

STUDENT MANAGEMENT SYSTEM

A PROJECT REPORT

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1) Objective

Schools and Universities are the foundation of knowledge and an educational body upon which students rely. Therefore, they need to maintain a proper database of its students to keep all the updated records and easily share information with students.

Most schools and Universities count on an advanced software tool known as 'Student Information System (SIS)' to keep all their student records like Name, Roll Numbers, Phone Numbers, Percentage

Over the recent years, the performance and efficiency of the education industry have been enhanced by using the Student Management System. This tool has productively taken over the workload of the Class in charge with its well-organized, easy, and reliable adding, Deleting, Searching, Updating

"Student Management System (SMS) is a Code that is designed to Add, Delete, Update Display Search all the data generated by a School or college, including the grades of a student, their name Phone Number, Percentage"

2) Problem Definition

The school / College Management has to handle records for the number of students and maintain their records and update their records regularly. But it takes more time if we do it on paper or in books Hence we need an upgradation this code which we wrote can easily Add, Delete, Update, Search, and display the information of the students whenever required

Existing System

All the details of the student are Maintained in a Single Record

So Searching and Updating the Details is a tedious task Also it has more time and space complexity

Proposed System

The Code which written can easily Add, Delete, Update, Search, and Display the information of the students whenever required

Easy to Handle / Fast and Convenient

4) Flow Chart

4) Algorithm

5) Source Code:-

```
#include<stdlib.h>

#include<string.h>

#include<stdio.h>

struct Student

{

int rollnumber;

char name[100];

char phone[100];

float percentage;

struct Student *next;

}* head;

void insert(int rollnumber, char* name, char* phone, float percentage)

{

struct Student * student = (struct Student *) malloc(sizeof(struct Student));

student->rollnumber = rollnumber;

strcpy(student->name, name);

strcpy(student->phone, phone);

student->percentage = percentage;

student->next = NULL;

if(head==NULL){

head = student;

}

else{
```

```

student->next = head;

head = student;

}

}

void search(int roroll number
{

struct Student * temp = head;

while(temp!=NULL){

if(temp->rollnumber==rollnumber){

printf("Roll Number: %d\n", temp->rollnumber);

printf("Name: %s\n", temp->name);

printf("Phone: %s\n", temp->phone);

printf("Percentage: %0.4f\n", temp->percentage);

return;

}

temp = temp->next;

}

printf("Student with roll number %d is not found !!!\n", rollnumber);

}

void update(int rollnumber)

{

struct Student * temp = head;

while(temp!=NULL){

```

```

if(temp->rollnumber==rollnumber){

printf("Record with roll number %d Found !!!\n", rollnumber);

printf("Enter new name: ");

scanf("%s", temp->name);

printf("Enter new phone number: ");

scanf("%s", temp->phone);

printf("Enter new percentage: ");

scanf("%f",&temp->percentage);

printf("Updation Successful!!!\n");

return;

}

temp = temp->next;

}

printf("Student with roll number %d is not found !!!\n", rollnumber);

}

void Delete(int rollnumber)

{

struct Student * temp1 = head;

struct Student * temp2 = head;

while(temp1!=NULL){

if(temp1->rollnumber==rollnumber){

printf("Record with roll number %d Found !!!\n", rollnumber);

if(temp1==temp2){

head = head->next;

```

```
free(temp1);

}

else{

temp2->next = temp1->next;

free(temp1);

}

printf("Record Successfully Deleted !!!\n");

return;

}

temp2 = temp1;

temp1 = temp1->next;

}

printf("Student with roll number %d is not found !!!\n", rollnumber);

}

void display()

{

struct Student * temp = head;

while(temp!=NULL){

printf("Roll Number: %d\n", temp->rollnumber);

printf("Name: %s\n", temp->name);

printf("Phone: %s\n", temp->phone);

printf("Percentage: %0.4f\n\n", temp->percentage);

temp = temp->next;
```



```
}  
  
}  
  
int main()  
{  
  
    head = NULL;  
  
    int choice;  
  
    char name[100];  
  
    char phone[100];  
  
    int rollnumber;  
  
    float percentage;  
  
    printf("1 to insert student details\n2 to search for student details\n3 to delete student  
details\n4 to update student details\n5 to display all student details");  
  
    do  
  
    {  
  
        printf("\nEnter Choice: ");  
  
        scanf("%d", &choice);  
  
        switch (choice)  
  
        {  
  
        case 1:  
  
            printf("Enter roll number: ");  
  
            scanf("%d", &rollnumber);  
  
            printf("Enter name: ");  
  
            scanf("%s", name);  
  
            printf("Enter phone number: ");  
  
            scanf("%s", phone);
```

```
printf("Enter percentage: ");

scanf("%f", &percentage);

insert(rollnumber, name, phone, percentage);

break;

case 2:

printf("Enter roll number to search: ");

scanf("%d", &rollnumber);

search(rollnumber);

break;

case 3:

printf("Enter roll number to delete: ");

scanf("%d", &rollnumber);

Delete(rollnumber);

break;

case 4:

printf("Enter roll number to update: ");

scanf("%d", &rollnumber);

update(rollnumber);

break;

case 5:

display();

break;

}

} while (choice != 0);
}
```

6) Output Screen

Adding the Student

```
/tmp/XFfo6qs4tx.o
1 to insert student details
2 to search for student details
3 to delete student details
4 to update student details
5 to display all student details
Enter Choice: 1
Enter roll number: 240
Enter name: Namratha
Enter phone number: 7989870545
Enter percentage: 89
```

Displaying All students

```
Enter Choice: 5
Roll Number: 240
Name: Namratha
Phone: 7989870545
Percentage: 89.0000
```

Deleting Roll no :-240

```
Enter Choice: 3
Enter roll number to delete: 240
Record with roll number 240 Found !!!
Record Successfully Deleted !!!
```

As 240 is deleted after searching

```
/tmp/XFfo6qs4tx.o
1 to insert student details
2 to search for student details
3 to delete student details
4 to update student details
5 to display all student details
Enter Choice: 2
Enter roll number to search: 240
Student with roll number 240 is not found !!!
```