

Department of Computer Science and Engineering



*CGC College of Engineering
Landran -Mohali ,140307*

**PROJECT
ON
PATIENT REGISTRATION SYSTEM**



Submitted By:
Preekshit Dahiya
2019214

Submitted To:
Mr Tejpal.
IT workshop

CERTIFICATE

This is to certify that the project work entitled
“PATIENT REGISTRATION SYSTEM”
is a bonafide work done by *PREEKSHIT*
DAHIYA (2019214) of CGC College of
Engineering ,B.Tech CSE , 3rd Semester group
E1,session 2021-2022 in partial fulfillment for IT
workshop project and has been carried out
under my supervision and guidance .

.....

Mr. Tejpal
IT workshop.
CGC College of Engineering.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my teacher (Mr Tejpal) as well as our Director-Principal- of CGC College of Engineering, who gave me this opportunity to do something wonderful for our society and helped me in doing a lot of research and I came to know about so many new things ,I am really thankful to them.

Secondly, I would like to thank my thanks my parents and friends who have directly or indirectly helped me in finalizing this project within a limited time frame.

Preekshit Dahiya
2019214
B.tech CSE 3rd semester
Group E1.

INDEX

S.NO.	CONTENTS	PAGE NO.
1.	TITLE AND OBJECTIVE.	5.
2.	MANUAL SYSTEM.	6.
3.	PROPOSED SYSTEM.	7.
4.	INTRODUCTION OF THE PROJECT.	8.
5.	FEATURES AND SCOPE OF THE PROJECT.	9.
6.	HARDWARE AND SOFTWARE SPECIFICATIONS.	10.
7.	WORKING ENVIRONMENT.	11-12.
8.	FUNCTIONS,CLASSES AND LIBRARIES.	13.
9.	SOURCE CODE.	14-17.
10.	OUTPUT.	18-19.
11.	CONCLUSION.	20.
12.	REFERENCES.	21.

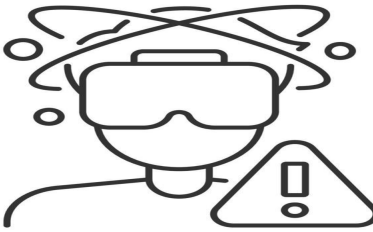
TITLE

Patient Registration System
For
Community Health Centers(CHCs)
[GOVERNMENT HOSPITALS]

OBJECTIVE:

This project is made with the objective to replace the existing manual patient registration system of government hospitals with efficient and simple computerized registration system. With this system patient can be registered easily after paying necessary registration fee i.e one rupee.

MANUAL SYSTEM



Manual system means a system which does its work not by the help of any technology in which paper work has a significant place.

All the conventional methods are in more use instead of technologies. And now as everybody knows that computer graphs at its extent means the more you can use computer more you can make your work easier.

Same goes to the patient registration system in government hospitals. Now a days when there is an era of technological advancement, government hospitals still appoint a member specially for the registration of patients.

This create many problems because the task become more complex and time consuming.

Moreover, its maintenance become a tedious task as it is very difficult to search a file of patient in the paper records .

PROPOSED SYSTEM



Proposed system is a system which is computerized in every aspect. Computerized system is not just adding machines but they are capable of doing many complex, tedious and cumbersome tasks like traversing ,searching from a large records.

Processing of data by hand is satisfactory only when the amount of data to be processed is small and also the manual processing is slow , monotonous and often subject to errors.

Above explanation is clearly telling us that the existing system contains a lots of deficiencies which can be removed by the following proposed system.

This patient registration system ask registration details and register the patient. It store the information in a text file ,which is readable easily. Also this system generates the OPD slip for patients.

INTRODUCTION

This proposed project “Patient Registration System” has been developed overcome the problems faced in practicing of manual system. A patient registration system is a software that can be used to register the Patients in Community Health Centers, Government hospitals .

This system input the details of patients like their Name, age, registration number, gender etc and give an OPD slip as output. Also it stores this information in readable text format.

This software is built to eliminate and in some cases reduce the hardships faced by the existing manual system. Moreover, this system can be updated according to the needs of customers.

Features and Scope of the project

The main features of this project are as follows:

- > Input the details of patients.
- > Generate the OPD slip with details given by patients.
- > Store the data in a readable text file.

The scope of this project is as follows:

- > Can replace the existing manual registration.
- > Make the registration system easier and compatible to use.
- > Management of patient records becomes easy.
- > Overcome the difficulties of the manual system.
- > Errors become minimal.

Hardware and software specifications

Hardware:

- >Processor:11th Gen Intel core i5.
- >Processor speed:2.42GHz.
- >Windows 7 or above.
- >RAM:2.00GB or above.
- >System type:64-bit operating system

Software:

- >IDE:DEV C++ version 5.11.
- >Frontend:C++.
- >Backend:Data handling in C++.

WORKING ENVIRONMENT

What is C++?

C++ is a [general-purpose programming language](#) created by [Bjarne Stroustrup](#) as an extension of the [C programming language](#). C++ was designed with an orientation toward [system programming](#) and [embedded](#), resource-constrained software and large systems, with [performance](#), efficiency, and flexibility of use as its design highlights.

C++ has also been found useful in many other contexts, with key strengths being software infrastructure and resource-constrained applications, including [desktop applications](#), [video games](#), [servers](#), and performance-critical applications.

Some features of c++:

- | | |
|-----------------------|------------------|
| ->polymorphism. | ->encapsulation. |
| ->inheritance. | ->abstraction. |
| ->exception handling. | ->data handling. |

What is Data Handling?

In C++, files are mainly dealt with by using three classes `fstream`, `ifstream`, `ofstream` available in `fstream` headerfile.

`ofstream`: Stream class to write on files

`ifstream`: Stream class to read from files

`fstream`: Stream class to both read and write from/to files.

File operations are:

`open()` – This is used to create a file.

`write()` – This is used to write new data to file.

`read()` – This is used to read the data from the file.

`close()` – This is used to close the file.

This is basically used to store data in text files.

Function, Classes and Libraries

Functions used :

INPUT-

->To take the input from user i.e personnel
information of patients.

GENERATE-

->To generate the OPD slip.

MAIN-

->to do main functioning.

Class used is named as "Patient".

Libraries or header files used:

->iostream.

->iomanip.

->ctype.h.

->fstream.

SOURCE CODE.

```
#include<iostream>
#include<iomanip>
#include<fstream>
#include<ctype.h>
using namespace std;
class patient
{   int rno;
    int d;
    int m;
    int y;
    char name[40];
    int age;
    char gender;
public:

    void input ()
    {   cout<<endl;
        cout<<"-----:"<<endl;
        cout<<"enter registration number  ";
        cin>>rno;
        cout<<" enter today's date(dd/mm/yyyy)  ";
        cin>>d>>m>>y;
        cout<<"enter name of the patient  ";
        fflush(stdin);gets(name);
        cout<<"enter age of the patient  ";
        cin>>age;
        cout<<"enter gender of the patient(M/F)  ";
        cin>>gender;
        cout<<"-----:"<<endl;
        cout<<endl;
    }
    void generate()
```



```

        cout<<setw(100)<<"|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|-----|
        cout<<setw(100)<<"|
        cout<<setw(100)<<"|          NOTE:This slip can be used for 15 days
        cout<<setw(100)<<"|-----|
        cout<<setw(100)<<"|
        cout<<endl;
    }
};

int main()
{
    char ch;
    ofstream fout;
    fout.open("PATIENT-RECORD.txt",ios::app);
    cout<<setw(100)<<"|-----|<<endl;
    cout<<setw(100)<<"|          WELCOME          |<<endl;
    cout<<setw(100)<<"|          TO          |<<endl;
    cout<<setw(100)<<"|    COMMUNITY HEALTH CENTER    |<<endl;
    cout<<setw(100)<<"|-----|<<endl;
    patient p;
    for(int i=0;i<100;i++)
    {
        cout<<endl;
        cout<<"|-----|<<endl;
        cout<<"| Give the following details of the patient :<<endl;
        cout<<"|-----|<<endl;
        cout<<endl;
    }
}

```



```

    p.input();
    p.generate();
    fout.write((char*)&p,sizeof(p));
    fout<<endl;
    cout<<"-----:"<<endl;
    cout<<" Do you want to continue(Y/N) :"<<endl;
    cout<<"-----:      ";
    cin>>ch;
    if(ch=='N' || ch=='n')
    {
        cout<<endl;
        cout<<"-----:"<<endl;
        cout<<" Registration Done :"<<endl;
        cout<<"-----:"<<endl;
        exit(1);
    }

}
fout.close();
return 0;
}

```

[illegible]

```
:-----:
: Do you want to continue(Y/N) :
:-----:
```

```

:-----:
: Give the following details of the patient :
:-----:

```

```

:-----:
enter registration number 2
    enter today's date(dd/mm/yyyy) 21 12 2021
enter name of the patient RANI SHARMA
enter age of the patient 33
enter gender of the patient(M/F) F
:-----:

```

[illegible]

```

:-----:
: Do you want to continue(Y/N) :
:-----:

```

```
:-----:
:  Registration Done  :
:-----:
```

```
Process exited after 109.3 seconds with return value 1
Press any key to continue . . .
```

CONCLUSION

Patient Registration System developed to replace the cumbersome manual registration system ,has been designed to achieve efficiency and reduce the time taken to handle registration activity and to get rid of piles of papers.

REFERENCES.

To develop this system many references are used.

- > Docs.microsoft.com.
- > Wikipedia.
- > Google images.
- > Object oriented programming in c++
(McGraw Hill).
- > C++ programming Sumita Arora ,volume 1.
(+2 computer science).