1: Call time() function with argument (0) to store total seconds in total\_seconds variable.
* Step 2: Make a call to localtime() function and pass the address of total\_seconds as a parameter. This function splits the seconds into hours, minutes and seconds and returns a structure tm\* which holds the values of hours, minutes and seconds.
* Step 3: Get the values of seconds, minutes and hours from the structure variable.
* Step 4: Print the values of hours, minutes and seconds with an interval of 1 second. System (“CLS”) statement to clear the screen of each interval.
* Step 5: The localtime() function returns time in 24-hours format. Convert it into the 12-hour format and print AM or PM accordingly
* Stop

THE CODE

#include <iostream>

#include<ctime>

#include<cstdlib>

using namespace std;

int main()

{

int sec\_prev = 0;

while (1)

{

int seconds, minutes, hours;

string str;

//storing total seconds

time\_t total\_seconds = time(0);

//getting values of seconds,minutes and hours

struct tm\* ct = localtime(&total\_seconds);

seconds = ct ->tm\_sec;

minutes = ct ->tm\_min;

hours = ct ->tm\_hour;

//converting it into 12 hour format

if(hours >= 12)

str ="Pm";

else

str = "Am";

hours = hours>12?hours-12:hours;

//printing the result

if (seconds == sec\_prev+1 || (sec\_prev == 59 && seconds == 0))

{

system("CLS");

cout<< (hours<10? "0" : " ") << hours << ":" << (minutes<10? "0" : " ") <<minutes << ":" << (seconds<10? "0" : "") << seconds << " " << str <<endl;

}

sec\_prev = seconds;

}

return 0;

}





