DEPARTMENT OF INFORMATION TECHNOLOGY FACULTY OF ENGINEERING AND TECHNOLOGY

MINI PROJECT REPORT

SUBJECT TITLE: Programming for Problem Solving

SUBJECT CODE: 18CSS101J

DIARY MANAGEMENT SYSTEM

TEAM MEMBERS:

- 1. PREM SAGAR RA2011004010039
- 2. KUNAL KESHAN RA2011004010051
- 3. MARAMUTTAM KUMAR RA2011004010430
 - 4. MADHANRAJ RA201104010427
- 5. INTI GOWTHAM NARAYANA RA2011004010375

Department of ECE

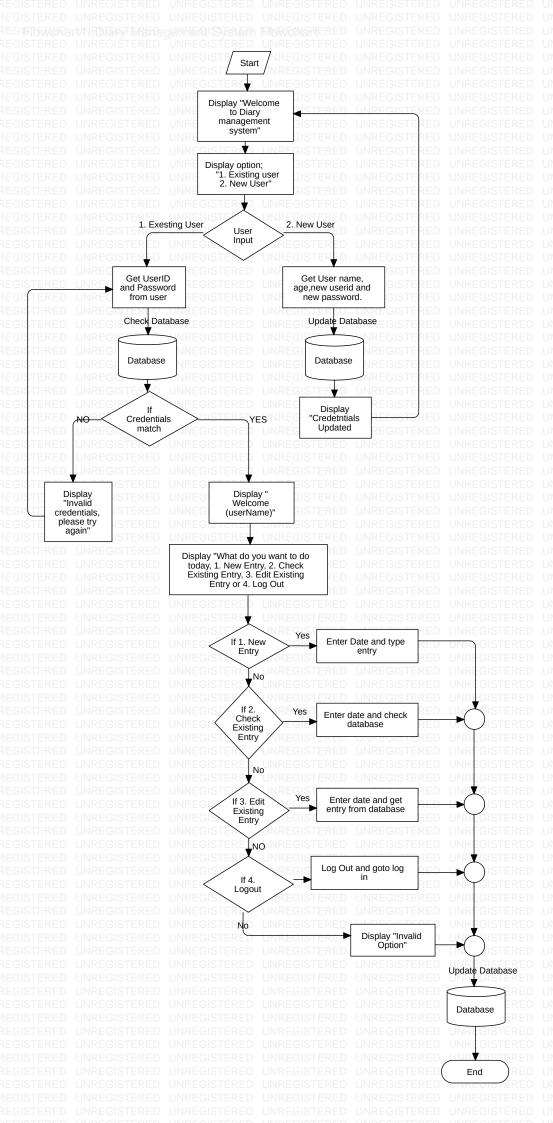


SRMIST, SRM Nagar, Kattankulathur-603203 Kancheepuram District, Tamil Nadu

1.	Name of the Project	Diary Management System
2.	Objective/Vision	To make common diary management system, that proactively suggests contents of interest to users based on various kinds of context information. It provides benefits to users and meets their satisfaction. We can get those life-log data from PC storage. The final product of diary management includes feeling, time, and physical location information.
3.	Users of the System	1. Admin(single person user)
4.	Functional Requirements	 Can give user option to log new meetings and details. Allow user to access past meeting details. Password protected access

		required to check logs. 4. Allows user to change password if required. 5. Allow user to check logs without editing. 6. Allow user to edit past logs. 7. Allow user to go log multiple entries within the same day. 8. User can view the upcoming meetings
5.	Non-functional Requirements	1. Allow user to change multiple logs within the same day. 2. Allow user to change logs of many days as well. 3. Initial Password is Enter key for new user. 4. For new entry no password is required.

6.	Optional Features	 For security purpose allow user to enter password only three times. Allow user to change multiple logs in one go.
7.	Team Size	5
8.	Technologies to be Used	PC/Smartphone
9.	Tools to be Used	Codeblocks IDE



Algorithm for Diary Management System

Step 1: Start Program.

Step 2: Display message, "Welcome to Diary Management System."

Step 3: Display main menu to user, "1. Add Record, 2. View Record, 3. Edit Record, 4. Delete Record, 5. Edit Password, 6. Exit."

Step 4: Get choice from the user.

Step 5: If user selects, "1. Add Record"

Step 5(a): Display message, "Welcome to the add menu."

Step 5(b): Get date of record from the user.

Step 5(c): Get time of record from the user.

Step 5(d): Get name of the user.

Step 5(e): Get place of record from the user.

Step 5(f): Get duration of record from the user.

Step 5(g): Get the note from the user.

Step 5(h): Display message, "Your Record is added. Add another record (Y/N)."

Step 5(i): If user enters "y", then redirect to 'Step 5(c)'

Step 5(j): If user enters "n", then display message, "Press Any Key to Exit" and redirect to 'Step 3.'

Step 6: If user selects, "2. View Record."

Step 6(a): Display message, "Here is the viewing menu. For Security reasons Only Three Trial allowed."

Step 6(b): If Password is correct and Records exits, display message, "Access Granted."

Step 6(c): Get date of previously entered record from user.

Step 6(d): If date is correct, Display message, "1. View Record of the whole day or 2. Record of a fix time"

 $\label{eq:Step 6(e): If user selects 1. View Record of the whole day, display Record of the whole day from records and prompt user to, "Continue viewing or not."$

Step 6(f): If user selects "Y", then get date of existing record from the user and redirect to Step 6(d).

Step 6(g): If user selects no redirect to Step 3.

- **Step 6(h):** If user selects, 2. Record of a fix time in **Step 6(d)**, then get time of record time from user.
- **Step 6(i):** If time matches, then display record at particular time and prompt user to, "Continue Viewing or not."
- Step 7: If user selects, "3. Edit Record."
- Step 7(a): Display message, "Welcome to the Editing Menu, For security purpose, only three trials are allowed."
 - Step 7(b): Get password from the user.
- **Step 7(c):** If Password matches, then display message, "Access Granted." And get date of record from the user.
 - **Step 7(d):** If date of record exists, then get time of record from the user.
- **Step 7(e):** If time of record exists, then display old record of that particular time and prompt user what they would like to change.
- Step 7(f): Give user the option to change the following, "1. Time, 2. Meeting Person, 3. Meeting Place, 4. Duration, 5. Note, 6. Whole Record, and 7. Go back to menu."
- **Step 7(g):** If user selects 1. Time, display message, "Enter the new data" and get the new time from the user. The same applies from option 2-6.
 - Step 7(h): After editing data, prompt user whether to "Continue editing or not."
 - **Step 7(i):** If user enters yes then redirect to Step 7(f).
- **Step 7(j):** If user enters no then display message, "File is edited" and redirect to **Step 3.**
 - Step 7(k): If user selects 7. Go back to main menu, then redirect to Step 3.
- Step 8: If user selects, "4. Delete Record"
- **Step 8(a):** Display message, "Welcome to delete menu, for security purpose, only three trials are allowed."
 - **Step 8(b):** Get password from user.
- Step 8(c): If password matches, display options, "1. Delete Whole Record or 2. Delete a particular record by time."
- **Step 8(d):** If user selects 1. Delete Whole record, then get of date of record from the user.
- Step 8(e): If record exists, then proceed to delete record and display message, "Deleted Successfully."
 - Step 8(f): Prompt user to, "Continue to delete other files or not".
 - Step 8(g): If user selects yes then redirect to Step 8(c).
 - Step 8(h): If user Selects no then redirect to Step 3.

Step 8(i): If user selects 2. Delete A particular Record by time, get date of record from the user.

Step 8(j): Get time of record from the user, proceed to delete record and display message, "Deleted Successfully." And redirect user to **Step 8(f)**.

Step 9: If user selects, "5. Edit Password."

Step 9(a): Display message, "Your Password is 'Enter', Press 'Enter' to
change password."

Step 9(b): After user presses enter, display message, "For security purpose, only three trials allowed" and get the password from the user.

Step 9(c): If password is correct, display message, "Access Granted" and get the new password from the user.

Step 9(d): Display message, "Confirm password", to prompt user to re-enter password again.

Step 9(e): If password matches, display message, "Password Changed, Press any key to go back." Redirect to **Step 3**.

Step 9(f): If password entered in Step 9(b) is wrong, then display message, "Wrong Password, Access Denied" and prompt user to re-enter password again.

Step 9(g): If Password entered in **Step 9(b)** is wrong three times, then display message, "You entered wrong password, you are not allowed to access any file" and redirect to **Step 3**.

Step 10: If user selects, "6. Exit."

Step 10(a): Display message, "THANK YOU FOR USING THE SOFTWARE."

Step 10(b): User continues to press any key to exit.

```
#include<stdio.h>
#include<stdlib.h>
#include<conio.h>
#include<string.h>
int password();
void addrecord();
void viewrecord();
void editrecord();
void editpassword();
void deleterecord();
struct record
   char time[6];
   char name[30];
    char place[25];
    char duration[10];
   char note[500];
};
int main()
   int ch;
    printf("\n\n\t******************************n");
   printf("\t*Welcome to Diary Management System*\n");
   printf("\t***********************");
```

```
while(1)
    printf("\n\n\t\tMAIN MENU:");
    printf("\n\n\tADD RECORD\t[1]");
    printf("\n\tVIEW RECORD\t[2]");
    printf("\n\tEDIT RECORD\t[3]");
    printf("\n\tDELETE RECORD\t[4]");
    printf("\n\tEDIT PASSWORD\t[5]");
    printf("\n\tEXIT\t\t[6]");
    printf("\n\n\tENTER YOUR CHOICE:");
    scanf("%d",&ch);
    switch(ch)
    case 1:
        addrecord();
        break;
    case 2:
        viewrecord();
        break;
    case 3:
        editrecord();
        break;
    case 4:
        deleterecord();
```

```
break;
        case 5:
            editpassword();
            break;
        case 6:
            printf("\n\n\t\tTHANK YOU FOR USING THE SOFTWARE ");
           getch();
            exit(0);
        default:
            printf("\nYOU ENTERED WRONG CHOICE..");
            printf("\nPRESS ANY KEY TO TRY AGAIN");
           getch();
           break;
        system("cls");
   return 0;
void addrecord( )
   system("cls");
    FILE *fp;
   char another = 'Y' ,time[10];
   struct record e ;
```

```
char filename[15];
int choice;
printf("\n\n\t\t*****************\n");
printf("\t\t* WELCOME TO THE ADD MENU *");
printf("\n\t\t*****************\n\n");
printf("\n\n\tenter DATE OF YOUR RECORD:[dd-mm-yyyy]:");
fflush(stdin);
gets(filename);
fp = fopen (filename, "ab+" );
if ( fp == NULL )
    fp=fopen(filename,"wb+");
   if(fp==NULL)
       printf("\nSYSTEM ERROR...");
       printf("\nPRESS ANY KEY TO EXIT");
       getch();
while ( another == 'Y'|| another=='y' )
    choice=0;
    fflush(stdin);
```

```
printf ( "\n\tENTER TIME:[hh:mm]:");
scanf("%s",time);
rewind(fp);
while(fread(&e,sizeof(e),1,fp)==1)
    if(strcmp(e.time,time)==0)
        printf("\n\tTHE RECORD ALREADY EXISTS.\n");
        choice=1;
if(choice==0)
    strcpy(e.time,time);
    printf("\tENTER NAME:");
    fflush(stdin);
    gets(e.name);
    fflush(stdin);
    printf("\tENTER PLACE:");
    gets(e.place);
    fflush(stdin);
    printf("\tENTER DURATION:");
    gets(e.duration);
    fflush(stdin);
```

```
printf("\tNOTE:");
           gets(e.note);
           fwrite ( &e, sizeof ( e ), 1, fp );
           printf("\nYOUR RECORD IS ADDED...\n");
       printf ( "\n\tADD ANOTHER RECORD...(Y/N) " );
       fflush ( stdin );
       another = getchar( );
   fclose ( fp );
   printf("\n\n\tPRESS ANY KEY TO EXIT...");
   getch();
void viewrecord( )
   FILE *fpte ;
   system("cls");
   struct record customer;
   char time[6],choice,filename[14];
   int ch;
   printf("\n\n\t\t******************\n");
   printf("\t\t* HERE IS THE VIEWING MENU *");
   printf("\n\t\t*******************\n\n");
   choice=password();
```

```
if(choice!=0)
   return ;
   printf("\n\tENTER THE DATE OF RECORD TO BE VIEWED:[yyyy-mm-dd]:");
   fflush(stdin);
   gets(filename);
   fpte = fopen ( filename, "rb" );
   if ( fpte == NULL )
       puts ( "\nTHE RECORD DOES NOT EXIST...\n" );
       printf("PRESS ANY KEY TO EXIT...");
       getch();
    system("cls");
   printf("\n\tHOW WOULD YOU LIKE TO VIEW:\n");
   printf("\n\t1.WHOLE RECORD OF THE DAY.");
   printf("\n\t2.RECORD OF FIX TIME.");
   printf("\n\t\tENTER YOUR CHOICE:");
   scanf("%d",&ch);
    switch(ch)
```

```
{
case 1:
    printf("\nTHE WHOLE RECORD FOR %s IS:",filename);
   while ( fread ( &customer, sizeof ( customer ), 1, fpte ) == 1 )
        printf("\n");
        printf("\nTIME: %s",customer.time);
        printf("\nMEETING WITH: %s",customer.name);
        printf("\nMEETING AT: %s",customer.place);
        printf("\nDURATION: %s",customer.duration);
        printf("\nNOTE: %s",customer.note);
        printf("\n");
    break;
case 2:
   fflush(stdin);
    printf("\nENTER TIME:[hh:mm]:");
   gets(time);
   while ( fread ( &customer, sizeof ( customer ), 1, fpte ) == 1 )
        if(strcmp(customer.time,time)==0)
            printf("\nYOUR RECORD IS:");
            printf("\nTIME: %s",customer.time);
```

```
printf("\nMEETING WITH: %s",customer.name);
                    printf("\nMEETING AT: %s",customer.place);
                    printf("\nDUARATION: %s",customer.duration);
                    printf("\nNOTE: %s",customer.note);
            break;
        default:
            printf("\nYOU TYPED SOMETHING ELSE...\n");
            break;
        printf("\n\nWOULD YOU LIKE TO CONTINUE VIEWING...(Y/N):");
        fflush(stdin);
        scanf("%c",&choice);
   while(choice=='Y'||choice=='y');
   fclose ( fpte );
void editrecord()
    system("cls");
    FILE *fpte ;
    struct record customer;
    char time[6],choice,filename[14];
```

```
int num,count=0;
printf("\n\n\t\t***********************\n");
printf("\t\t* WELCOME TO THE EDITING MENU *");
choice=password();
if(choice!=0)
   printf("\n\tENTER THE DATE OF RECORD TO BE EDITED:[yyyy-mm-dd]:");
   fflush(stdin);
   gets(filename);
   printf("\n\tENTER TIME:[hh:mm]:");
   gets(time);
   fpte = fopen ( filename, "rb+" );
   if ( fpte == NULL )
       printf( "\nRECORD DOES NOT EXISTS:" );
       printf("\nPRESS ANY KEY TO GO BACK");
      getch();
```

```
while ( fread ( &customer, sizeof ( customer ), 1, fpte ) == 1 )
    if(strcmp(customer.time,time)==0)
        printf("\nYOUR OLD RECORD WAS AS:");
        printf("\nTIME: %s",customer.time);
        printf("\nMEETING WITH: %s",customer.name);
        printf("\nMEETING AT: %s",customer.place);
        printf("\nDURATION: %s",customer.duration);
        printf("\nNOTE: %s",customer.note);
        printf("\n\n\t\tWHAT WOULD YOU LIKE TO EDIT..");
        printf("\n1.TIME.");
        printf("\n2.MEETING PERSON.");
        printf("\n3.MEETING PLACE.");
        printf("\n4.DURATION.");
        printf("\n5.NOTE.");
        printf("\n6.WHOLE RECORD.");
        printf("\n7.GO BACK TO MAIN MENU.");
        do
            printf("\n\tENTER YOUR CHOICE:");
            fflush(stdin);
            scanf("%d",&num);
            fflush(stdin);
```

```
switch(num)
    printf("\nENTER THE NEW DATA:");
    printf("\nNEW TIME:[hh:mm]:");
    gets(customer.time);
    break;
case 2:
    printf("\nENTER THE NEW DATA:");
    printf("\nNEW MEETING PERSON:");
    gets(customer.name);
    break;
case 3:
    printf("\nENTER THE NEW DATA:");
    printf("\nNEW MEETING PLACE:");
    gets(customer.place);
    break;
case 4:
    printf("\nENTER THE NEW DATA:");
    printf("\nDURATION:");
    gets(customer.duration);
    break;
case 5:
    printf("ENTER THE NEW DATA:");
    printf("\nNOTE:");
    gets(customer.note);
    break;
```

```
case 6:
        printf("\nENTER THE NEW DATA:");
        printf("\nNEW TIME:[hh:mm]:");
        gets(customer.time);
        printf("\nNEW MEETING PERSON:");
        gets(customer.name);
        printf("\nNEW MEETING PLACE:");
        gets(customer.place);
        printf("\nDURATION:");
        gets(customer.duration);
        printf("\nNOTE:");
        gets(customer.note);
        break;
    case 7:
        printf("\nPRESS ANY KEY TO GO BACK...\n");
        getch();
        return ;
        break;
    default:
        printf("\nYOU TYPED SOMETHING ELSE...TRY AGAIN\n");
        break;
while(num<1||num>8);
fseek(fpte,-sizeof(customer),SEEK_CUR);
fwrite(&customer, sizeof(customer), 1, fpte);
```

```
fseek(fpte,-sizeof(customer),SEEK_CUR);
       fread(&customer, sizeof(customer), 1, fpte);
       choice=5;
       break;
   }
if(choice==5)
   system("cls");
   printf("\n\t\tEDITING COMPLETED...\n");
   printf("----\n");
   printf("THE NEW RECORD IS:\n");
   printf("----\n");
   printf("\nTIME: %s",customer.time);
   printf("\nMEETING WITH: %s",customer.name);
   printf("\nMEETING AT: %s",customer.place);
   printf("\nDURATION: %s",customer.duration);
   printf("\nNOTE: %s",customer.note);
   fclose(fpte);
   printf("\n\n\tWOULD YOU LIKE TO EDIT ANOTHER RECORD.(Y/N)");
   scanf("%c",&choice);
   count++;
}
else
```

```
printf("\nTHE RECORD DOES NOT EXIST::\n");
            printf("\nWOULD YOU LIKE TO TRY AGAIN...(Y/N)");
            scanf("%c",&choice);
    while(choice=='Y'||choice=='y');
    fclose ( fpte );
    if(count==1)
        printf("\n%d FILE IS EDITED...\n",count);
    else if(count>1)
        printf("\n%d FILES ARE EDITED..\n",count);
    else
        printf("\nNO FILES EDITED...\n");
    printf("\tPRESS ENTER TO EXIT EDITING MENU.");
    getch();
int password()
    char pass[15]= {0},check[15]= {0},ch;
    FILE *fpp;
    int i=0,j;
    printf("::FOR SECURITY PURPOSE::");
    printf("::ONLY THREE TRIALS ARE ALLOWED::");
```

```
for(j=0; j<3; j++)
    i=0;
   printf("\n\n\tENTER THE PASSWORD:");
   pass[0]=getch();
   while(pass[i]!='\r')
       if(pass[i]=='\b')
           printf("\b");
           printf(" ");
           printf("\b");
           pass[i]=getch();
           printf("*");
            i++;
           pass[i]=getch();
   pass[i]='\0';
   fpp=fopen("SE","r");
```

```
if (fpp==NULL)
    printf("\nERROR WITH THE SYSTEM FILE...[FILE MISSING]\n");
   getch();
    return 1;
else
    i=0;
while(1)
    ch=fgetc(fpp);
   if(ch==EOF)
        check[i]='\0';
        break;
    check[i]=ch-5;
   i++;
if(strcmp(pass,check)==0)
    printf("\n\n\tACCESS GRANTED...\n");
   return 0;
```

```
else
            printf("\n\n\tWRONG PASSWORD..\n\n\tACCESS DENIED...\n");
   printf("\n\n\t::YOU ENTERED WRONG PASSWORD::YOU ARE NOT ALLOWED TO ACCESS
ANY FILE::\n\n\tPRESS ANY KEY TO GO BACK...");
   getch();
   return 1;
void editpassword()
    system("cls");
   printf("\n");
    char pass[15]= {0},confirm[15]= {0},ch;
    int choice,i,check;
    FILE *fp;
    fp=fopen("SE","rb");
    if(fp==NULL)
        fp=fopen("SE","wb");
        if(fp==NULL)
            printf("SYSTEM ERROR...");
           getch();
```

```
return ;
        fclose(fp);
        printf("\nSYSTEM RESTORED...\nYOUR PASSWORD IS 'ENTER'\n PRESS ENTER T
O CHANGE PASSWORD\n\n");
        getch();
   fclose(fp);
    check=password();
   if(check==1)
        if(check==0)
            i=0;
            choice=0;
            printf("\n\n\tENTER THE NEW PASSWORD:");
            fflush(stdin);
            pass[0]=getch();
            while(pass[i]!='\r')
```

```
if(pass[i]=='\b')
        printf("\b");
        printf(" ");
        printf("\b");
        pass[i]=getch();
    else
        printf("*");
        i++;
        pass[i]=getch();
pass[i]='\0';
i=0;
printf("\n\tCONFIRM PASSWORD:");
confirm[0]=getch();
while(confirm[i]!='\r')
   if(confirm[i]=='\b')
```

```
printf("\b");
        printf(" ");
        printf("\b");
        confirm[i]=getch();
    else
        printf("*");
        i++;
        confirm[i]=getch();
confirm[i]='\0';
if(strcmp(pass,confirm)==0)
   fp=fopen("SE","wb");
   if(fp==NULL)
        printf("\n\t\tSYSTEM ERROR");
        getch();
    i=0;
   while(pass[i]!='\0')
```

```
ch=pass[i];
                    putc(ch+5,fp);
                    i++;
                putc(EOF,fp);
                fclose(fp);
            else
                printf("\n\tTHE NEW PASSWORD DOES NOT MATCH.");
                choice=1;
   while(choice==1);
    printf("\n\n\tPASSWORD CHANGED...\n\n\tPRESS ANY KEY TO GO BACK...");
    getch();
void deleterecord( )
   system("cls");
   FILE *fp,*fptr ;
    struct record file;
   char filename[15],another = 'Y' ,time[10];;
```

```
int choice,check;
    printf("\n\n\t\t****************\n");
    printf("\t\t* WELCOME TO DELETE MENU*");
    printf("\n\t\t**************\n\n");
    check = password();
    if(check==1)
   while ( another == 'Y' )
       printf("\n\n\tHOW WOULD YOU LIKE TO DELETE.");
       printf("\n\n\t#DELETE WHOLE RECORD\t\t\t[1]");
       printf("\n\t#DELETE A PARTICULAR RECORD BY TIME\t[2]");
       do
        {
           printf("\n\t\tENTER YOU CHOICE:");
           scanf("%d",&choice);
           switch(choice)
           case 1:
               printf("\n\tenter the DATE OF RECORD TO BE DELETED:[yyyy-mm-
dd]:");
               fflush(stdin);
```

```
gets(filename);
   fp = fopen (filename, "wb" );
   if ( fp == NULL )
        printf("\nTHE FILE DOES NOT EXISTS");
        printf("\nPRESS ANY KEY TO GO BACK.");
        getch();
        return ;
    }
    fclose(fp);
    remove(filename);
   printf("\nDELETED SUCCESFULLY...");
   break;
case 2:
   printf("\n\tENTER THE DATE OF RECORD:[yyyy-mm-dd]:");
   fflush(stdin);
   gets(filename);
   fp = fopen (filename, "rb" );
   if ( fp == NULL )
        printf("\nTHE FILE DOES NOT EXISTS");
        printf("\nPRESS ANY KEY TO GO BACK.");
        getch();
```

```
}
    fptr=fopen("temp","wb");
    if(fptr==NULL)
        printf("\nSYSTEM ERROR");
        printf("\nPRESS ANY KEY TO GO BACK");
        getch();
        return ;
    }
    printf("\n\tENTER THE TIME OF RECORD TO BE DELETED:[hh:mm]:");
    fflush(stdin);
    gets(time);
    while(fread(&file,sizeof(file),1,fp)==1)
        if(strcmp(file.time,time)!=0)
            fwrite(&file, sizeof(file), 1, fptr);
    fclose(fp);
    fclose(fptr);
    remove(filename);
    rename("temp",filename);
    printf("\nDELETED SUCCESFULLY...");
    break;
default:
```

C:\Users\Admin\Desktop\diaryManagement.exe

ADD RECORD [1] VIEW RECORD [2] EDIT RECORD [3]

DELETE RECORD [4] EDIT PASSWORD [5]

EXIT [6]

ENTER YOUR CHOICE: