



DATA STRUCTURE AND OBJECT ORIENTED PROGRAMMING LAB

FINAL PROJECT REPORT

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OBJECTIVE:

This program is basically a CD Management Software which can be used in a CDs Store. It keeps the record of all the CDs present in the CDs Store and we can also add more records for the fresh arrivals. This project can search the CDs available in the store, by various modes.

PROJECT DISCRIPTION:

This C++ project is based on CD Management System. This program uses the concept of object oriented programming. Database is a collection of interrelated data to serve multiple applications. In this project we had used the knowledge of classes and linked list. In the CDs shop management system, we had created multiple functions which are explain as under:

CHECK IN CD:

The CD Management System contains a function of Check In. In this function there is detail related to the new CD came into Shop. This function helps us to look how many CDs came into the shop.

LIST OF CDs:

The Program we created contains the function in which we store the list of CDs present in shop. In this function we create the list of CDs that the CD stores owns. This function helps us to see the list of the CDs present in store by which it is easier to find any CD.

DETAILS OF PARTICULAR CD:

CD Management system also contains the function in which we store the details of particular CD. In this function we input the detail related to a specific CD present in store. This function helps us to find the CD according to the details given by the customer which will save our time.

PRINT LIST OF CDs:

CD Management software contains the function of printing the list of CDs. This function gets the information from List of CDs function and display on the screen. This will help us when a costumer asks to show the all CDs of the Store. By using this function, we print the list of CDs present in the store.

PARTICULAR CD IN STORE:

Our CD Management software also contains the function of Particular CD in store. This function will help the store manager to search the particular CD in the Store. Suppose a customer wants a particular CD and he ask for a specific CD this function helps a lot to locate the specific CD. The following functions are performed in the software.

MAINTAIN DATABASE:

This management software also maintains the database of costumer. This function will help the store manager to maintain the record of the costumers who rented the CDs or who have given back the CDs. It saves the shop owners time and memory to remind the Information related to the Costumers.

LIST OF CDs RENTED BY COSTUMERS:

Our software contains the function in which list of CDs rented by the costumer. This function helps the owner of the shop to maintain the record of the rented CDs by the costumer.

STORE COSTUMERS LIST:

The management software also contains the function in which list of costumers is stores. It helps the shop owner to made the list of its costumer who had taken the CDs on rent.

RETURN CD:

In the CDs Management Software there is an another function of returning the CD. This function shows the details related to the CDs which a costumer returns. It helps the CD shop manager to maintain the check and balance in the shop.

CLASSES:

The classes we used in the program are as follows:

- **CD**
- **CUSTOMER**

VARIABLES OF CLASS CD:

The variables of the class CD are:

- Int index,
- Int total copies,
- Int rented copies,
- Int available copies,
- Int no of stars,
- String name,
- String stars [10].

VARIABLES OF CLASS CUSTOMER:

The variables of the class CUSTOMER are:

- Int index;
- Int cds_rented;
- Int account_number;

- Int rented_cd_list [15];
- string name;

WORKING:

After the compilation of code, a main console is shown in which the message is displayed "welcome to the CD store Management:". Then it will ask "HOW MANY CDS DETAILS WOULD YOU LIKE TO ENTER?" after the number of CDs it will ask that "how many costumers you want?" Afterwards entering the costumer's and CDs list details it will ask you which information do u you want. Following menu is shown to you:

ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM

1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10. EXIT

By choosing any of the above option you can perform any task on your screen.

CODE:

INPUT

```
1  #include<iostream>
2  using namespace std;
3
4  //class CD
5  class CD{
6      public:
7          int index,total_copies,rented_copies,
8          available_copies,no_of_stars;
9          string name;
10         string stars[10];
11     };
12
13     //input CD Info function
14     void input_cd(CD* cd){
15         cout<<"\nENTER NAME OF CD:";
16         cin.ignore();
17         getline(cin,cd->name);
```

```
18     cout<<"\nHOW MANY STARS THIS MOVIE HAS?";
19     cin>>cd->no_of_stars;
20     for(int i=0;i<cd->no_of_stars;i++){
21         cout<<"\nENTER NAME OF STAR "<<i+1<<" OF "
22         <<cd->name<<" ";
23         cin>>cd->stars[i];
24     }
25
26     //qauntity check
27     int CHECK_QUANTITY=1,QUANTITY;
28     while(CHECK_QUANTITY==1){
29         cout<<"\nENTER AVAILABLE COPIES OF CD: ";
30         cin>>QUANTITY;
31         if(QUANTITY>0){
32             cd->total_copies=QUANTITY;
33             cd->rented_copies=0;
34             cd->available_copies=cd->total_copies;
35             CHECK_QUANTITY=0;
36         }else{
37             cout<<"\nPLEASE ENTER A QUANTITY GREATER THAN 0";
38         }
39     }
40 };
41
42     //Class Customer
43     class CUSTOMER{
44     public:
45         int index;
46         int cds_rented;
47         int account_number;
48         int rented_cd_list[15];
49         string name;
50     };
51
52     //input customers data
53     void input_customer(CUSTOMER* customer){
54         cout<<"\nASSIGN CUSTOMER A ACCOUNT NUMBER: ";
55         cin>>customer->account_number;
56         cout<<"\nENTER NAME OF CUSTOMER: ";
57         cin.ignore();
```

```
58     getline(cin, customer->name);
59     cout<<"\nHOW MANY CDS HAS THIS CUSTOMER RENTED: ";
60     cin>>customer->cds_rented;
61     cout<<"\nENTER THE INDEX NO.S OF CDS USER RENTED: \n";
62 }
63
64 //display CD data
65 void DISPLAY_CD(CD* cd)
66 {
67     cout<<"\t"<<cd->index<<"\t"<<cd->name
68     <<"\t"<<cd->total_copies<<"\t"<<cd->rented_copies
69     <<"\t"<<cd->available_copies;
70     cout<<"\n\tMOVIE STARS: ";
71     for(int i=0; i<cd->no_of_stars; i++){
72         cout<<"\n\t"<<cd->stars[i];
73     }
74 }
75 void DISPLAY_CD2(CD* cd){
76     cout<<"\n\t"<<cd->index<<"\t"<<cd->name;
77 }
78
79 //display customers data
80 void DISPLAY_CUSTOMER(CUSTOMER* customer){
81     cout<<"\nCUSTOMER INDEX IS: "<<customer->index;
82     cout<<"\nACCOUNT NUMBER OF CUSTOMER IS: "
83     <<customer->account_number;
84
85     cout<<"\nNAME FO CUSTOMER IS: "
86     <<customer->name;
87
88     cout<<"\nTOTAL NUMBER OF RENTED CDS IS: "
89     <<customer->cds_rented;
90 }
91 void DISPLAY_CUSTOMER2(CUSTOMER* customer){
92     cout<<"\nCUSTOMER INDEX IS: "<<customer->index;
93     cout<<"\nACCOUNT NUMBER OF CUSTOMER IS: "
94     <<customer->account_number;
95 }
96
97
98 int main(){
```

```
99  cout<<"--- WELCOME TO CD STORE RECORDS DATABASE SYSTEM ---";
100  int TOTAL_CDS;
101
102  // ENTERING CDS DETAILS
103  cout<<"\nHOW MANY CDS DETAILS WOULD YOU LIKE TO ENTER:";
104  cout<<endl;
105      cin>>TOTAL_CDS;
106      CD cd[TOTAL_CDS];
107  for(int i=0;i<TOTAL_CDS;i++){
108      cd[i].index=i+1;
109      input_cd(&cd[i]);
110  }
111
112  int TOTAL_CUSTOMERS;
113  // ENTERING CUSTOMER DETAILS
114  cout<<"\nHOW MANY CUSTOMERS DETAILS WOULD YOU LIKE TO ENTER:";
115  cout<<endl;
116      cin>>TOTAL_CUSTOMERS;
117      CUSTOMER customer[TOTAL_CUSTOMERS];
118      int current;
119  for(int i=0;i<TOTAL_CUSTOMERS;i++){
120      current=i;
121      customer[i].index=i+1;
122      input_customer(&customer[i]);
123      cout<<"\t"<<"INDEX"<<"\t"<<"NAME"<<"\t"
124      <<"TOTAL " <<"\t"<<"RENTED " <<"\t"<<"AVAILABLE\n";
125  for(int d=0;d<TOTAL_CDS;d++){
126      DISPLAY_CD(&cd[d]);
127  }
128  for(int j=0;j<customer[current].cds_rented;j++){
129      int correct=1;
130      while(correct==1){
131          int temporary;
132          cout<<"\nENTER INDEX OF CD "<<j+1<<": ";
133          cin>>temporary;
134          if(temporary>0&&temporary<=TOTAL_CDS){
135              if(cd[temporary-1].available_copies>0){
136                  customer[i].rented_cd_list[j]=temporary;
137                  cd[temporary-1].rented_copies++;
138                  cd[temporary-1].available_copies--;
139                  correct=0;
140              }
```

```
141 else{
142     cout<<"\n    PLEASE ENTER CORRECT INDEX: ";
143 }
144 }
145 else{
146     cout<<"\nCD YOU CHOOSED OUT OF STOCK";
147 }
148 }
149 }
150 }
151 int permission=7;
152 while (permission==7){
153     int command;
154     cout<<"\n\tENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM";
155     cout<<"\n1. DISPLAY CDS DETAILS";
156     cout<<"\n2. DISPLAY CUSTOMERS DETAILS";
157     cout<<"\n3. DISPLAY RENTED CDS DETAILS";
158     cout<<"\n4. DISPLAY AVAILABLE CDS DETAILS";
159     cout<<"\n5. DISPLAY OUT OF STOCK CDS DETAILS";
160     cout<<"\n6. ADD CD";
161     cout<<"\n7. ADD CUSTOMER";
162     cout<<"\n8. RENT CD";
163     cout<<"\n9. RETURN CD";
164     cout<<"\n10.EXIT";
165     cout<<"\n\tCHOICE: \t";
166     cin>>command;
167 if(command==1){
168     cout<<"\t"<<"INDEX"<<"\t"<<"NAME"<<"\t"
169     <<"TOTAL " <<"\t"<<"RENTED " <<"\t"<<"AVAILABLE\n";
170 for(int i=0;i<TOTAL_CDS;i++){
171     cout<<"\n->\t CD " <<i+1;
172     DISPLAY_CD(&cd[i]);
173 }
174 }
175 else if(command==2){
176     cout<<"\nDISPLAYING CUSTOMERS :";
177 for(int j=0;j<TOTAL_CUSTOMERS;j++){
178     DISPLAY_CUSTOMER(&customer[j]);
179 for(int i=0;i<customer[j].cds_rented;i++){
180     int refrence;
181     cout<<"\nRENTED CD " <<i+1<<" is: "
```



```
182         <<cd[customer[j].rented_cd_list[i]-1].name;
183     }
184 }
185 }
186 else if(command==3)
187 {
188     cout<<"\t"<<"INDEX"<<"\t"<<"NAME"<<"\t"
189     <<"TOTAL " <<"\t"<<"RENTED " <<"\t"<<"AVAILABLE\n";
190     int displayed=1;
191     for(int i=0;i<TOTAL_CDS;i++){
192         if(cd[i].available_copies!=cd[i].total_copies){
193             cout<<"\n->\tRENTED CD " <<displayed<<endl;
194             DISPLAY_CD(&cd[i]);
195             displayed++;
196         }
197     }
198     if(displayed==1){
199         cout<<"\nNO CD RENTED";
200     }
201 }
202 else if(command==4){
203     cout<<"\t"<<"INDEX"<<"\t"<<"NAME"<<"\t"
204     <<"TOTAL " <<"\t"<<"RENTED " <<"\t"<<"AVAILABLE\n";
205     int displayed=1;
206     for(int i=0;i<TOTAL_CDS;i++){
207         if(cd[i].available_copies!=0){
208             cout<<"\n->\tAVAILABLE CD " <<displayed<<endl;
209             DISPLAY_CD(&cd[i]);
210             displayed++;
211         }
212     }
213 }
214 else if(command==5)
215 {
216     cout<<"\t"<<"INDEX"<<"\t"<<"NAME"<<"\t"
217     <<"TOTAL " <<"\t"<<"RENTED " <<"\t"<<"AVAILABLE\n";
218
219     int displayed=1;
220     for(int i=0;i<TOTAL_CDS;i++){
221         if(cd[i].available_copies==0){
222             cout<<"\n->\tOUT OF STOCK CD " <<displayed<<endl;
```

```
223     DISPLAY_CD(&cd[i]);
224     displayed++;
225 }
226 }
227 }
228 else if(command==6){
229 {
230     int TOTAL_CDS1;
231     TOTAL_CDS1=TOTAL_CDS;
232     CD cd1[TOTAL_CDS1];
233 for (int i=0;i<TOTAL_CDS1;i++){
234     cd1[i].index=cd[i].index;
235     cd1[i].name=cd[i].name;
236     cd1[i].no_of_stars=cd[i].no_of_stars;
237     cd1[i].rented_copies=cd[i].rented_copies;
238     cd1[i].total_copies=cd[i].total_copies;
239     cd1[i].available_copies=cd[i].available_copies;
240 for(int k=0;k<cd[i].no_of_stars;k++){
241     cd1[i].stars[k]=cd[i].stars[k];
242 }
243 }
244     TOTAL_CDS++;
245     for (int i=0;i<TOTAL_CDS1;i++)
246 {
247     cd[i].index=cd1[i].index;
248     cd[i].name=cd1[i].name;
249     cd[i].no_of_stars=cd1[i].no_of_stars;
250     cd[i].rented_copies=cd1[i].rented_copies;
251     cd[i].total_copies=cd1[i].total_copies;
252     cd[i].available_copies=cd1[i].available_copies;
253 for(int k=0;k<cd1[i].no_of_stars;k++){
254     cd[i].stars[k]=cd1[i].stars[k];
255 }
256 }
257     cd[TOTAL_CDS-1].index=TOTAL_CDS;
258     input_cd(&cd[TOTAL_CDS-1]);
259 }
260 }
261 else if(command==7)
262 {
263 {
```

```
264     int TOTAL_CUSTOMERS1;
265     TOTAL_CUSTOMERS1=TOTAL_CUSTOMERS;
266     CUSTOMER customer1[TOTAL_CUSTOMERS1];
267     for (int i=0;i<TOTAL_CUSTOMERS1;i++){
268         customer1[i].index=customer[i].index;
269         customer1[i].account_number=customer[i].account_number;
270         customer1[i].cds_rented=customer[i].cds_rented;
271         customer1[i].name=customer[i].name;
272     for(int k=0;k<customer[i].cds_rented;k++){
273         customer1[i].rented_cd_list[k]=customer[i].rented_cd_list[k];
274     }
275     }
276     TOTAL_CUSTOMERS++;
277     for (int i=0;i<TOTAL_CUSTOMERS1;i++){
278         customer[i].index=customer1[i].index;
279         customer[i].account_number=customer1[i].account_number;
280         customer[i].cds_rented=customer1[i].cds_rented;
281         customer[i].name=customer1[i].name;
282     for(int k=0;k<customer1[i].cds_rented;k++){
283         customer[i].rented_cd_list[k]=customer1[i].rented_cd_list[k];
284     }
285     }
286     customer[TOTAL_CUSTOMERS-1].index=TOTAL_CUSTOMERS;
287     input_customer(&customer[TOTAL_CUSTOMERS-1]);
288     for(int i=0;i<TOTAL_CDS;i++){
289         DISPLAY_CD(&cd[i]);
290     }
291     for(int i=0;i<customer[TOTAL_CUSTOMERS-1].cds_rented;i++){
292         int correct=1;
293     while(correct==1){
294         int temporary;
295         cout<<"\nENTER INDEX OF CD "<<i+1;
296         cin>>temporary;
297     if(temporary>0&&temporary<TOTAL_CDS){
298         customer[TOTAL_CUSTOMERS-1].rented_cd_list[i]=temporary;
299         cd[temporary-1].rented_copies++;
300         cd[temporary-1].available_copies--;
301         correct=0;
302     }
303     else{
304         cout<<"\n    PLEASE ENTER CORRECT INDEX: ";
305     }
```

```
306     }
307     }
308     }
309     }
310     else if(command==8)
311     {
312         cout<<"\nDISPLAYING CUSTOMERS :";
313         for(int j=0;j<TOTAL_CUSTOMERS;j++){
314             DISPLAY_CUSTOMER2(&customer[j]);
315         }
316         int enter=1,enter2=1;
317         int index;
318         while(enter==1){
319             cout<<"\nENTER THE INDEX NUMBER OF CUSTOMER: ";
320             cin>>index;
321             if(index>0&&index<=TOTAL_CUSTOMERS){
322                 enter=0;
323             }
324             else{
325                 cout<<"\n INVALID ENTRY PLEASE RE ENTER";
326             }
327         }
328         cout<<"\t"<<"INDEX"<<"\t"<<"NAME";
329         for(int i=0;i<TOTAL_CDS;i++){
330             cout<<"\n->\t CD "<<i+1;
331             DISPLAY_CD2(&cd[i]);
332         }
333         while(enter2==1){
334             int index2;
335             cout<<"\nENTER THE INDEX NUMBER OF CD TO RENT";
336             cin>>index2;
337             if (index2>0&&index2<=TOTAL_CDS){
338                 if(cd[index2-1].available_copies>0){
339                     customer[index-1].cds_rented++;
340                     customer[index-1].rented_cd_list
341                     [customer[index-1].cds_rented-1]=index2;
342                     cd[index2-1].rented_copies++;
343                     cd[index2-1].available_copies--;
344                     cout<<"\nCD RENTED SUCCESSFULLY";
345                     enter2=0;
346                 }
```

```
347 else{
348     cout<<"\n THE CD YOU WANT TO RENT IS OUT OF STOCK";
349 }
350 }
351 else{
352     cout<<"\nPLEASE ENTER THE CORRECT CHOICE: ";
353 }
354 }
355 }
356 else if(command==9)
357 {
358     cout<<"\nDISPLAYING CUSTOMERS :";
359     for(int j=0;j<TOTAL_CUSTOMERS;j++)
360     {
361         DISPLAY_CUSTOMER2(&customer[j]);
362     }
363     int enter=1,enter2=1;
364     int index;
365     while(enter==1){
366         cout<<"\nENTER THE INDEX NUMBER OF CUSTOMER: ";
367         cin>>index;
368         if(index>0&&index<=TOTAL_CUSTOMERS){
369             enter=0;
370         }
371         else{
372             cout<<"\n INVALID ENTRY PLEASE RE ENTER";
373         }
374     }
375     for(int i=0;i<customer[index-1].cds_rented;i++){
376         cout<<"\nRENTED CD "<<i+1<<" is: "
377         <<cd[customer[index-1].rented_cd_list[i]-1].name;
378     }
379     while(enter2==1){
380         int index2;
381         cout<<"\nENTER THE INDEX NUMBER OF CD TO RETURN";
382         cin>>index2;
383         if (index2>0&&index2<=TOTAL_CDS){
384             if(cd[index2-1].rented_copies>0){
385                 customer[index-1].cds_rented--;
386                 int temporary_array[customer[index-1].cds_rented];
387                 int done=0;
```

```
388 for(int i=0;i<=customer[index-1].cds_rented;i++){
389     for(done;done<customer[index-1].cds_rented;){
390         if(customer[index-1].rented_cd_list[i]!=index2){
391             temporary_array[done]=customer[index-1].rented_cd_list[i];
392             customer[index-1].rented_cd_list[done]=temporary_array[done];
393             done++;
394         }
395     }
396 }
397 cd[index2-1].rented_copies--;
398 cd[index2-1].available_copies++;
399 cout<<"\nCD RETURNED SUCCESSFULLY";
400 enter2=0;
401 }
402 else{
403     cout<<"\n THIS CUSTOMER HAS NOT RENTED THIS CD";
404 }
405 }
406 else{
407     cout<<"\nPLEASE ENTER THE CORRECT CHOICE: ";
408 }
409 }
410 }
411 else if(command==10)
412 {
413     permission=0;
414 }
415 else{
416     cout<<"\nINVALID COMMAND";
417 }
418 }
419 }
```

OUTPUT

```
---WELCOME TO CD STORE RECORDS DATABASE SYSTEM---  
  
HOW MANY CDS DETAILS WOULD YOU LIKE TO ENTER:  
2  
  
ENTER NAME OF CD:boss  
  
HOW MANY STARS THIS MOVIE HAS:  
1  
  
ENTER NAME OF STAR 1 OF boss:tripathi  
  
ENTER AVAILABLE COPIES OF CD: 4  
  
ENTER NAME OF CD:heist  
  
HOW MANY STARS THIS MOVIE HAS:  
1  
  
ENTER NAME OF STAR 1 OF heist:professor  
  
ENTER AVAILABLE COPIES OF CD: 3
```

CD Details Input

```
HOW MANY CUSTOMERS DETAILS WOULD YOU LIKE TO ENTER: 2  
  
ASSIGN CUSTOMER A ACCOUNT NUMBER: 79  
  
ENTER NAME OF CUSTOMER: fasih  
  
HOW MANY CDS HAS THIS CUSTOMER RENTED: 1  
  
ENTER THE INDEX NO.S OF CDS USER RENTED:  
  
INDEX   NAME   TOTAL   RENTED   AVAILABLE  
1      boss    4       0        4  
MOVIE STARS:  
tripathi  
2      heist   3       0        3  
MOVIE STARS:  
professor  
  
ENTER INDEX OF CD 1: 2
```

Detail of First costumer and its rented Cds

```
ASSIGN CUSTOMER A ACCOUNT NUMBER: 80

ENTER NAME OF CUSTOMER: yasir

HOW MANY CDS HAS THIS CUSTOMER RENTED: 3

ENTER THE INDEX NO.S OF CDS USER RENTED:

      INDEX  NAME    TOTAL  RENTED  AVAILABLE
      1      boss    4      0      4
      MOVIE STARS:
      tripathi
      2      heist    3      1      2
      MOVIE STARS:
      professor

ENTER INDEX OF CD 1: 2

ENTER INDEX OF CD 2: 2

ENTER INDEX OF CD 3: 1
```

Details of Second customer and its rented CDs

```
      ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
      CHOICE: 1

      INDEX  NAME    TOTAL  RENTED  AVAILABLE
-> CD 1
      1      boss    4      1      3
      MOVIE STARS:
      tripathi
-> CD 2
      2      heist    3      3      0
      MOVIE STARS:
      professor
```

Display Cd Details


```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
CHOICE: 2
```

```
DISPLAYING CUSTOMERS :
INDEX  ACCOUNT NUMBER  NAME  CDS RENTED
1      79              fasih  1
RENTED CD 1 is: heist
INDEX  ACCOUNT NUMBER  NAME  CDS RENTED
2      80              yasir  3
RENTED CD 1 is: heist
RENTED CD 2 is: heist
RENTED CD 3 is: boss
```

Display Costumer Details

```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
CHOICE: 3
```

```
INDEX  NAME  TOTAL  RENTED  AVAILABLE
-> RENTED CD 1
1      boss  4      1      3
MOVIE STARS:
tripathi
-> RENTED CD 2
2      heist 3      3      0
MOVIE STARS:
professor
```

Display rented cd list

```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
```

CHOICE: 4

```
INDEX    NAME    TOTAL    RENTED    AVAILABLE
-> AVAILABLE CD 1
1        boss    4        1        3
MOVIE STARS:
tripathi
```

Minor Details of Cd

```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
```

CHOICE: 5

```
INDEX    NAME    TOTAL    RENTED    AVAILABLE
-> OUT OF STOCK CD 1
2        heist    3        3        0
MOVIE STARS:
professor
```

Display out of stock CD details

```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
```

CHOICE: 7

ASSIGN CUSTOMER A ACCOUNT NUMBER: 81

ENTER NAME OF CUSTOMER: omer

HOW MANY CDS HAS THIS CUSTOMER RENTED: 2

ENTER THE INDEX NO.S OF CDS USER RENTED:

INDEX	NAME	TOTAL	RENTED	AVAILABLE
1	boss	4	1	3

MOVIE STARS:
tripathi

INDEX	NAME	TOTAL	RENTED	AVAILABLE
2	heist	3	3	0

MOVIE STARS:
professor

ENTER INDEX OF CD 11

ENTER INDEX OF CD 21

Add Costumer Details

```
ENTER THE TASK NUMBER YOU WOULD LIKE TO PERFORM
1. DISPLAY CDS DETAILS
2. DISPLAY CUSTOMERS DETAILS
3. DISPLAY RENTED CDS DETAILS
4. DISPLAY AVAILABLE CDS DETAILS
5. DISPLAY OUT OF STOCK CDS DETAILS
6. ADD CD
7. ADD CUSTOMER
8. RENT CD
9. RETURN CD
10.EXIT
```

CHOICE: 10

Process exited after 74.04 seconds with return value 0
Press any key to continue . . .

Exit The Program

CONCLUSION:

- In this project we had learned how to make a CD Management System. This Software helps the shop owner to save his time in doing check and balance on the shop record.
- This is to conclude that the project that we undertook was worked upon with a sincere effort. Most of the requirements have been fulfilled up to the mark and the requirements which have been remaining, can be completed with a short extension.
- The further implementation is performing in this software are connectivity to internet that the customer detail so online and every detail related with organization are also so on the internet.
- The main technical field of this project that can be developed after the enhanced version of this software is that it can calculate the profit or loss of the organization that help to get the financial position of the organization.

