GAYA COLLEGE, GAYA

2019

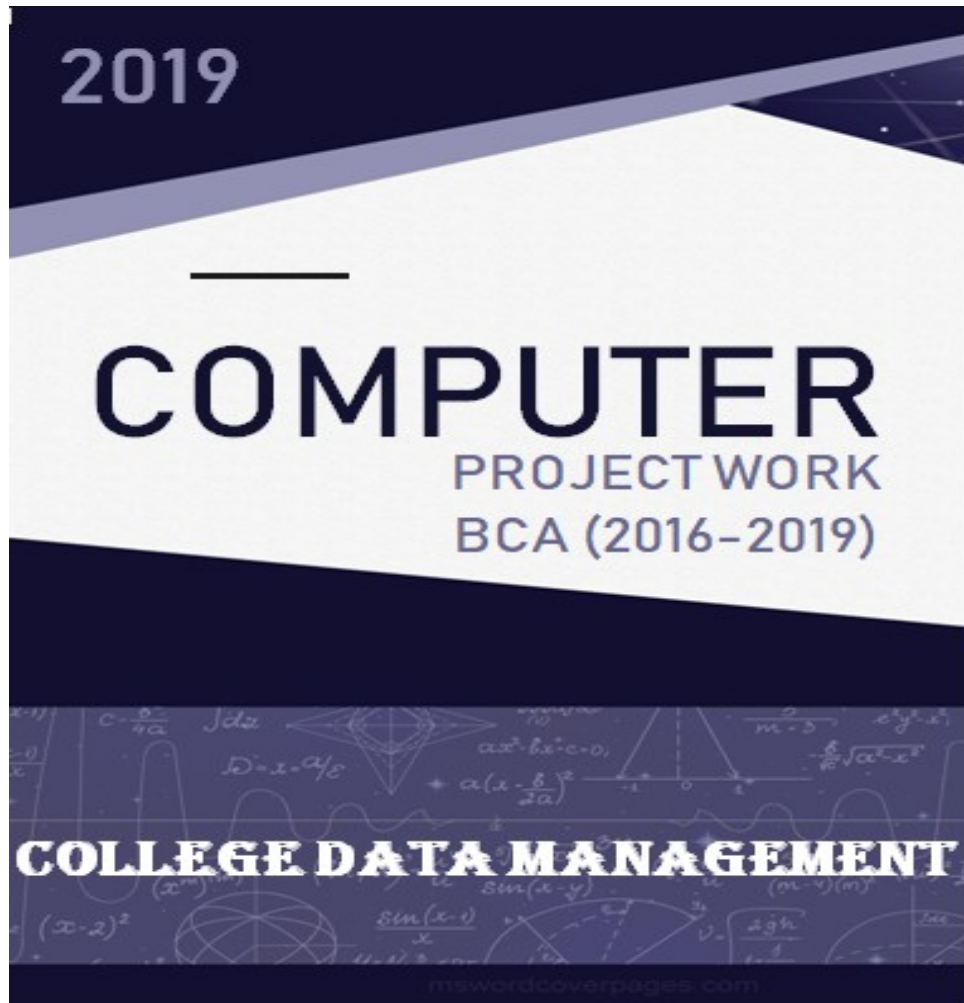COMPUTER
PROJECT WORK
BCA (2016–2019)

COLLEGE DATA MANAGEMENT

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Introduction

I begin with a brief introduction about this project and the different stages of the design and the development of **COLLEGE DATA MANAGEMENT SYSTEM**. Before detailed discussion, first of all I would like to give an overall idea about this project.

I developed my project on **COLLEGE DATA MANGEMNET SYSTEM**, because Data Management System is one of the most common and the first application implemented in any higher educational organization

In College a large amount of data is processed and the results are used in running an organization. The College Data management system project maintains the complete details of Students and teachers of their different streams. An organized and systematic office solution is essential for all colleges and organizations. There are many departments of administration for the maintenance of college information and student databases in any institution. All these departments provide various records regarding students. Most of these track records need to maintain information about the students and teachers. This information could be the general details like student name, address, performance, attendance etc. or specific information related to departments like the collection of data. All the modules in college administration are interdependent. They are maintained manually. So, they need to be automated and centralized as, Information from one module will be needed by other modules. With that in mind, we overhauled the existing Student Database

Management System and made the necessary improvement to streamline the processes. Administrators using the system will find that the process of recording and retrieving student's information and managing their classes, including marking of attendance, is now a breeze. In general, this project aims to enhance efficiency and at the same time maintain information accurateness. Later in this report, features and improvement that allow achievement to this goal will be demonstrated and highlighted.

Our work is useful for easy user interface. We are planning to utilize the powerful database management, data retrieval and data manipulation. We will provide more ease for managing the data than manually maintaining in the documents. Our work is useful for saving valuable time and reduces the huge paper work.

Aim

- To provide quality education of information technology and IT enabled services to shine as leading business promoters on real time and submission of application and system software.

- To develop the efficient candidates as per the requirements of major IT sectors.

- To serve the society by releasing free wares.

- To provide a wide range of ideas and thoroughly to the environment about the development of information technology

and it's enabled fields. Quality IT Education at an affordable cost for all.

- Out motto explains that even a middle-class student can learn the booming technology which is highly costlier for them.

- Our logo symbolizes the horse, which means the power to ride through our own vision.

- The symbol of speed.

- The symbol of resistance and getting up quick as thunder even if it falls.

- Speed up is coming up speedily

Why Computerized College Data Management System?

Speed up Networks Software College was actually established in the year 2002 March 17th on Hope College near Mani's Theatre. The official address was No126, Thulasiammal layout, Opp to Mani's theatre with only two systems as a home-based application development center. Later it developed as the student project Centre with lot of MBA's and Polytechnic students were migrated by the internal marketing of the three staff who becomes the directors of the speed up networks.

Man is a social animal and has endless wants and needs. The days of the primitive man are gone. These days when survival meant just food, clothing and shelter. Technology has changed the ways we live. The invention of currency has ushered in a new

breed of humans. Most business transactions are clinched by fiscal exchanges.

To sustain them, people put in hours of work. The average adult spends approximately one-third of his or her life working. Business is booming. A considerable portion of the expenditure of the business is on the compensation given to its employees. Therefore, it becomes necessary for an organization to maintain perfect and accurate record. For this we need a computerized College data management system.

Perfect ness is the key to work. It is very important from the point of view of the organization as well as for the college that the record is maintained about the college's students and teachers error free. So, speedier and accurate maintenance of the records becomes a matter of importance. Automation does this to a large extent.

As we know that today is the world of computers and it has entered in the each and every phase of everyday life. Computer plays an important role in day-to-day   work. Hence today is the day of computers.

The use of computers in the field of management of information is well known to us. The use of computers in the university management system provides following benefits over manual system

1.) Availability

It gives us that information which was not provided by the manual system.

2.) Timeliness

Provides information (output) in less time.

3.) Accuracy

Using computer, we will get the information more accurate rather than the manually calculated and manual records information.

4.) Completeness

Computer never gives us incomplete information. We will always get the complete and full information using the computer.

5.) Meaningful and action oriented

Whatever the work we will provide the computer to do, computer works on only that particular work. It means computer always do a meaningful and action-oriented work for the user.

6.) Commensurate

Whatever the format (output) is designed for a particular program by the computer should be in such a manner that co-relates with the format of other information groups.

"A College Data Management System handles all information necessary related to college students and teachers too." The system must maintain files of each of the individual college student and teacher record, provide up to date the information, print outputs on information related to the University.

In addition, the system must have checks & controls that prevent fraudulent use of payroll funds.

A good College data management system will process input data faster and reduce time, while:

- Assuring management control in making certain that output is correct.
- Generally useful reports at little or no incremental cost.
- Project is handled with the oops concept.

Main Goal of the Project

The main objective of the existing system is to provide a user-friendly interface. The system, which is proposed, now computerizes all the details that are maintained manually. Once the details are fed into the computer there is no need for various persons to deal with separate sections. Only a single person is enough to maintain all the reports. The security can also be given as per the requirement of the user.

- Large volumes of data can be stored with the case.

- Maintenance of the file is flexible.

- Records stored are updated now and then.

- Stored data and procedures can be easily edited.🐧

- Less manpower required.

Objectives of the Project

My project **"COLLEGE DATA MANAGEMNT SYSTEM"** maintains detailed records of all the teachers and Students. This system not only stores the data of all teachers and student but also protect these important data by password. By doing this no one can access these data without password. This way we can access data and retrieve data very easily and fastly. There is no need of Record Books to finding details about teachers and what subject he/she teaches and it also gives complete information's about all the students studying in this college.

College data management system is to provide an easy way not only to automate all functionalities of a college, but also to provide full functional reports to top management of college with the finest of details about any aspect of college. We are committed to bring the best way of management in the various forms of **College data management system.**

We understand that **college data management system** in not a product to be sold, it is a bridge between the College and Students. So, we can say the Core purpose of designing "**College Management System"** is to manage the task related to the

college students/employees and to reduce time to searching of appropriate candidates in college view.

Drawbacks with Existing System

- Time Consuming.
- Less Data Security.
- More paper works are to be done.
- No view the generation facility.
- No report generation.

Advantages of the Proposed System

- Less time consuming.
- Less paper Work.
- Query can be done easily
- It does not require an expert hand.
- It is fully user friendly.
- Faster Access of information.

Following are the benefits for using College Data Management System :

For Employees:

- Easy to create any kind of certificate.

- Easy to query all related details of student and employee.

- Easy to generate payroll of individual employee.

For College:

- Collective records of students of all the branches.

- Collective records of employees of all departments.

- Easy approach to find the detail information for any student/employee.

- Easy to handle all functionality of college.

- Easy to manage all actions (generating attendance report, fee report etc).

- All information can be synchronized in one place. And distribute to a particular department to manage properly.

- This is beneficial for both students/employees only in the way that they Can get all previous or current information's when they need.

Tools/Platforms and Languages Used

Hardware Configuration

Main Memory: 128 MB RAM

HDD: 20 GB

FDD: 1.44 MB

SVGA Color monitor
Logitech mouse
105 keys keyboard

Software

Operating System: WINDOWS 7, 8, 10, XP

Programming Language: C++

Documentation: MS-WORD

Backup media: Hard Disk Backup

Why using C++

Developments in software technology continue to be dynamic. New tools and techniques are announced in quick succession. This has forced the software engineers and industry to continuously look for new approaches to software design and development, and they are becoming more and more critical in

view of the increasing complexity of software systems as well as the highly competitive nature of the industry.

These rapid advances appear to have created a situation of crisis within the industry. The following issues need to be addressed to face this crisis:

- How to represent real-life entities of problems in system design?
- How to design systems with open interfaces?
- How to ensure reusability and extensibility of modules?
- How to develop modules that are tolerant to any changes in future?
- How to improve software productivity and decrease software cost?
- How to improve the quality of service?
- How to manage the time schedules?
- How to industrialize the software development process?

Many software products are either not finished, or not used, or else are delivered with major errors.

To reduce such errors software technology evolution gradually increases. Since, the invention of the computer, many programming approaches has been tried. These include techniques such as modular programming and structured programming.

Procedure-Oriented Programming

Conventional programming, using high-level languages such as COBOL, FORTRAN and C, is commonly known as procedure-oriented programming (POP).

Problems with POP

- In the procedure-oriented approach, the problem is viewed as a sequence of things to be done such as reading, calculating and printing.
- In a large program it is very difficult to identify what data is used by which function.
- Another serious drawback with the procedural approach is that it does not model real world problems very well. This is because functions are action oriented and do not really corresponds to the elements of the problem

Object–Oriented Programming

The major motivating factor in the invention of object-oriented approach is to remove some of the flaws encountered in the procedural approach. OOP treats data as a critical element in the program development and does not allow it to flow freely around the system. It ties data more closely to the functions that operate

on it and protects it from accidental modification from outside functions.

Object – oriented programming is the most recent concept among programming paradigms. We define "object-oriented programming as an approach that provides a way of modularize problems by creating partitioned memory area for both data and functions that can be used as templates for creating copies of such modules on demand.

Characteristics of OOP languages

1. **Object**: Objects are entities, which can exist individually. It has its own properties and methods, where properties define the outlook of the object and methods define their procedures.

2. **Class**: It is a template used to define different objects of same   type.

3. **Encapsulation**: The data and the methods, which operate on the data, are combined and placed in a group, this phenomenon is known as encapsulation, and the group is known   as   the   object.

4. **Abstraction**: It means hiding of the data of one object of a class from another object of the same class.

5. **Inheritance**:   Inheritance is the property by which an existing class can be used to create new classes, by deriving all the properties and methods of the old class to the new class and also adding new properties /methods in the new class. The old class is known as a base class or super class. The new class is known as derived class or sub class.

6. **Polymorphism**:   Polymorphism means the "One interface and multiple methods" i.e. one interface can be used to provide different functionalities.

There are two kinds of polymorphism:

   a. **Compile time polymorphism**: It is also known as early binding, as the interfaces are bind with their methods at compile time. It is accomplished using function overloading and operator overloading.
   b. **Run time polymorphism**:   It is also known as late binding. In run time polymorphism the interface and its method bind at the time of execution. It is accomplished using virtual function.

7. Multiple Inheritances: When two or more classes are used to define a single class, then it is known as multiple inheritance.

Benefits of OOP

Object oriented contributes to solution of many problems associated with the development quality of software products. The new technology promises greater programmer productivity, better quality of software and lesser maintenance cost. The principal advantages are:

- Through inheritance, we can eliminate redundant code and extend the use of existing classes.
- We can build programs from the standard working modules that communicate with one another rather than having to start writing the code from scratch. This leads to saving of development time and higher productivity.
- The principle of data hiding helps the programmer to build secure programs that cannot be invaded by code in other parts of the program
- It is possible to have map objects in the problem domain to those in the program.
- It is easy to partition the work in a project based on objects.
- The data centered design approach enables us to capture more details of a model in implemental form,

- Object-oriented systems can be easily upgraded from small to large systems.
- Message passing techniques for communication between objects make the interface descriptions with external systems much simpler.
- Software complexity can be easily managed.

C++ Program for College Data Management System

SOURCE CODE

```cpp
#include <iostream>

#include <fstream>

#include <string>

#include <conio.h>

#include <windows.h>

using namespace std;

struct student
{
```

```
        string fname;
        string lname;
        string Registration;
        string classes;
        string addrs;
        string cel_no;
        string blod_grp;
        string session;
        }studentData[50];

        struct teacher
        {
        string fst_name;
        string lst_name;
        string qualification;
        string exp;
        string pay;
        string subj;
        string lec;
        string addrs;
        string cel_no;
        string blod_grp;
        }tech[50];
```

```cpp
int main()
{
int login();
login();

int i=0,j,k=0;
char choice;
string find;
string srch;

while(1)
{
system("cls");
system("color 02");
cout<<"\n\n\n\n\n\n\t\t\t\t\t\t\t\t\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\";
cout<<"\n\n\t\t\t\t\t\t\t\t   COLLEGE DATA MANAGEMENT";
cout<<"\n\n\t\t\t\t\t\t\t\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\";
cout<<"\n\n\n\n\t\t\t\t\t\t\t\t\t::SELECT  YOUR  CHOICE  FIRST::\n\n\n";
cout<<"\t\t\t\t\t\t\t\t1. STUDENT INFORMATION"<<endl;
cout<<"\t\t\t\t\t\t\t\t2. TEACHER INFORMATION"<<endl;
cout<<"\t\t\t\t\t\t\t\t3. EXIT"<<endl;
cout<<"\n\n\t\t\t\t\t\t\t\tEnter your choice: ";
```

```cpp
cin>>choice;

system("cls");

switch(choice)
{

case '1':
{
while(1)
{
system("cls");
system("color 06");
cout<<"\n\n\n\t\t\t\t\t\t\t\t\t        STUDENT'S   INFORMATION   AND   BIODATA SECTION\n\n\n\n\n";
cout<<"\t\t\t\t\t\t\t1. CREATE NEW ENTRY\n";
cout<<"\t\t\t\t\t\t\t2. FIND AND DISPLAY DETAILS\n";
cout<<"\t\t\t\t\t\t\t3. BACK\n";
cout<<"\n\n\t\t\t\t\t\t\tEnter your choice: ";
cin>>choice;

switch (choice)

{
case '1':
```

```cpp
{
ofstream f1("student.txt",ios::app);

system("CLS");

system("color 37");

cout<<"\n\n\t\t\t\t\t\t\t\t\tNEW ENTRY SECTION\n\n\n";

cout<<"\t\t\t\t\tEnter First name:: ";

cin>>studentData[k].fname;

cout<<"\n\t\t\t\t\tEnter Last name:: ";

cin>>studentData[k].lname;

cout<<"\n\t\t\t\t\tEnter Registration number:: ";

cin>>studentData[k].Registration;

cout<<"\n\t\t\t\t\tEnter class:: ";

cin>>studentData[k].classes;

cout<<"\n\t\t\t\t\tEnter Address:: ";

cin>>studentData[k].addrs;

cout<<"\n\t\t\t\t\tENTER Contact No.:: ";

cin>>studentData[k].cel_no;

cout<<"\n\t\t\t\t\tEnter Blood Group:: ";

cin>>studentData[k].blod_grp;

cout<<"\n\t\t\t\t\tEnter session:: ";

cin>>studentData[k].session;


f1<<studentData[k].fname<<endl<<studentData[k].lname<<endl<<studentData[k].Registration<<endl<<studentData[k].classes<<endl
```

```cpp
<<studentData[k].addrs<<endl<<studentData[k].cel_no<<endl
<<studentData[k].blod_grp<<endl<<studentData[k].session<<endl;

Sleep(500);

system("cls");

f1.close();

}

continue;

case '2'://Display data

{

ifstream f2("student.txt");

system("CLS");

cout<<"\n\t\t\t\t\t\t\t\t\t   DISPLAY STUDENT'S ENTRY\n\n\n";

cout<<"\n\t\t\t\t\tEnter First name :: ";

cin>>find;

cout<<endl;

int notFound = 0;

for( j=0;(j<i)||(!f2.eof()));j++)

{

getline(f2,studentData[j].fname);

if(studentData[j].fname==find)

{
```

```cpp
notFound = 1;

cout<<"\n\t\t\t\t\t\t\t\t\t~::DETAILS::~\n";

cout<<"\n\t\t\t\t\tFirst Name: "<<studentData[j].fname<<endl;

getline(f2,studentData[j].lname);

cout<<"\n\t\t\t\t\tLast Name: "<<studentData[j].lname<<endl;

getline(f2,studentData[j].Registration);

cout<<"\n\t\t\t\t\tRegistration                        Number:
"<<studentData[j].Registration<<endl;

getline(f2,studentData[j].classes);

cout<<"\n\t\t\t\t\tClass: "<<studentData[j].classes<<endl;

getline(f2,studentData[j].addrs);

cout<<"\n\t\t\t\t\tAddress: "<<studentData[j].addrs<<endl;

getline(f2,studentData[j].cel_no);

cout<<"\n\t\t\t\t\tContact No.: "<<studentData[j].cel_no<<endl;

getline(f2,studentData[j].blod_grp);

cout<<"\n\t\t\t\t\tBlood                           Group:
"<<studentData[j].blod_grp<<endl;

getline(f2,studentData[j].session);

cout<<"\n\t\t\t\t\tSession:
"<<studentData[j].session<<endl<<endl;
}


}
if(notFound == 0)
{
```

```cpp
cout<<"\n\n\t\t\t\t\tNO   SUCH   STUDENT   DETAILS   AVAILABLE
"<<endl;
}
f2.close();
cout<<"\n\t\t\tPress any key to back ";
getch();
}
continue;

case '3':
{
break;
}
}

break;
}
continue;

}

case '2':
{
while(1)
{
```

```cpp
system("cls");

system("color 06");

cout<<"\n\n\n\t\t\t\t\t\t\t	TEACHER'S	INFORMATION	AND
BIODATA SECTION\n\n\n\n";

cout<<"\t\t\t\t\t\t\t\t1. ADD NEW TEACHER DETAIL\n";

cout<<"\t\t\t\t\t\t\t\t2. FIND AND DISPLAY DETAILS\n";

cout<<"\t\t\t\t\t\t\t\t3. BACK\n";

cout<<"\n\n\t\t\t\t\t\t\tEnter your choice: ";

cin>>choice;


switch (choice)

{

case '1':

{

ofstream t1("teacher.txt",ios::app);

system("CLS");

system("color 02");

cout<<"\n\n\t\t\t\t\t\t\t\t\tNEW ENTRY SECTION";

cout<<"\n\n\n\n\t\t\t\t\t\t\tEnter First name:: ";

cin>>tech[i].fst_name;

cout<<"\n\t\t\t\t\t\t\tEnter Last name:: ";

cin>>tech[i].lst_name;

cout<<"\n\t\t\t\t\t\t\tEnter Qualification:: ";

cin>>tech[i].qualification;

cout<<"\n\t\t\t\t\t\t\tEnter Experiance(year):: ";
```

```cpp
cin>>tech[i].exp;
cout<<"\n\t\t\t\t\t\t\tEnter Subject:: ";
cin>>tech[i].subj;
cout<<"\n\t\t\t\t\t\t\tEnter Lecture(per Week):: ";
cin>>tech[i].lec;
cout<<"\n\t\t\t\t\t\t\tEnter Pay:: ";
cin>>tech[i].pay;
cout<<"\n\t\t\t\t\t\t\tAddress:: ";
cin>>tech[i].addrs;
cout<<"\n\t\t\t\t\t\t\tEnter Phone Number:: ";
cin>>tech[i].cel_no;
cout<<"\n\t\t\t\t\t\t\tEnter Blood Group:: ";
cin>>tech[i].blod_grp;

t1<<tech[i].fst_name<<endl<<tech[i].lst_name<<endl
<<tech[i].qualification<<endl<<tech[i].exp<<endl<<tech[i].subj<<endl<<tech[i].lec
<<endl<<tech[i].pay<<endl<<tech[i].addrs<<endl<<tech[i].cel_no<<endl<<tech[i].blod_grp<<endl;
Sleep(500);
system("cls");
t1.close();
}

continue;
```

```cpp
case '2'://Display data
{
ifstream t2("teacher.txt");
system("CLS");
cout<<"\n\n\t\t\t\t\t\t\t\t    DISPLAY TEACHER'S ENTRY\n";
cout<<"\n\n\n\t\t\t\t\tENTER FIRST NAME : ";
cin>>find;

cout<<endl;
int notFound = 0;
for( j=0;((j<i)||(!t2.eof()));j++)
{

getline(t2,tech[j].fst_name);

if(tech[j].fst_name==find)
{
notFound = 1;
cout<<"\n\t\t\t\t\t\t\t\t\t~::DETAILS::~\n";
cout<<"\n\t\t\t\t\tFirst name: "<<tech[j].fst_name<<endl;
getline(t2,tech[j].lst_name);
cout<<"\n\t\t\t\t\tLast name: "<<tech[j].lst_name<<endl;
getline(t2,tech[j].qualification);
cout<<"\n\t\t\t\t\tQualification: "<<tech[j].qualification<<endl;
```

```cpp
getline(t2,tech[j].exp);
cout<<"\n\t\t\t\tExperience: "<<tech[j].exp<<endl;
getline(t2,tech[j].subj);
cout<<"\n\t\t\t\tSubject: "<<tech[j].subj<<endl;
getline(t2,tech[j].lec);
cout<<"\n\t\t\t\tLecture (per Week): "<<tech[j].lec<<endl;
getline(t2,tech[j].pay);
cout<<"\n\t\t\t\tPay: "<<tech[j].pay<<endl;
getline(t2,tech[j].addrs);
cout<<"\n\t\t\t\tAddress: "<<tech[j].addrs<<endl;
getline(t2,tech[j].cel_no);
cout<<"\n\t\t\t\tPhone Number: "<<tech[j].cel_no<<endl;
getline(t2,tech[j].blod_grp);
cout<<"\n\t\t\t\tBlood Group: "<<tech[j].blod_grp<<endl;
}

}
t2.close();
if(notFound == 0)
{
cout<<"\n\t\t\tNO SUCH TEACHER AVAILABLE"<<endl;
}
cout<<"\n\n\t\t\tPress any key to back";
getch();
```

```cpp
                    }

                    continue;

                    case '3':
                    {
                    break;
                    }


                    }
                    break;
                    }
                    continue;
                    }
                    case '3':
                    {
                    cout<<"\n\n\n\n\n\t\t\t\t\t\t\t\t\t~~GOODBYE~~";
                    cout<<"\n\t\t\t\t\t\t\t\tTHANKS FOR USING COME BACK AGAIN";
                    break;
                    }
                    }
                    break;
                    }
                    }
```

```cpp
int login()
{
system("color 34");
string pass ="";
char ch;
cout<<"\n\n\n\n\n\n\n\n\t\t\t\t\t\t\t\t\t\bCOLLEGE                DATA MANAGEMENT SYSTEM \n\n";
cout<<"\t\t\t\t\t\t\t\t\t-----------------------------";
cout<<"\n\t\t\t\t\t\t\t\t\t\b    LOGIN \n";
cout<<"\t\t\t\t\t\t\t\t\t-----------------------------\n\n\n";
cout << "\t\t\t\t\t\t\t\t\t\bPLEASE ENTER PASSWORD: ";
ch = _getch();
while(ch != 13)
{
pass.push_back(ch);
cout << '*';
ch = _getch();
}
if(pass == "vivo")
{
cout<<"\n\n\n\t\t\t\t\t\t\t       LOADING PLEASE WAIT  ";
Sleep(500);
cout << "\\\\" ;
Sleep(500);
```
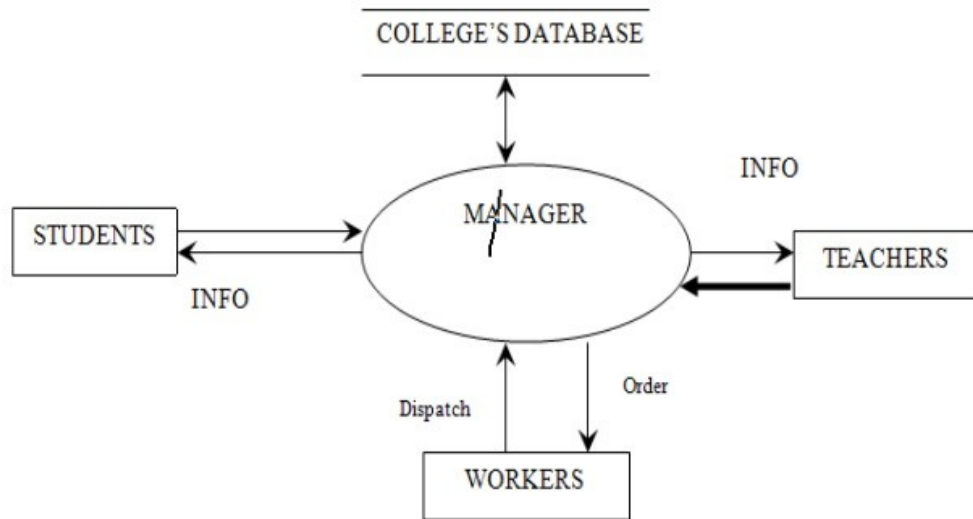
```cpp
cout << "//";
Sleep(500);
cout << "\\\\";
Sleep(500);
cout << "//";
Sleep(500);
cout << "\\\\";
Sleep(500);
cout << "//";
Sleep(500);
cout << "\\\\";
cout << "\n\n\n\t\t\t\t\t\t\t\tLOGGED IN SUCCESSFULLY! \n";
Sleep(500);
system ("CLS");
}
else
{
cout<<"\n\n\n\t\t\t\t\t\t\t     LOADING PLEASE WAIT  ";
Sleep(500);
cout << "\\\\" ;
Sleep(500);
cout << "//";
Sleep(500);
cout << "\\\\";
```
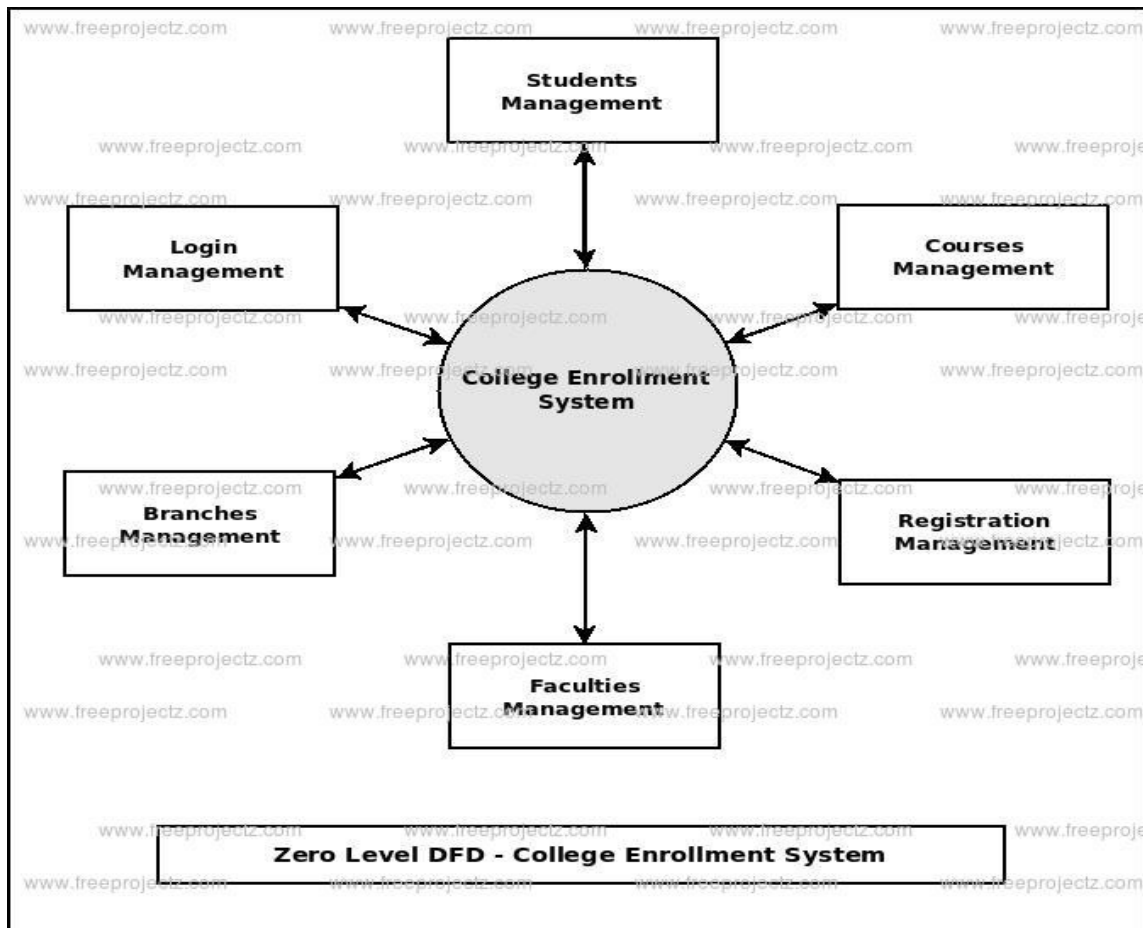
```
Sleep(500);

cout << "//";

Sleep(500);

cout << "\\\\";

Sleep(500);

cout << "//";

Sleep(500);

cout << "\\\\";

cout << "\n\n\n\t\t\t\t\t\t\t\t\t\bWRONG    PASSWORD    PLEASE
RETRY\n\n";

Sleep(950);

system("CLS");

login();

}

}
```

Flow Diagram Of this System

DATA FLOW DIAGRAM

COLLEGE'S DATABASE

MANAGER

STUDENTS

TEACHERS

INFO

INFO

WORKERS
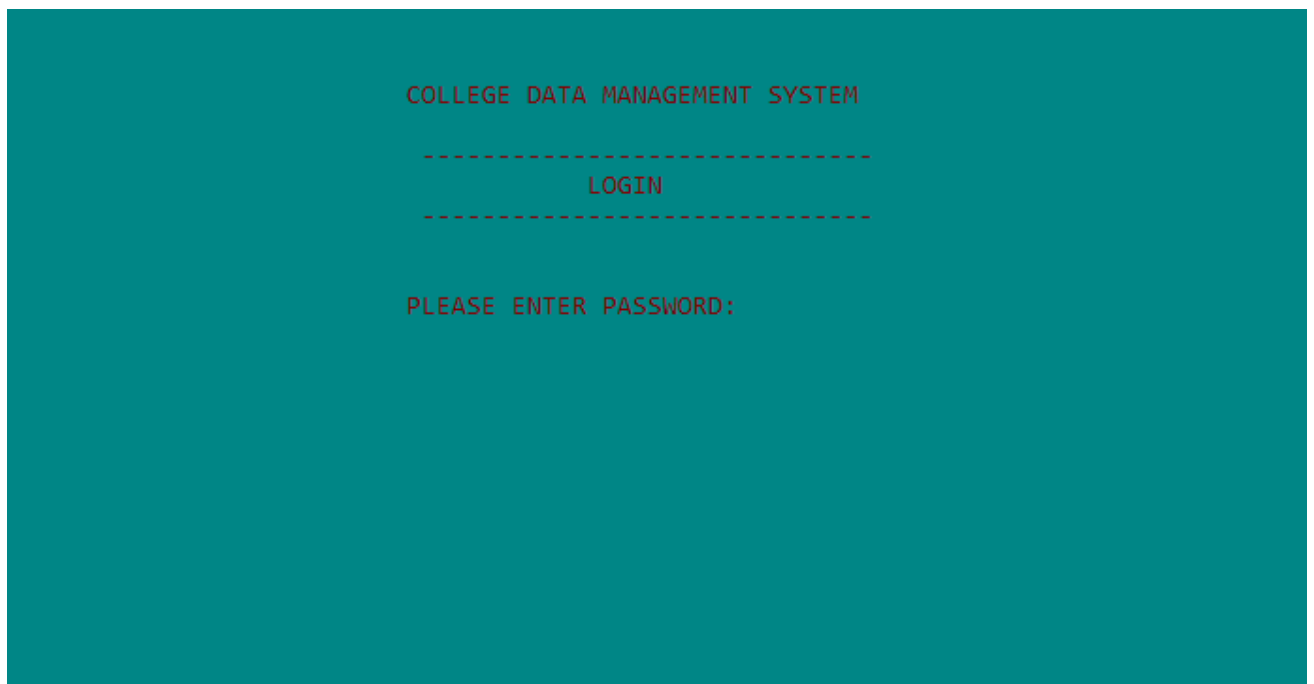
Dispatch

Order

Zero Level DFD - College Enrollment System

Output Screens

There will be different types of output screen such as Login screen, Main menu, Teachers section, Entry for new teacher, find details about teachers, Students Section, Entry of new Students, Find details about students.

```
COLLEGE DATA MANAGEMENT SYSTEM

-------------------------------
                LOGIN
-------------------------------


PLEASE ENTER PASSWORD:
```

```
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

          COLLEGE DATA MANAGEMENT

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\



           ::SELECT YOUR CHOICE FIRST::



      1. STUDENT INFORMATION
      2. TEACHER INFORMATION
      3. EXIT


      Enter your choice: _
```

```
          STUDENT'S INFORMATION AND BIODATA SECTION



      1. CREATE NEW ENTRY
      2. FIND AND DISPLAY DETAILS
      3. BACK


      Enter your choice:
```

```
                                    NEW  ENTRY  SECTION

Enter First name:: Divya

Enter Last name:: Bhadani

Enter Registration number:: 205118017

Enter class:: BCA(3rd_yr)

Enter Address:: N/A

ENTER Contact No.:: N/A

Enter Blood Group:: N/A

Enter session:: 2016-2019
```

```
                              DISPLAY STUDENT'S ENTRY


          Enter First name :: Divya


                                    ~::DETAILS::~

          First Name: Divya

          Last Name: Bhadani

          Registration Number: 205118017

          Class: BCA(3rd_yr)

          Address: N/A

          Contact No.: N/A

          Blood Group: N/A

          Session: 2016-2019


     Press any key to back
```

```
                    NEW ENTRY SECTION



        Enter First name:: Divya

        Enter Last name:: Bhadani

        Enter Qualification:: BCA

        Enter Experiance(year):: 1

        Enter Subject:: C

        Enter Lecture(per Week):: 2

        Enter Pay:: 25420

        Address:: N/A

        Enter Phone Number:: N/A

        Enter Blood Group:: N/A
```

DISPLAY TEACHER'S ENTRY

ENTER FIRST NAME : Divya

~::DETAILS::~

First name: Divya

Last name: Bhadani

Qualification: BCA

Experience: 1

Subject: C

Lecture (per Week): 2

Pay: 25420

Address: N/A

Phone Number: N/A

Blood Group: N/A

Press any key to back

Testing

Testing is the process of exercising or evaluating a system or system component by manual or automated means to verify that it satisfies the specified requirements. Normally, most of the testing and debugging is done after the system has been implemented. A large percentage of errors are discovered during testing originates in the requirement and design phase. The techniques that have been proposed for unit testing include the following:

1. **Path testing**: Each possible path from input to output is traversed once.
2. **Branch testing**: Each path must be traversed at least once.
3. **Functional testing**: Each, functional decomposition is tested at least once.
4. **Special value testing**: Testing for all values assumed to cause problems.

All the modules that have been developed before and tested individually are put together (integrated) in this phase and tested as a whole system. After doing this in the project will be almost ready to be delivered.

Cost and Benefit

System cost can be sub-divided into the following categories:

1.   Development   Cost
            2.   Operating   Cost
3.   Intangible Cost

Development Cost
- The Salaries of the system analyst and the computer programmer who designed the entire computerized system.
- Cost of commenting and preparing data files and preparing system manuals and other supportive documents.
- Cost of preparing new or expanded computer facilities.
- Cost of testing and documenting the system, Training employees and other standard cost.
- Cost of stationary, system maintenances etc.

Operating Cost
- Cost of Hardware/Software, Rental or Depreciation cost.
- The salaries of the technical person such as computer operator,

- Other data processing personnel who will operate the new system.
- The salaries of system analyst and computer programmers who will perform the system maintenance function.
- The cost of input data preparation and control.
- Cost of data processing suppliers.
- Cost of maintaining the proper physical facilities, including power, air- conditioning, appropriate furniture, power backup facilities etc.
- Overhead Charges of the business firms.
- Cost of storing the data in machine code form.
- Launching cost like staff training, file communication and system training.

Intangible cost

- The development of the system may disrupt the activities of an organization and cause a loss of employee productivity.
- Comparativeness with the other firm with respect to the productivity due to computerization.
- Customer sales and goodwill may be lost by error made during the installation of new system.

Benefits

The benefits which results from developing new or improved information systems that utilizes the resources can be subdivided

as   follows:

1. **Tangible Benefits.**

2. **Intangible Benefits**

Tangible Benefits

Tangible Benefits are those benefits that can be accurately measured and are directly related to the introduction of a new system such as decrease in the data processing cost.

Intangible Benefits

Intangible Benefits are more difficult to estimate and justify usually requiring the skill of the particular management concern, the cost of input data preparation and control.

Benefits that can results from the development of the computerized system are summarized below.

- Increase in sales and profits.
- Decrease in data processing costs.
- Decrease in operating costs.
- Decrease in required investments.

4

- Increase operational ability and efficiency.
- New and improved information availability.
- Improved abilities in computation and analysis.
- Reduction in employees such as clerical aspects.
- Elimination of some specific costs, e.g., postage, stationary, office machinery, etc.
- Reduction in cost and effort due to improved procedures such as data capture and avoiding the data validation.

Future Scope of the Project

Normally a Banking Organization covers different area of business. However this project College Data MANAGMENT SYSTEM only covers the implementation of the student, college's records and their various activities. The data accumulated in this project is used periodically to provide different types of managerial information.

The future applications of this College Data MANAGEMENT SYSTEM are:

I. This overall project is basically written in function and can be used in conjunction with other program, for future development for this system.

II. We have provided many data function through which any one can know about any STUDENT/TEACHER giving COLLEGE/TEACHER First name.

III. The project is using the modern trend OOPs that gives a better design to the software, which help in maintaining code in terms of reusability, modifiability, etc. These attributes a quit wanting in today's complex software scenario. OOPs giving a better designs objective taken this problem and provide better design objective.

IV. This software is design with OOPs so we choose C++ language, which provide all features which will be needed in future. This software is having sounding economic aspect with the motion of controlling the local market.

V. Cost of our project is comparatively low.

After using College Data MANAGMENT SYSTEM the user will find that in the package provided to them has some of the facilities are slightly different than any other packages. This project omits something or adds some additional minor details as and when required by the user**.**