

Student Record System

A Report for the Evaluation 3 of Project 1

Submitted by

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 $\begin{tabular}{ll} \it in partial fulfillment for the award of the degree \\ \it of \\ \it Bachelor of Computer Application \\ \end{tabular}$

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

Under the Supervision of

"Dr. S. Annamalai",

APRIL / MAY- 2020

SCHOOL OF COMPUTING AND SCIENCE AND ENGINEERING

BONAFIDE CERTIFICATE

Certified that this project report "Student Record System" is

The bonafide work of "Pushpendra Kushwaha who carried out

The project work under my supervision

SIGNATURE OF HEAD

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TABLE OF CONTENTS

- 1. Abstract
- 2. Introduction
- 3. Existing System
- 4. Proposed system
- 5. Implementation or architecture diagrams
- 6. Output / Result / Screenshot
- 7. Conclusion/Future Enhancement
- 8 . References

Abstract

Student Record System can be used by education institutes to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solve using this project.

Throughout the project the focus has been on presenting information in an easy and intelligible manner. The project is very useful for those who want to know about Student Information Management Systems and want to develop software's websites based on the same concept. The project provides facilities like online registration and profile creation of students thus reducing paperwork and automating the record generation process in an educational institution.

This project "Student Record System" provides us a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using this project.

Student Record System can be used by education institutes to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using this project

Without Student Record System, managing and maintaining the details of the student is a tedious job for any organization. Student Information system will store all the details of the students including their background information, educational qualifications, personal details and all the information related to their resume

Introduction

The objective of Student Record System is to allow the administrator of any organization to edit and find out the personal details of a student and allows the student to keep up to date his profile. It'll also facilitate keeping all the records of students, such as their id, name, mailing address, phone number, DOB etc. So all the information about an student will be available in a few seconds. Overall, it'll make Student Information Management an easier job for the administrator and the student of any organization. The main purpose of this SRS document is to illustrate the requirements of the project.

As we know that, many Colleges, Institutes and academic centers work in manual mode for their day to day operations. Whether it is registration of students, faculties or other operations. All such operations are handled on files or registers manually. This project tends to use latest advancements in information technology and provide a central web solution for automating some basic mundane tasks. This will help many stakeholders of a college, institute or school to quickly do some basic operations instead of doing same manually.

This project intends to automate some of the basic operations of an institute or college or a school. Scope would be to provide basic functionalities using a web application so that that manual process can be automated. Main functionalities involved would be around actors such as Students, Faculties & System Admin. Basic operations will be allowed for these actors along with listing & search capability.

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manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using this project.

a Student Record System, managing and maintaining the details of the student is a tedious job for any organization. Student Record system will store all the details of the students including their background information, educational qualifications, personal details

help students and faculties to know about other students or faculties.

Users will be able to check department wise other students and faculties.

System will also provide option to search a particular name across departments and all profiles.

Management or admin will be able to provide important updates and notifications on the home page which will help users to get details of such events.

An important outcome of the preliminary investigation is the determination that system requested is feasible. In our case, System will allow registration of Students and faculties for which data will be stored in database. Records in DB will be used for authentication, listing and search functionality. Further there are three aspects in the feasibility study portion of the preliminary investigation

Economic Feasibility

Are there sufficient benefits in creating the system to make the costs acceptable? Or, are the costs of not creating the system so great that it is advisable to undertake the project? These are the important questions to be answered in economic feasibility. Proposed system will not face any economic constraint as it will be developed by students only. And it will help to automate manual processing, which will save time and money. This will provide economic benefits.

Operational Feasibility

Will the system be used if it is developed and implemented? Will there be resistance from users that will undermine the possible application benefits? When we look from this perspective, we don't see any risk in implementing and making it operational. This project will help everyone, as

it is planned to be more reliable, maintainable, affordable and producible.

Technical Feasibility

Can the work for the project be done with current equipment, existing software technology and available personnel? These are the questions which need to be answered to check Technical feasibility. Project will be developed using C++ framework with Angular as Frontend and database as MySQL which will store details related to this project. There are basic requirement of hardware to run this application. This application will be web application so this application can be accessed by using any device like (Personal Computers, Laptop and with some hand held devices) provided they are on same network.

Existing System

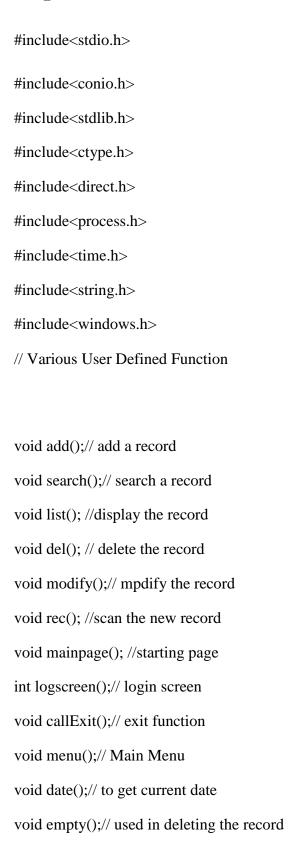
system has come up with many functionalities for educational institutions the student progress and managing attendance. It helps both student and guardian to keep track of student progress without visiting to the college. It also notifies student and guardian during the time of important events which are happening in institution. One more feature is guardian get alerted whenever student get failed in the exam or student not able to meet the expected attendance average. Student Information Report System (SIRS) is application software and which has intention to begin a conductive and direct interchanging the statistics in a secure platform with students, faculties, parents and the college/school administration. The information has the particulars(like register number sem, date-of-birth, sex, parent phone number, address, parent name ,etc.) invade to the system by the faculties. All these particulars is stored in the database. SIRS application is trouble free to us in schools, colleges, universities, and any other educational institutions. It can be customized as per the need. It can be used in private and government educational institutions also. SIRS application is an internet based application we can login to the system from anywhere irrespective of geographical area it will give seamless navigation. The paper provides the particulars to carry out the performance, management and decision-making functions of enterprises or organizations.

Attendance is part of any system to keep track of the particular person. It is mandatory process in educational system which directly reflects the student progress. In educational institutes attendance management is normally a manual process. There is enormous grow in the software industry which has privileged colleges to maintain the attendance system by using gadgets which is the best way. As we are using the smartphones we not require maintaining attendance register. It can be easily done in mobile application. Faculty will be going to take the attendance when class gets started. will initially login to the system through mobile application. Once attendance has been taken successfully for the class it will sent to sever through GPRS. The faculties can also do the necessary functions like registering new students, deleting the information about a particular student, modifying the information regarding the student etc. The main intention of this process to reduce the risk of manual efforts.

Proposed system

This program was work offline and do the task was given from user. The Student Information System is aimed towards recording considerable number of student records and needs online assistance for managing records of students. Website should be user-'quick to learn' and reliable website for the above purpose. Student Information System is intended to be a stand-alone product and should not depend on the availability of other website. The system will also have an administrator who has full-fledged rights with regards to performing all actions related to control and management of the website. An important outcome of the preliminary investigation is the determination that system requested is feasible. In our case, System will allow registration of Students and faculties for which data will be stored in database. Records in DB will be used for authentication, listing and search functionality. Further there are three aspects in the feasibility study portion of the preliminary investigation Economic Feasibility Are there sufficient benefits in creating the system to make the costs acceptable? Or, are the costs of not creating the system so great that it is advisable to undertake the project? These are the important questions to be answered in economic feasibility. Proposed system will not face any economic constraint as it will be developed by students only. And it will help to automate manual processing, which will save time and money. This will provide economic benefits. Operational Feasibility Will the system be used if it is developed and implemented? Will there be resistance from users that will undermine the possible application benefits? When we look from this perspective, we don't see any risk in implementing and making it operational. This project will help everyone, as it is planned to be more reliable, maintainable, affordable and producible. Technical Feasibility Can the work for the project be done with current equipment, existing software technology and available personnel? These are the questions which need to be answered to check Technical feasibility. Project will be developed using C++ framework with Angular as Frontend and database as MySQL which will store details related to this project. There are basic requirement of hardware to run this application. This application will be web application so this application can be accessed by using any device like (Personal Computers, Laptop and with some hand held devices) provided they are on same network

Implementation or architecture diagrams



```
void title();// title bar
void delay(unsigned int mseconds)
{
  clock_t goal = mseconds + clock();
  while (goal > clock());
}
/*declaring structure*/
struct information
{
 char ID[15]; //Student ID
 char name[30]; //Student name
 char cls[10]; //Class of Student
 char Branch[35]; //Branch of class
 char address[50]; //Address of Student
 char email[30]; //Email of Student
 char rollno[15]; //Roll No Of a Student
 char phoneno[15]; //Phone No Of a Student
};
struct information c;
FILE *fpt;
void main()
```

```
system("cls");
 mainpage();
 logscreen();
}
void date()
{
 time_t T= time(NULL);
 struct tm tm = *localtime(&T);
 printf("\langle n \rangle n \rangle");
 printf("\t\t\t\t\ Date:\%02d/\%02d/\%04d\n",tm.tm\_mday, tm.tm\_mon+1, tm.tm\_year+1900);
}
void title()
{
 printf("\langle n \rangle n \rangle");
 printf("\t\t\t\t');
 printf("\n");
 printf("\t\t\t\ ----\n");
 printf("\t\t\t | STUDENT RECORD SYSTEM|\n");
 printf("\t\t\t\ ----\n");
 printf("\langle n \rangle n");
 printf("\t\t\t');
```

```
}
void mainpage()
{
 int process=0;
 system("cls");
 date();
 printf("\n");
 printf("\t\t\t -----\n");
 printf("\t\t\t |STUDENT RECORD SYSTEM|\n");
 printf("\t\t\t\ ----\n");
 printf("\n\n");
 printf("\t\t\t");
 printf("Prepared By ");
 printf(":");
 printf(" Pushpendra Kushwaha");
 printf("\n\n");
 printf("\t\t\t");
 printf("Mini Project ");
 printf(":");
 printf(" Student Management System");
 printf("\n\n");
 printf("\t\t\t");
 printf("Guided By
                     ");
```

```
printf(":");
 printf(" Dr.S.Annamalai");
 printf("\n\n");
 printf("\t\t\t\ Press Enter to continue.....");
 printf("\langle n \rangle n");
 getchar();
 printf("\t\t\tLoading");
 for(process=0;process<25;process++)</pre>
  delay(150);
  printf(".");
}
int logscreen()
{
 char username[30];
 char password[30];
 int try = 0;
 int true = 1;
 do
  system("cls");
  printf("\n\n\n\n\n\n\n\n\n\n\n\n\n\n);
```

```
printf("Username: ");
scanf("%s",username);
printf("\t\t\t\t');
printf("\n");
printf("\t\t\t\t\t");
printf("Password: ");
scanf("%s",password);
if(strcmp(username, "admin")==0 && strcmp(password, "pass")==0)
  printf("\n\n");
  printf("\t\t\t');
  printf("You are accessed to the system!\n\n");
  printf("\t\t\t\ Press Enter to continue...");
  fflush(stdin);
  getchar();
  menu();
  system("cls");
  getchar();
  true =0;
 else
  system("cls");
  try = try+1;
```

```
printf("\t\t\t\t');
    printf("No. of attempts remain: %d",3-try);
    fflush(stdin);
    getchar();
    if(try>=3)
     printf("\t\t\t\t\t");
     printf("\n");
     printf("\t\t\t");
     printf(" No permission to enter the system!");
     getchar();
     callExit();
     getchar();
 } //END OF ELSE
while(true==1);
}
void menu()
{
```

```
int input;
system("cls");
title();
printf(" 1. Enter new Records\n\n");
printf("\t \t \t \t');
printf(" 2. Modify Records\n\n");
printf("\t\t\t');
printf(" 3. Delete Records\n\n");
printf("\t \t \t \t');
printf(" 4. Search and view Records\n\n");
printf(" 5. Exit\n\n");
printf("\t\t\t");
printf("Choose options:[1/2/3/4/5]:");
fflush(stdin);
scanf("%d",&input);
switch(input)
 case 1:
  system("cls");
  add();
 }
 break;
```

```
case 2:
system("cls");
modify();
getchar();
break;
case 3:
system("cls");
del();
}
break;
case 4:
{
system("cls");
search();
}break;
case 5:
system("cls");
```

```
fflush(stdin);
  printf("\t\t\t');
  printf("Brought To You By code-projects.org");
  printf("\langle n \rangle n \langle n \rangle");
  exit(0);
 break;
 default:
  fflush(stdin);
  printf("\langle n \rangle n \rangle");
  printf("\t\t\t");
  printf(" Invalid input!");
  printf("\n\n");
  printf("\t\t\t');
  printf("Press Enter to choose again...");
  getchar();
  menu();
void add()
 char input;
```

```
system("cls");
printf(" ");
printf("\n");
printf("\t\t\t');
printf("\n");
printf("\t\t\t');
printf("\n");
printf("\t\t\t");
printf("\n");
printf("\n\n\n");
printf("\t\t\t");
printf("Enter The Information Below: \n\n");
printf("\t\t\t');
printf("Enter ID
                       : ");
fflush(stdin);
scanf("%s",c.ID);
printf("\n\n");
printf("\t\t\t');
printf("Full Name
                      : ");
fflush(stdin);
scanf("%[^\n]s",c.name);
printf("\n\n");
printf("\backslash t \backslash t \backslash t");
printf("Class
                     : ");
```

```
fflush(stdin);
scanf("%[^\n]s",c.cls);
printf("\n\n");
printf("\t\t\t');
printf("Branch
                 : ");
fflush(stdin);
scanf("%[^\n]s",c.Branch);
printf("\langle n \rangle n");
printf("\t\t\t');
printf("Address
                 : ");
fflush(stdin);
scanf("%[^\n]s",c.address);
printf("\n\n");
printf("Email Address : ");
fflush(stdin);
scanf("%[^\n]s",c.email);
printf("\n\n");
printf("\t\t\t');
printf("Roll No.
                : ");
fflush(stdin);
scanf("%s",c.rollno);
printf("\n\n");
printf("Phone No. : ");
```

```
fflush(stdin);
scanf("%s",c.phoneno);
fflush(stdin);
fpt=fopen("data.txt","a");
fwrite(&c,sizeof(c),1,fpt);
fclose(fpt);
printf("\n\n");
printf("Record added successfully!!");
printf("\n\n");
printf("\t\t\t');
printf("Do you want to add more?(Y/N)");
scanf("%s",&input);
if(input=='Y' || input=='y')
{
 add();
}
else
menu();
getchar();
}
 void callExit()
 {
```

```
system("cls");
printf("\t\t\t\t');
fflush(stdin);
printf("You are out of the System.");
printf("\n\n");
printf("\t\t\t');
printf(" Press Enter to Continue Exit Program...");
getchar();
exit(0);
}
void search()
{
 int ch;
char sid[30];
 system("cls");
 printf("\t\t\t\t\t");
fflush(stdin);
 printf("Enter Full Name: ");
 scanf("%[^\n]s",sid);
 fpt=fopen("data.txt","r");
```

```
while (fread(&c, sizeof(c), 1, fpt)==1)
 if(strcmp(sid,c.name)==0)
 {
   ch=1;
   break;
 }
if(ch==1)
 system("cls");
 printf("\langle n \rangle n \langle n \rangle n \langle n \rangle n");
 printf("\t\t\t\t');
 printf("<<==Search Succesfull==>>");
 fflush(stdin);
 getchar();
 list(); //display the record
 printf("\n\n");
 printf("\t\t\t\t");
 printf("Press Enter For Main Menu...");
 getchar();
 menu();
else
```

```
system("cls");
    getchar();
    printf("\t\t\t\t');
    printf("<<--Record Not Found-->>");
    printf("\n\n");
    printf("Press Enter For Main Menu...");
    getchar();
    menu();
    }
   fclose(fpt);
   }
  void list()
{
  printf(" ");
  printf("\n");
  printf("\t\t\t");
  printf("\t\t\t");
```

```
printf("\n");
printf("\t\t\t");
printf("\n");
printf("\t\t\t');
printf("\tID : % s \n\, c.ID);
printf("\t\t\t");
printf("Full Name : %s ",c.name);
printf("\n\n");
printf("\t\t\t");
printf("Class : %s ",c.cls);
printf("\n\n");
printf("\t\t\t');
printf("Branch : %s ",c.Branch);
printf("\n\n");
printf("\t\t\t');
printf("Address : %s ",c.address);
printf("\n\n");
printf("\t\t\t");
printf("Email Address : %s ",c.email);
printf("\n\n");
```

```
printf("Roll No.
               : %s ",c.rollno);
  printf("\n\n");
  printf("Phone No.
                  : %s ",c.phoneno);
}
  void del()
   FILE *fpt,*temp;
   int ch;
   char sid[30];
   system("cls");
   printf("\t\t\t\t\t");
   printf("Enter Full Name:");
   fflush(stdin);
   scanf("%[^\n]s",sid);
   fflush(stdin);
   printf("\t\t\t\t');
   printf("\n");
```

```
printf("Record Deleted Successfully.\n");
 printf("\n");
 printf("\t\t\t\t');
 printf("Press Enter For Main Menu...");
 getchar();
 menu();
 fpt=fopen("data.txt","r");
 temp = fopen("temp.txt", "w");
 while (fread(\&c, sizeof(c), 1, fpt)==1)
  if(strcmp(sid,c.name)==0)
  {
      fwrite(&c,sizeof(c),1,temp);
  }
 }
 fclose(fpt);
 fclose(temp);
 remove("data.txt");
 rename("temp.txt","data.txt");
 }
}
/*void del()
{
```

```
int ch;
char cno[30];
system("cls");
fpt=fopen("data.txt","r+");
printf("\t\t\t\t');
printf("Enter Full Name:");
fflush(stdin);
scanf("%[^\n]s",cno);
fflush(stdin);
while (fread(&c, sizeof(c), 1, fpt) && strcmp(cno,c.name));
ch=strcmp(cno,c.name);
if(ch!=0)
 system("cls");
 delay(200);
 printf("\t\t\t\t');
 printf("<<--Record Not Found-->>");
 getchar();
 menu();
 }
else //Here the saved record is displayed.
system("cls");
```

```
printf("\n\n\n\n\n\n\n\n");
  printf("t\t\t\t');
  printf("<<==Search Succesfull==>>");
  list(); //display the record
  printf("\n\n");
  printf("\t\t\t\t');
  printf("Press Enter To Delete The Record.....");
  getchar();
  empty(); //this is a Function which will erase the record in memory & NOT physically.
  fseek(fpt, ftell(fpt) - sizeof(c), 0);
  fwrite(&c, sizeof(c), 1, fpt);
  system("cls");
  delay(200);
  printf("t\t\t\t');
  printf("Record Deleted !!!");
  getchar();
 }
 menu();
 fclose(fpt);
}*/
void empty()
 strcpy(c.ID," ");
```

```
strcpy(c.name," ");
    strcpy(c.cls," ");
    strcpy(c.Branch," ");
    strcpy(c.address," ");
    strcpy(c.email," ");
    strcpy(c.rollno," ");
    strcpy(c.phoneno," ");
   }
void modify()
 char mid[30];
 int found=0;
 printf("\t\t\t\t\t");
 fflush(stdin);
 printf("Enter Full Name: ");
 scanf("%[^\n]s",mid);
 fflush(stdin);
 FILE *fpt, *temp;
 temp =fopen("temp.txt","w");
 fpt = fopen("data.txt","r+");
 while(fread(&c, sizeof(c),1,fpt) == 1)
 {
```

```
if(strcmp(mid, c.name) == 0)
  fflush(stdin);
  system("cls");
  printf("\t\t\t\t');
  printf("<<<==Old Record==>>>");
  printf("\n");
  printf("\t\t\t\t');
  list();
  printf("\n\n");
  printf("t\t\t\t');
  printf("Press Enter to modify the record...");
  getchar();
  system("cls");
  rec(); // this will ask to enter new record
  fseek(fpt, ftell(fpt) - sizeof(c),0);
  fwrite(&c, sizeof(c), 1, fpt); //The new name will be added to the record.
  found = 1;
  printf("\n\n");
  printf("\t\t\t\t');
  printf("Record Saved !!!");
```

```
getchar();
 fclose(fpt);
 menu();
if(!found)
  system("cls");
  delay(200);
  fflush(stdin);
  printf("\t\t\t\t");
  fflush(stdin);
  printf("<<--Record Not Found-->>");
  getchar();
  menu();
fclose(fpt);
void rec()
```

}

```
printf(" ");
printf("\n");
printf("\t\t\t");
printf("\n");
printf("\t\t\t");
printf("\n");
printf("\t\t\t");
printf("\n");
printf("\n\n\n");
printf("\t\t\t");
printf("Enter The Information Below: \n\n");
printf("\t\t\t");
printf("\tID : %s\n\n",c.ID);
printf("\t\t\t");
printf("Full Name : ");
fflush(stdin);
scanf("%[^\n]s",c.name);
printf("\n\n");
printf("\t\t\t");
                    : ");
printf("Class
fflush(stdin);
scanf("\%[^{\n}]s",c.cls);
printf("\n\n");
```

```
printf("\t\t\t');
printf("Branch
                     : ");
fflush(stdin);
scanf("%[^\n]s",c.Branch);
printf("\n\n");
printf("\t\t\t');
printf("Address
                  : ");
fflush(stdin);
scanf("%[^\n]s",c.address);
printf("\n\n");
printf("\t\t\t');
printf("Email Address : ");
fflush(stdin);
scanf("%[^\n]s",c.email);
printf("\n\n");
printf("\t\t\t');
printf("Roll No.
                   : ");
fflush(stdin);
scanf("%s",c.rollno);
printf("\n\n");
printf("\t\t\t');
printf("Phone No.
                    : ")
fflush(stdin);
scanf("%s",c.phoneno);
fflush(stdin);
```

Output / Result / Screenshot

When we run the program then show the Table of student Record System



Now we show the information of this program

```
Date:05/05/2020

|STUDENT MANAGEMENT SYSTEM|

Prepared By : Pushpendra Kushwaha

Mini Project : Student Management System

Guided By : Dr.S.Annamalai

Press Enter to continue.....
```

After this user press the key to continue

C:\Users\Virus found!\Desktop\pushpendra.exe

Enter The Information Below:

Enter ID : GU12345

Full Name : Pushpendra kushwaha

Class : BCA-3

Branch : Computer Science

Address : Greater Noida

Email Address : rajasingh0789@gmail.com

Roll No. : 1713121021

Conclusion/Future Enhancement

conclusion:

The paper SRS is about automating the existing manual system.

Implementation of this system will reduce the paper work which consumes more time and improves accuracy in colleges, schools and universities. The student will get information about the college events, exam notifications, placement information in a very easier way without any delay. This will reduce the time for maintaining the manual records.

Reference

"Web Based Student Information Management System" by S.R.

Bharamagoudar, Geeta R.B, S.G.Totad, 2013 International Journal of Advanced Research in Computer and Communication Engineering..

Zhi-gang YUE, You-wei JIN, "The development and design of the student management system based on the network environment", 2010 International Conference on Multimedia Communications, 978-0-7695- 4136-5/10 2010 IEEE.