

#### EMPLOYEE MANAGEMENT SYSTEM

#### A PROJECT REPORT

Submitted by

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#### SRM UNIVERSITY

(Under Section 3 of UGC Act, 1956)

#### BONAFIDE CERTIFICATE

Certified that this project report titled "EMPLOYEE MANAGEMENT SYSTEM" is the bonafide work of "PRATHAM AGARWALLA [RA2111026010073], NIKHIL RAJPUT [RA2111026010086] & POORNA PRADEEP REDDY [RA2111026010094]", who carried out the project work under our supervision. Certified further, that to the best of our knowledge the work reported herein does not form any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

SIGNATURE MA'AM SINDHUJA MANOHAR **SIGNATURE** 

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Signature of External Examiner

## **ABSTRACT**

Many companies currently use a manual system for management and maintenance of employee data. The records are maintained in registers which requires a great effort and human labour for maintenance. The process is also very much time consuming and there is sometimes loss of data in transit between various departments. Multiple copies of the same information may lead to data inconsistency. The process of searching for data, editing and updating existing data is quite complicated. All the information regarding an employee must be managed in an efficient way. Employee Management System is a distributed application, developed to maintain the details of employees working in any organization. It maintains the information about the personal details of their employees. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies. For further enhancement or development of the package, user's feedback will be considered.

## **ACKNOWLEDGEMENT**

We would like to express our deepest gratitude to our guide, MA'AM SINDHUJA MANOHAR for her valuable guidance, consistent encouragement, personal caring, timely help and providing our team with an excellent atmosphere for doing mini project. All through the work, in spite of her busy schedule, she has extended cheerful and cordial support to us for completing this mini project work.

# **TABLE OF CONTENTS**

Sl.	TITLE	PAGE No.
1 10.		_ , _ ,
I.	BONAFIDE CERTIFICATE	i
II.	ABSTRACT	ii
III.	ACKNOWLEDGEMENT	iii
1.	INTRODUCTION & OBJECTIVES	01
2.	PROBLEM STATEMENT, TOOLS USED	02
3.	PROPOSED SYSTEM, SYSTEM OVERVIEW	03
4.	SYSTEM DESIGN, COMPLETE FLOWCHART	04-05
5.	SOURCE CODE	06-12
6.	OUTPUT SCREEN	13-20
7.	CONCLUSION	21

#### **INTRODUCTION**

The objective of "Employee Management System" is designing a scheduling system for a work centre. But these task of scheduling the different activities if manually done whether they may be personal or official is time consuming and also may lead to confusion if not properly scheduled. Employee Management System is a distributed application, developed to maintain the details of employees working in any organization. It maintains the information about the personal details of their employees. It is simple to understand and can be used by anyone who is not even familiar with simple employee's system. It is user friendly and just asks the user to follow step by step operations by giving him few options. It is fast and can perform many operations of a company or organization. This software project has been developed using the basic C Programming.

# <u>OBJECTIVES</u>

- <u>Paperless</u>: To make existing system paperless and save lots of bunching logs of files on the shelf which makes the later on access of the record not at all easy task and overhead to peoples.
- <u>Automatic</u>: Making the existing system fully automatic which will save lots of human resources work. As the current system is all human resource work is needed to maintain and keep the record and details of every employee under and organization to keep track of every employee in staff working in an organization.

### PROBLEM STATEMENT

Manual handling of employee information poses a number of challenges. The use of paper work in handling some of these processes could lead to human error, papers may end up in the wrong hands and not forgetting the fact that this is time consuming. Another challenge is that multinational companies will have all the employee information stored at the headquarters of the company making it difficult to access the employee information from remote places when needed at short notice. This system will maintain employee information in a database by fully privacy and authority access. The project is aimed at setting up employee information system about the status of the employee, the educational background and the work experience in order to help monitor the performance and achievement of the employee. The program should perform the basic operations upon the database as retrieving, inserting, updating and deleting data. Any additional functionality is a goal of a further module development. It is a kind of strategy to start the development from designing and constructing the database, as this structure will determine the further structure of the application program. The Interface of the program should be user-friendly, and the program should be as easy for use as it is possible.

## TOOLS USED

- ➤ Operating System: Linux, Ubuntu or Windows 7 or above
- ➤ Minimum requirement:2GB RAM
- > CODEBLOCKS

## PROPOSED SYSTEM

The proposed system is designed to eliminate all the drawbacks of the existing employee management software. The system shall be responsible for maintaining information about employees, thus their personal profile.

- Consistent- Every page should have the same header/logo, heading style, fonts, navigations etc.
- Efficient and easy to maintain
- Layout-The layout of each page should have a good contrast between the text and background area.
- Easy to navigate and use- Users should not have a hard time trying to navigate the site.

All these features include the ability to add employee, update (edit), and retrieve through search results. So, this helps in maintaining computerised employee details.

## **SYSTEM OVERVIEW**

Processor Intel® Core<sup>TM</sup> i3-6006u CPU @2.00GHz 2.00 GHz

Installed RAM 4.00 GB (3.89 GB usable)

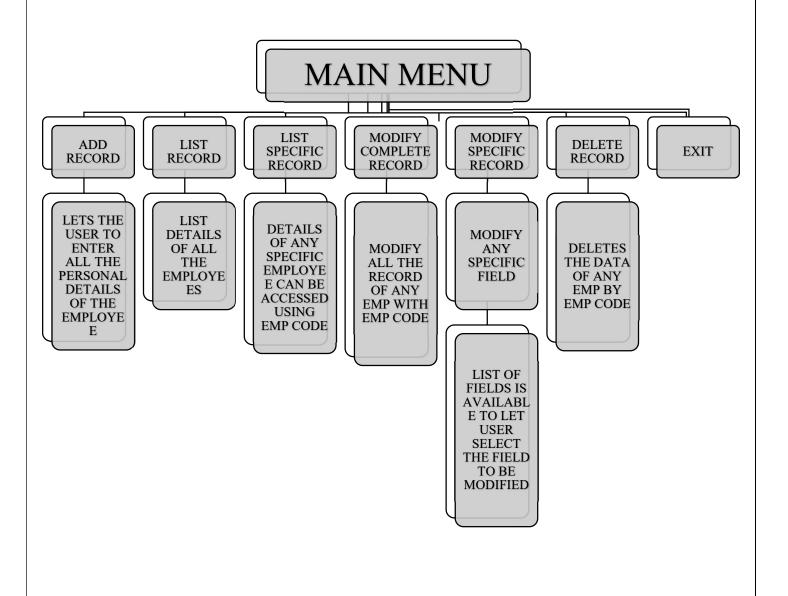
System Type 64-bit operating system, x64-based processor

## SYSTEM DESIGN

OUR WELCOME SCREEN/ MAIN SCREEN CONTAINS 7
OPTIONS: -

- 1. ADD RECORD: FOR ADDING A NEW EMPLOYEE RECORD WITH EMPLOYEE CODE(UNIQUE), FULL NAME, DESIGNATION, AGE, BASIC SALARY, QUALIFICATION, EXPERIENCE AND CONTACT NUMBER.
- **2. LIST RECORDS:** LISTS THE RECORDS OF ALL THE EMPLOYEES.
- **3. LIST SPECIFIC RECORD:** LISTS THE RECORD OF SPECIFIC EMPLOYEE ON THE BASIS OF EMPLOYEE CODE.
- **4. MODIFY COMPLETE RECORD:** LETS TO MODIFY THE COMPLETE RECORD OF AN EMPLOYEE.
- 5. MODIFY SPECIFIC RECORD: LETS TO MODIFY ONE FIELD OF THE EMPLOYEE RECORD PROVIDED WITH A LIST TO SELECT THE FIELD TO BE MODIFIED.
- 6. DELETE RECORD: LETS TO DELETE THE ENTIRE DETAILS
  OF AN EMPLOYEE BASED ON
  EMPLOYEE CODE
- 7. EXIT: TO EXIT FROM THE SYSTEM.

#### **COMPLETE APPLICATION**



### **SOURCE CODE**

```
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>
#include <windows.h> // FOR COORDINATES
#include <string.h>
COORD coord = \{0,0\};
void gotoxy(int x,int y) //ALIGNING ON THE MAIN SCREEN
coord.X = x;
coord.Y = y;
SetConsoleCursorPosition(GetStdHandle(STD OUTPUT HANDLE),coord);
int main()
FILE *fp, *ft; // FILE POINTER VARIABLES FP- EMP AND FT-TEMP WE MADE TEMP FILEFOR
DELETING PURPOSE
char another, choice, choice2;
struct emp //STRUCTURE
char code[10];
char fname[40];
char Iname[40];
char desg[40];
int age;
float bs;
char deg[25];
int exp;
char ph[15];
};
struct emp e; // DEFINED USING e
char empcode[10]; // TO GET INPUT FROM USER
long int recsize;
fp = fopen("EMP.DAT","r+"); //OPENING EMP FILE FOR READING AND MODIFICATION
if(fp == NULL)
fp = fopen("EMP.DAT","w+"); //OPENING EMP FILE FOR WRITING AND MODIFICATION
if(fp == NULL)
printf("Connot open file"); // IF NO EMP.DAT FILE
exit(1);
```

```
recsize = sizeof(e);
while(1)
system("cls");
gotoxy(30,6);
printf("WELCOME TO EMPLOYEE MANAGEMENT SYSTEM");
gotoxy(36,7);
printf("CREATED BY TEAM TECHNO");
gotoxy(38,10);
printf("1. Add Record");
gotoxy(38,12);
printf("2. List Records");
gotoxy(38,14);
printf("3. List Specific Record");
gotoxy(38,16);
printf("4. Modify Complete Record");
gotoxy(38,18);
printf("5. Modify Specific Record");
gotoxy(38,20);
printf("6. Delete Record");
gotoxy(38,22);
printf("7. Exit");
gotoxy(30,24);
printf("Your Choice: ");
fflush(stdin);
choice = getche();
switch(choice)
{
//ADD RECORDS
case '1':
system("cls");
fseek(fp,0,SEEK END);
another = 'v';
while(another == 'y')
printf("\nEnter Employee Code: ");
scanf("%s",e.code);
printf("\nEnter First Name: ");
scanf("%s",e.fname);
printf("\nEnter Last Name: ");
scanf("%s",e.lname);
printf("\nEnter Designation: ");
scanf("%s",e.desg);
printf("\nEnter Age: ");
```

```
scanf("%d", &e.age);
printf("\nEnter Basic Salary: ");
scanf("%f", &e.bs);
printf("\nEnter Qualification: ");
scanf("%s",e.deg);
printf("\nEnter Experience: ");
scanf("%d",&e.exp);
printf("\nEnter Contact Number: ");
scanf("%s",e.ph);
fwrite(&e,recsize,1,fp);
printf("\nPRESS ANY KEY TO GO BACK TO MAIN SCREEN");
fflush(stdin);
another = getche();
}
break;
//LIST RECORDS (ENTIRE)
case '2':
system("cls"); // CLEARING THE SCREEN
rewind(fp);
printf("EMPLOYEE DETAILS:\n");
while(fread(&e,recsize,1,fp)==1)
printf("\nEMPLOYEE CODE: %s\nNAME: %s %s\nDESIGNATION: %s\nAGE: %d
YEARS\nBASIC SALARY: Rs. %.2f\nQUALIFICATION: %s\nEXPERIENCE: %d YEARS\nCONTACT
NUMBER: %s\n",e.code,e.fname,e.lname,e.desg,e.age,e.bs,e.deg,e.exp,e.ph);
getch();
break;
//LIST SPECIFIC RECORD BASED ON EMP CODE
case '3':
system("cls"); // CLEARING THE SCREEN
another = 'v';
while(another == 'y')
printf("Enter the EMPLOYEE CODE to list details: ");
scanf("%s", empcode);
rewind(fp);
while(fread(&e,recsize,1,fp)==1)
if(strcmp(e.code,empcode) == 0)
printf("\nEMPLOYEE CODE: %s\nNAME: %s %s\nDESIGNATION: %s\nAGE:
%d YEARS\nBASIC SALARY: Rs. %.2f\nQUALIFICATION: %s\nEXPERIENCE: %d
YEARS\nCONTACT NUMBER:
%s\n",e.code,e.fname,e.lname,e.desg,e.age,e.bs,e.deg,e.exp,e.ph);
```

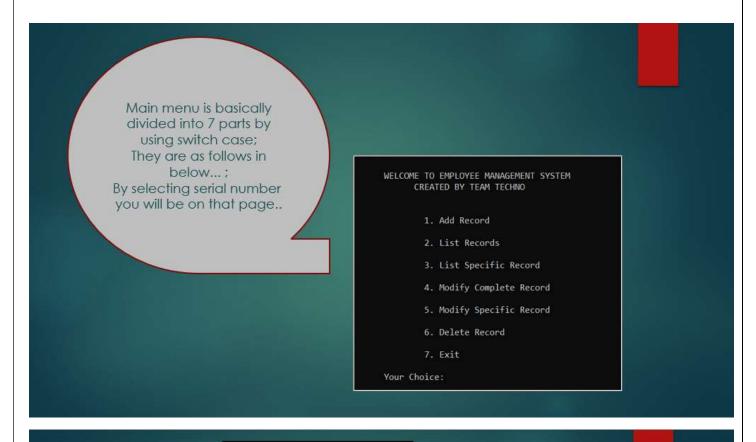
```
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break;
printf("\nPRESS ANY KEY TO GO BACK TO MAIN SCREEN");
fflush(stdin);
another = getche();
break;
//MODIFY ENTIRE RECORD BASED ON EMP CODE
case '4':
system("cls"); //CLEARING SCREEN
another = 'y';
while(another == 'y')
printf("Enter the EMPLOYEE CODE to modify: ");
scanf("%s", empcode);
rewind(fp);
while(fread(&e,recsize,1,fp)==1)
if(strcmp(e.code,empcode) == 0)
printf("\nEnter First Name: ");
scanf("%s",e.fname);
printf("\nEnter Last Name: ");
scanf("%s",e.Iname);
printf("\nEnter Designation: ");
scanf("%s",e.desg);
printf("\nEnter Age: ");
scanf("%d", &e.age);
printf("\nEnter Basic Salary: ");
scanf("%f", &e.bs);
printf("\nEnter Qualification: ");
scanf("%s",e.deg);
printf("\nEnter Experience: ");
scanf("%d",&e.exp);
printf("\nEnter Contact Number: ");
scanf("%s",e.ph);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break;
}
printf("SUCCESSFULLY MODIFIED THE EMPLOYEE DETAILS!!");
```

```
printf("\nPRESS ANY KEY TO GO BACK TO MAIN SCREEN");
fflush(stdin);
another = getche();
break;
//MODIFY SPECIFIC RECORD OF EMP
case '5':
system("cls");
another = 'v';
while(another == 'y')
printf("Enter the EMPLOYEE CODE to modify: ");
scanf("%s", empcode);
rewind(fp);
while(fread(&e,recsize,1,fp)==1)
if(strcmp(e.code,empcode) == 0)
printf("\n1.MODIFY NAME");
printf("\n2.MODIFY DESIGNATION");
printf("\n3.MODIFY AGE");
printf("\n4.MODIFY BASIC SALARY");
printf("\n5.MODIFY QUALIFICATION");
printf("\n6.MODIFY EXPERIENCE");
printf("\n7.MODIFY CONTACT NUMBER");
printf("\nYour Choice: ");
fflush(stdin);
choice2 = getche();
switch(choice2)
case '1': //MODIFY NAME
system("cls");
printf("ENTER FIRST NAME:");
scanf("%s",e.fname);
printf("ENTER LAST NAME:");
scanf("%s",e.Iname);
fseek(fp,-recsize,SEEK_CUR);
fwrite(&e,recsize,1,fp);
break;
case '2': //MODIFY DESIGNATION
system("cls");
printf("ENTER DESIGNATION:");
scanf("%s",e.desg);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
```

```
break;
case '3': //MODIFY AGE
system("cls");
printf("ENTER AGE:");
scanf("%d",&e.age);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break:
case '4': //MODIFY SALARY
system("cls");
printf("ENTER SALARY:");
scanf("%f",&e.bs);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break;
case '5': //MODIFY QUALIFICATION
system("cls");
printf("ENTER QUALIFICATION:");
scanf("%s",e.deg);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break:
case '6': //MODIFY EXPERIENCE
system("cls");
printf("ENTER EXPERIENCE:");
scanf("%d",&e.exp);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break:
case '7': //MODIFY CONTACT NUMBER
system("cls");
printf("ENTER CONTACT NUMBER:");
scanf("%s",e.ph);
fseek(fp,-recsize,SEEK CUR);
fwrite(&e,recsize,1,fp);
break;
}
break;
printf("SUCCESSFULLY MODIFIED THE EMPLOYEE DETAILS!!");
printf("\nPRESS ANY KEY TO GO BACK TO MAIN SCREEN");
fflush(stdin);
another = getche();
break;
```

```
//DELETE RECORDS BASED ON EMP CODE
case '6':
system("cls");
another = 'v';
while(another == 'y')
printf("\nEnter EMPLOYEE CODE of Employee to be deleted: ");
scanf("%s",empcode);
ft = fopen("Temp.dat", "w"); // TEMP FILE FOR DELETING THE RECORD
rewind(fp);
while(fread(&e,recsize,1,fp) == 1)
if(strcmp(e.code,empcode) != 0) // COMPARING E.CODE WITH EMP CODE
fwrite(&e,recsize,1,ft);
fclose(fp);
fclose(ft);
remove("EMP.DAT"); //EMP.DAT FILE IS REMOVED
rename("Temp.dat","EMP.DAT"); //TEMP.DAT FILE IS RENAMED TO EMP.DAT
fp = fopen("EMP.DAT", "r+");
printf("SUCCESSFULLY DELETED THE EMPLOYEE DETAILS!!");
printf("\nPRESS ANY KEY TO GO BACK TO MAIN SCREEN");
fflush(stdin); // FLUSH THE OUTPUT LIKE STDOUT
another = getche();
break;
//EXIT
case '7':
printf("\nTHANKS FOR USING THE SYSTEM");
fclose(fp);
exit(0);
break;
default:
gotoxy(34,26);
printf("SORRY! WRONG INPUT");
gotoxy(34,27);
printf("PLEASE TRY AGAIN!!");
getch();
break:
return 0;
```

## **OUTPUT SCREEN**





Once programmer enter all the details; system will display like this...

Enter Employee Code: 002 Enter First Name: Pradeep Enter Last Name: Reddy Enter Designation: A

Enter Age: 32

Enter Basic Salary: 100000 Enter Qualification: Msc Enter Experience: 5

Enter Contact Number: 8897590826 PRESS ANY KEY TO GO BACK TO MAIN SCREEN

> After entering the details, again it will come back to main screen and it will ask the programmer to select another choice...

WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record

7. Exit

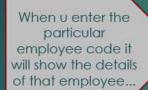
By selecting 2 the system will open List records...

#### WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- 7. Exit

Your Choice: 2





#### EMPLOYEE DETAILS:

EMPLOYEE CODE: 002 NAME: Pradeep Reddy

DESIGNATION: A AGE: 32 YEARS

BASIC SALARY: Rs. 100000.00

QUALIFICATION: Msc EXPERIENCE: 5 YEARS

CONTACT NUMBER: 8897590826

By selecting 3 it will open List Specific Record..

#### WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- 7. Exit

Your Choice: 3

It will ask the programmer to enter specific employee code which to be listed.. Enter the EMPLOYEE CODE to list details: AAA

EMPLOYEE CODE: AAA NAME: \_\_\_\_\_\_ DESIGNATION: (A/B/C) AGE: 0 YEARS BASIC SALARY: Rs. 0.00

QUALIFICATION: BBB EXPERIENCE: 0 YEARS CONTACT NUMBER: --

PRESS ANY KEY TO GO BACK TO MAIN SCREEN\_

After entering specific code it will be listed as shown below..

Enter the EMPLOYEE CODE to list details: 002

EMPLOYEE CODE: 002 NAME: Pradeep Reddy DESIGNATION: A AGE: 32 YEARS BASIC SALARY: Rs. 100000.00

QUALIFICATION: Msc EXPERIENCE: 5 YEARS CONTACT NUMBER: 8897590826

PRESS ANY KEY TO GO BACK TO MAIN SCREEN

By selecting 4, it will open modify complete record.. WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record

Your Choice:

If will ask the programmer to enter the employee code To be modified.

Enter Last Name: 000

Enter Last Name: 000

Enter Designation: 000

Enter Age: 00

Enter Basic Salary: 0000

Enter Qualification: 000

Enter Experience: 00

Enter Contact Number: .....

SUCCESSFULLY MODIFIED THE EMPLOYEE DETAILS!! PRESS ANY KEY TO GO BACK TO MAIN SCREEN.

Enter the EMPLOYEE CODE to modify: AAA

Enter First Name: Poorna

Enter Last Name: Reddy

Enter Designation: A

Enter Age: 25

Enter Basic Salary: 50000

Enter Qualification: Msc

Enter Experience: 05

Enter Contact Number: 8897590826

SUCCESSFULLY MODIFIED THE EMPLOYEE DETAILS!!
PRESS ANY KEY TO GO BACK TO MAIN SCREEN\_

By selecting 5,it will open modify specific record...

WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- 7. Exit

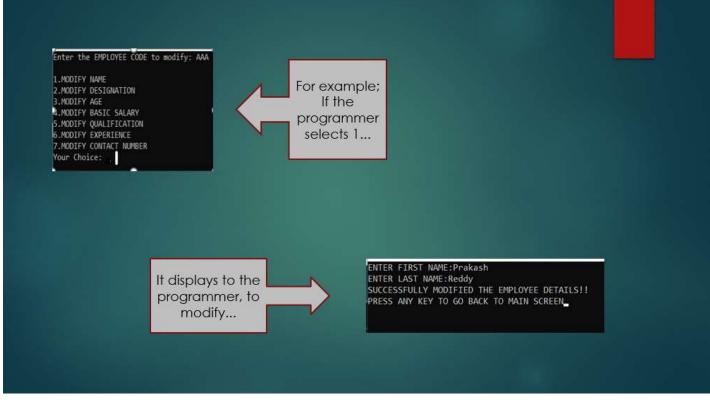
Your Choice: 5

code the

complete record

will be modified...





By selecting 6, It will open delete record..

#### WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- 7. Exit

Your Choice: 🧲



It will ask the programmer to enter the employee code to be deleted..

Enter EMPLOYEE CODE of Employee to be deleted: SUCCESSFULLY DELETED THE EMPLOYEE DETAILS!! PRESS ANY KEY TO GO BACK TO MAIN SCREEN

By selecting 7, It will show thank you. By pressing any key we can close the application

#### WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1. Add Record
- 2. List Records
- 3 list Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- ----

our Choice: 7

THANKS FOR USING THE SYSTEM Process returned 0 (0x0) execution time : 1.307 s Press any key to continue.

> If any other choice is given rather than 1-7, then it displays an error message

#### WELCOME TO EMPLOYEE MANAGEMENT SYSTEM CREATED BY TEAM TECHNO

- 1, Add Record
- 2. List Records
- 3. List Specific Record
- 4. Modify Complete Record
- 5. Modify Specific Record
- 6. Delete Record
- 7. Exit

Your Choice: 8

SORRY! WRONG INPUT PLEASE TRY AGAIN!!

## **CONCLUSION**

Overall, the system is useful for companies to maintain personal information of its employees. With this system, it will be convenient to easily access the details of a particular employee with his unique employee code. The task of editing and modification of particular data of an employee has been also made easy and less time consuming. This system will save a lot of time and human effort and the details of the employees will be at the fingertips of the management that can be easily accessed, modified or deleted. The system is user friendly with options for most of the tasks that can be easily chosen by the user from the menu displayed on the screen. For further enhancement or development of the package, user's feedback will be considered.