

# **ONLINE MOVIE TICKET BOOKING SYSTEM**

## **CHAPTER 1**

### **1.1 INTRODUCTION**

The main aim for developing “Online Movie Ticket Booking System” is to provide details of the recording and booking customer’s movie ticket details. This system can manage movie details, timings, and premium card registration. It will also maintain the details of customer such as Name,Phone Number,Address,and Mail id,.The main objective of this project is to provide the better work efficiency and accuracy.

### **1.2 PURPOSE:**

The main purpose of this Simple Movie Ticket Booking System is based on a concept of recording and booking customer’s movie ticket details. Here the user can perform all the tasks like booking a movie show, receiving tickets, and card registration and view all movie show details. There’s no login system for this project. This project contains fewer features but the essentials ones.

### **1.3 PROBLEM FACING:**

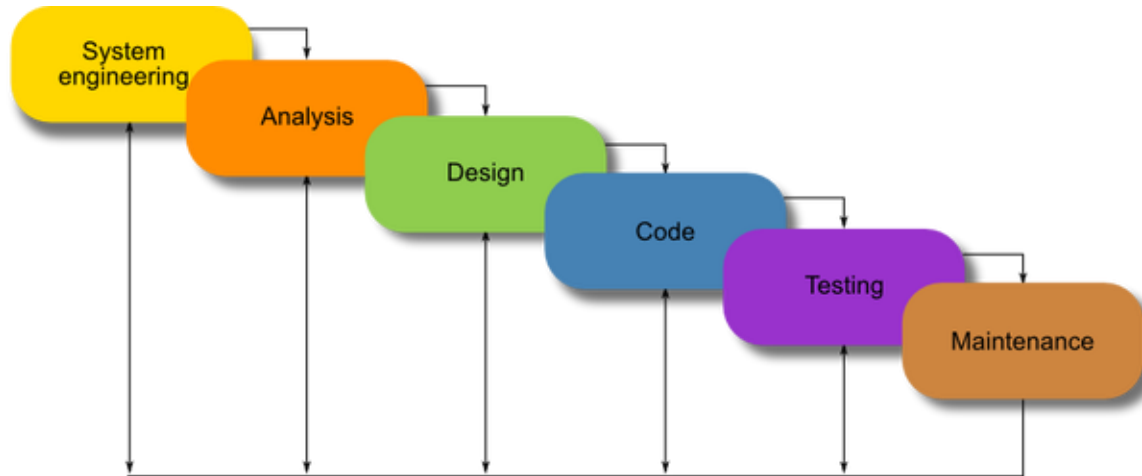
Currently, the type of system being used at the movie ticket counter is an internal system which is manually used in selling the movie tickets. The problems facing the company are that audience have to go to the counter to buy a movie ticket or ask for movie timings , audience will also have to queue up for a long time in order to get a movie ticket and will also need to pay cash when they buy movie ticket.

### **1.4 METHODOLOGY:**

For or any project to be completed,it has to go through different stages called Development Life Cycles. System Development Life Cycle (SDLC) is the process of understanding how an Information System (IS) can support business needs, designing the system, building it and delivering it to users. The SDLC composes of four phases: Planning, Analysis, Design and Implementation.

#### **1.4.1 WaterFall Model :**

Waterfall approach was first SDLC Model to be used widely in Software Engineering to ensure success of the project. In "The Waterfall" approach, the whole process of software development is divided into separate phases. In this Waterfall model, typically, the outcome of one phase acts as the input for the next phase sequentially.



**Fig:1.1 Methodology to solve**

- **Requirement Gathering and analysis** – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
- **System Design** – The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- **Implementation** – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- **Integration and Testing** – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment of system** – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- **Maintenance** – There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

# CHAPTER 2

## PROJECT DESCRIPTION

### 2.1 FEATURES

Movie booking system would help audience to book a seat for their movie. This system would also help the theatre management to check availability of the seats and to help the audience. This system would increase the booking process faster, convenient and comfortable. Audience can book their desired seats and can check the availability of booking and cancelling a movie ticket 24X7.

There are several modules required to complete this system. Here we are discussing the main modules or core modules of the system.

- 1.Book Movie Ticket.
- 2.Receiving Tickets.
- 3.For Information
- 4.Premium card registration.
- 5.Exit.

This project is console application without GUI. You can add many features in this project. Here data of movie timings and information is not store in file so every run of program previous data is lost so you can implement the file handling to store all the movie ticket details.

Basically four features are available in this project, but you can write your own code to add more features, and make this project even better. Here, I am going to briefly describe the features:

#### **1. Book Movie Ticket**

This feature allows you to show the current running movies in the theatre. After selecting the movie in the respective theatre it will show timings of the movie for the day then you can select the timings and enter your details like Name, Contact number, and number of tickets you want to purchase. You have two type of seating with different prices like Normal and Gold classes.

#### **2. Receiving Tickets**

This feature is very simple; it searches your transaction id and your name to find your previous bookings for this Name, and also prints your ticket.

#### **3. For Information**

With this feature, you can know more about our cinemas and you can download application from Google play store or Ios app store, and Toll free number of our application.

#### 4. Premium card registration

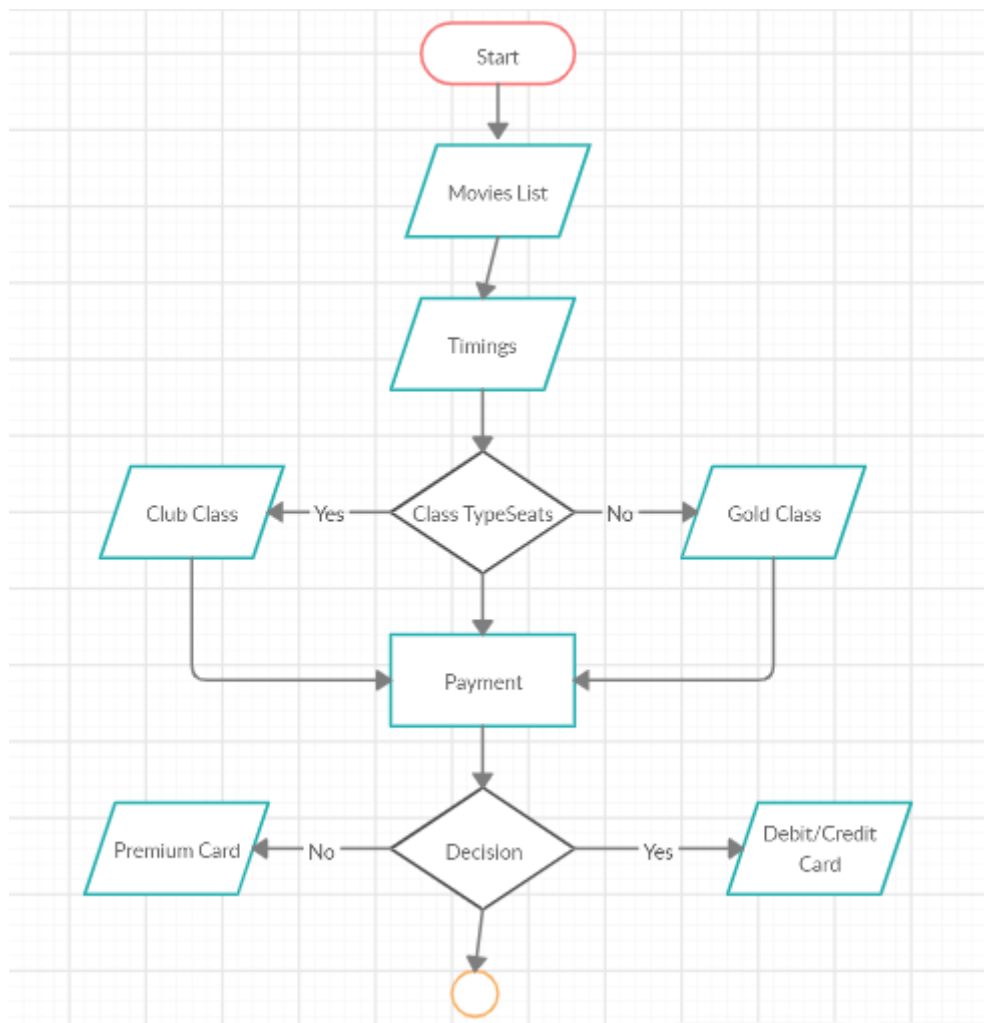
This feature is for registration of premium card to get more benefits, this will take Audience Name, Mobile number, Address and Mail id. It will generate a unique id for every registering customer and these details are stored in a file using File I/O feature in C++. This card can be used to get a discount during payment.

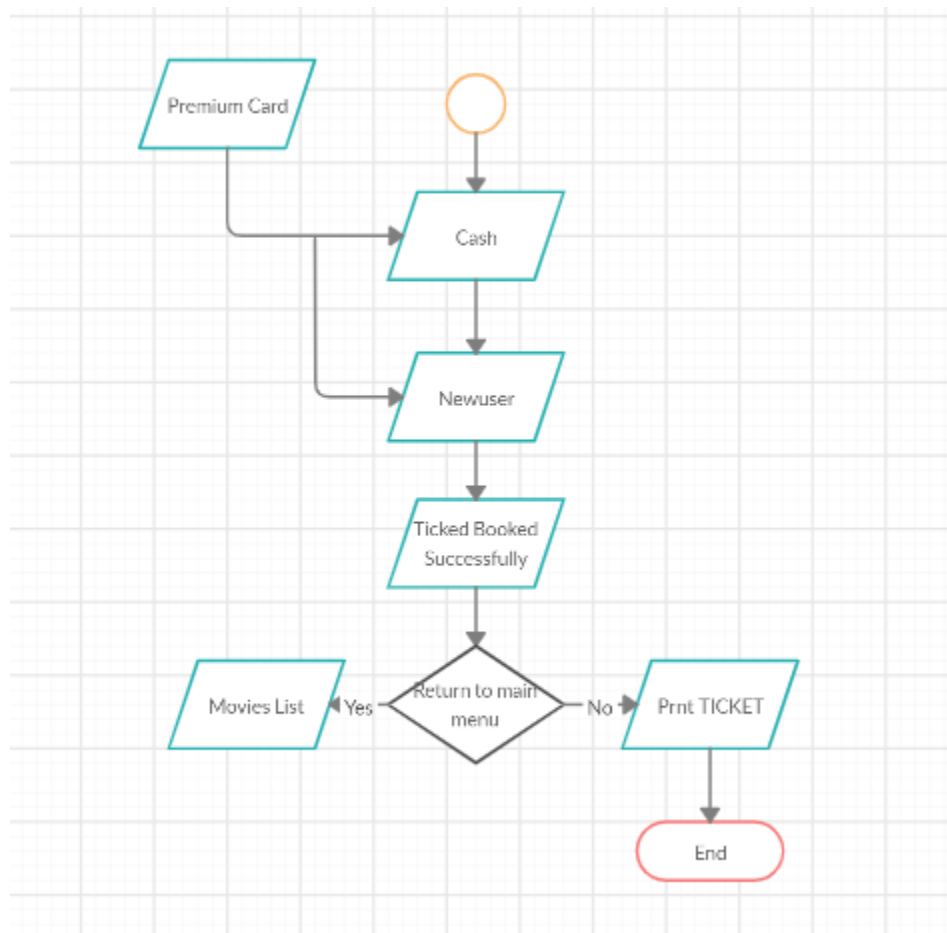
#### 5. Exit:

This feature helps the customer to logout from the application.

## 2.2 FLOW CHART:

A flowchart is simply a graphical representation of steps. It shows steps in sequential order and is widely used in presenting the flow of algorithms, workflow or processes. Typically, flowchart shows the steps as boxes of various kinds, and their order by connecting them with arrows.



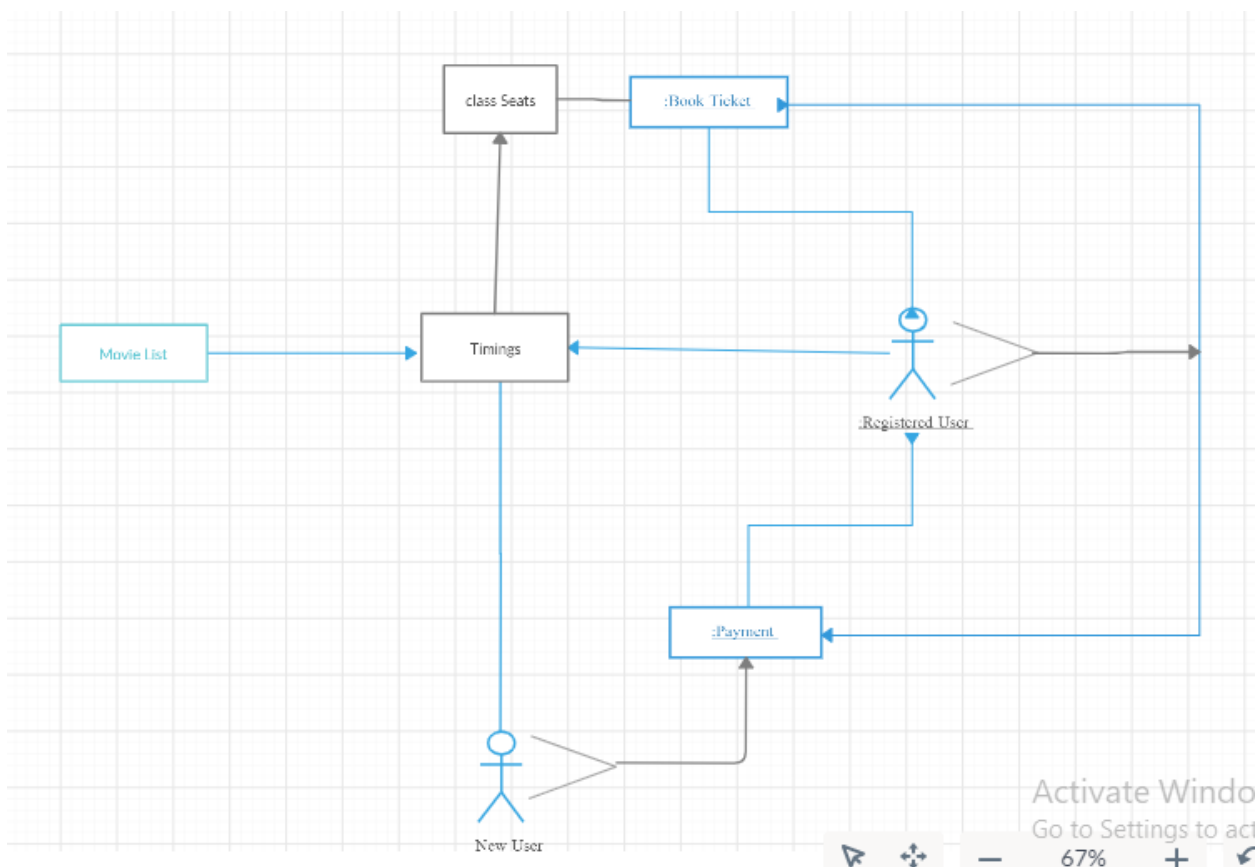


**Fig 2.2 Flow Chart representing Online Movie Booking System**

## 2.3 COLLABORATION DIAGRAM :

A collaboration diagram, also known as a communication diagram, is an illustration of the relationships and interactions among software objects in the Unified Modeling Language (UML). These diagrams can be used to portray the dynamic behavior of a particular use case and define the role of each object.

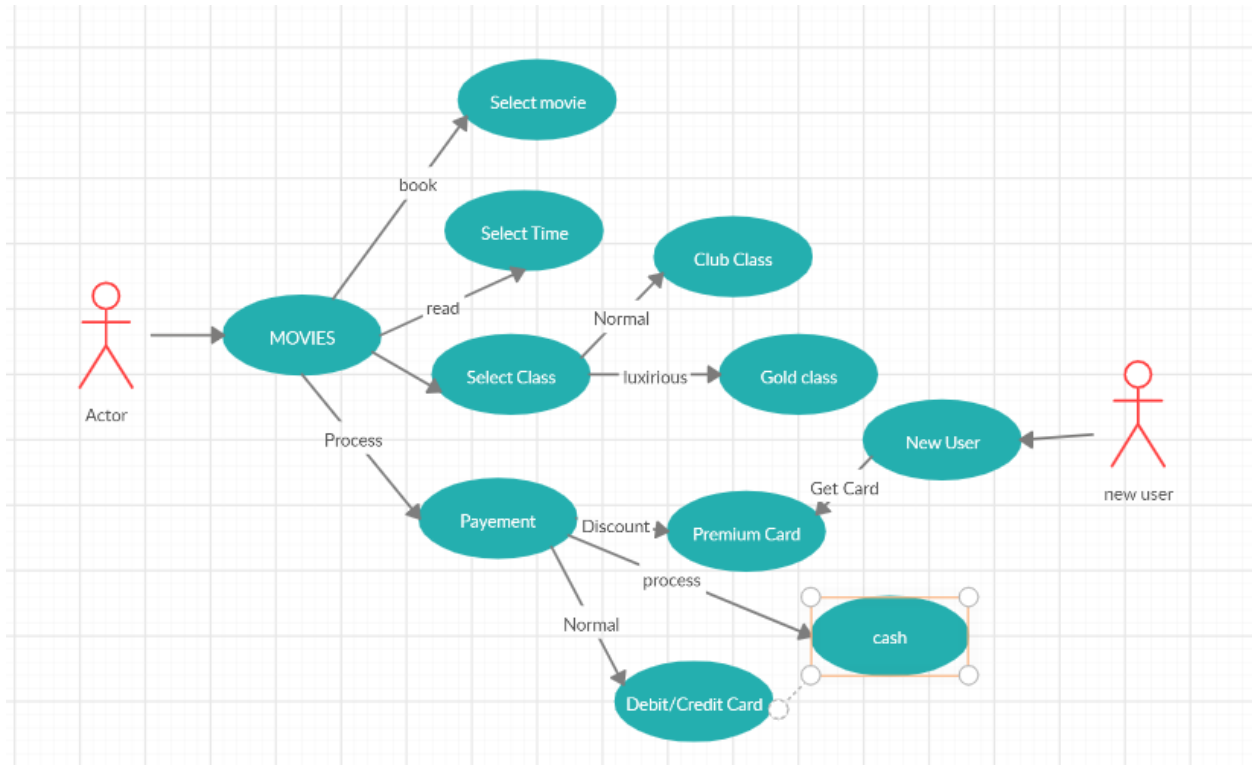
Collaboration diagrams are created by first identifying the structural elements required to carry out the functionality of an interaction. A model is then built using the relationships between those elements. Several vendors offer software for creating and editing collaboration diagram.



**Fig 2.3 Collaboration Diagram**

## 2.4 USE CASE DIAGRAM :

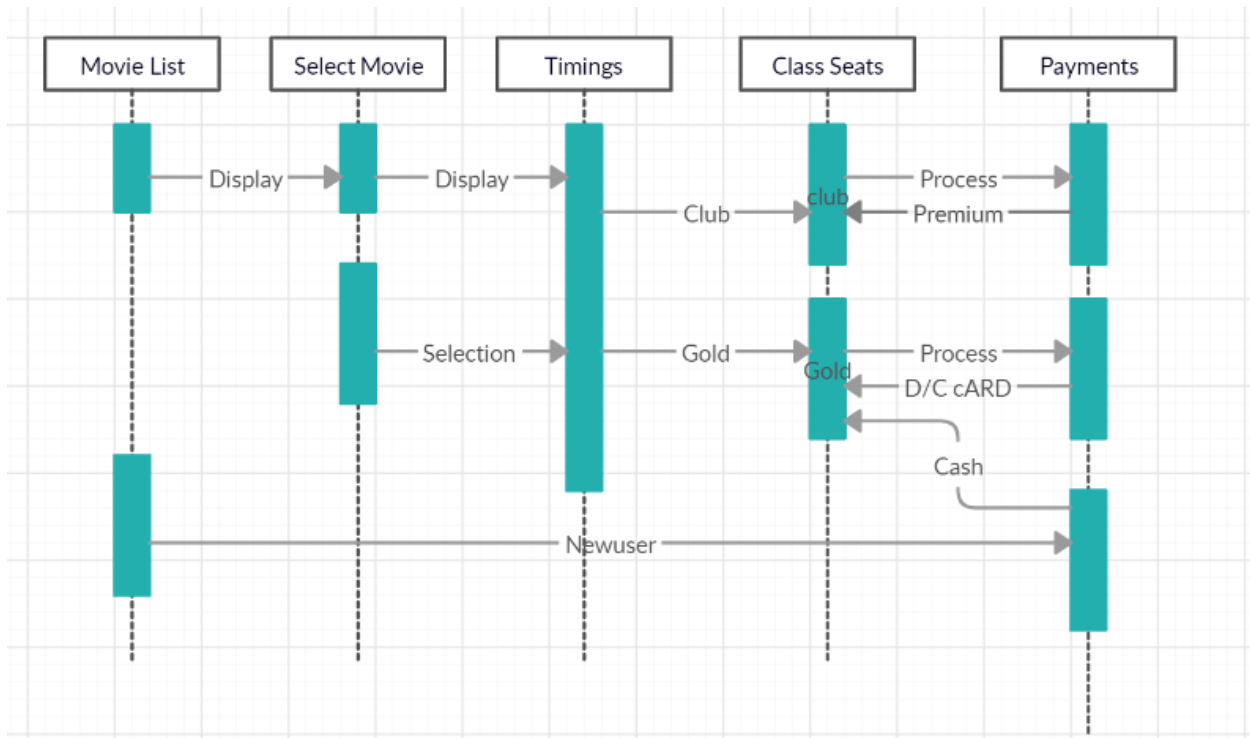
A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform.



**Fig 2.4 Use Case Diagram**

## 2.5 SEQUENTIAL DIAGRAM:

Sequence diagrams are sometimes called event diagrams or event scenarios. A sequence diagram shows, as parallel vertical lines (lifelines), different processes or objects that live simultaneously, and, as horizontal arrows, the messages exchanged between them, in the order in which they occur.

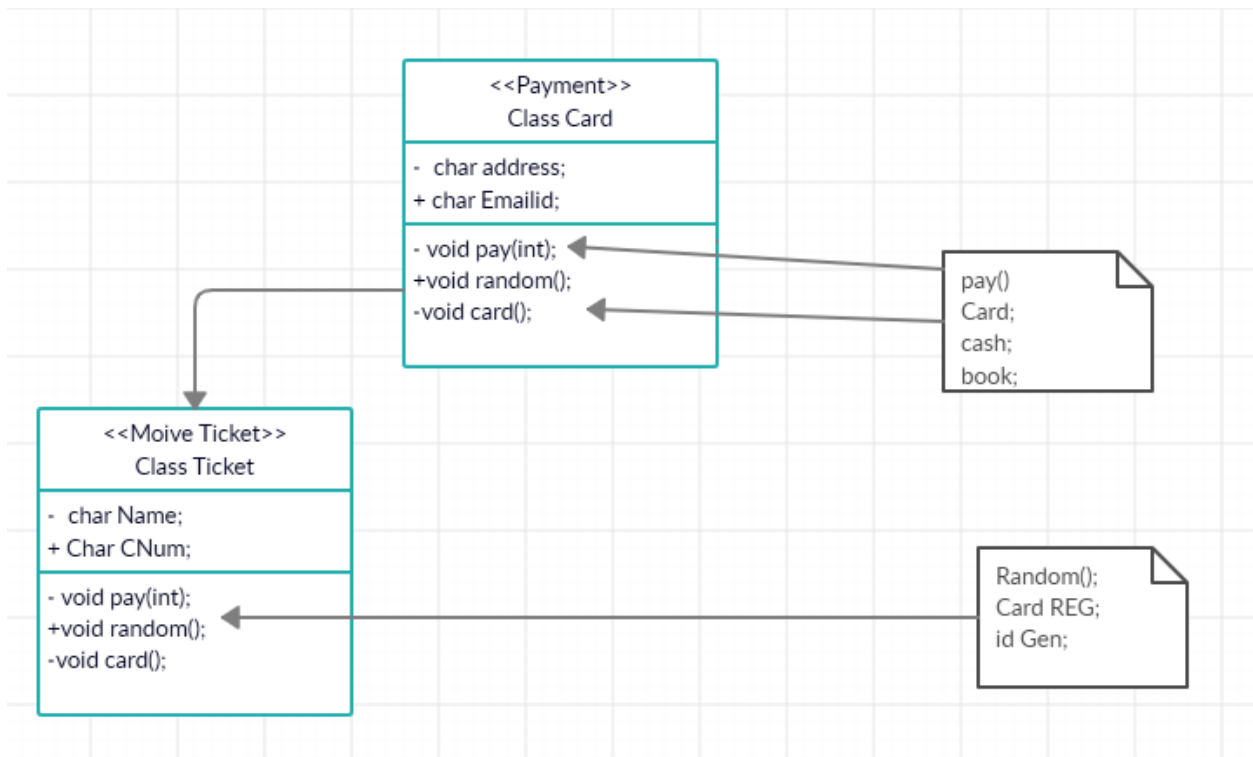


**Fig 2.5 Sequential Way Of Representing UML Diagram**



## 2.6 CLASS DIAGRAM:

A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects.



**Fig 2.6 Class Diagram**

## CHAPTER 3

### **CODING :**

```
//Header Files
#include <iostream>
#include <fstream>
#include <conio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
#include <stdio.h>
#include <process.h>
#include <time.h>
using namespace std;

//Class definition for ticket
class ticket{
public:
char name[10];
char cno[10];
} t; //object definition for ticket

// Class definition for card
class card : public ticket{ //inheritence for public ticket
public:
char address[50];
char emailid[20];
} v; //object definition for card

//Prototype Call for the functions definitions.
void pay(int);
void random();
void card();

//Main function
int main(){
system("CLS");
//Integer Declaration
int ent, a, b, N, x, cardid;
char ans;
//To display the system time.
```



```

cout<<"\n\n\t\t\t\t\t The Timings for the selected show are:";
switch(a)
{
case 1:
system("CLS");
cout<<"\n\n\t\t\t\t\t Select the the timings: ";
cout<<"\n\t\t\t\t\t 1. 08.00";
cout<<"\n\t\t\t\t\t 2. 13.00";
cout<<"\n\t\t\t\t\t 3. 14.50";
cout<<"\n\t\t\t\t\t 4. 18.00";
cout<<"\n\t\t\t\t\t 5. 21.00";
cout<<"\n\t\t\t\t\t 6. 01.00 \n"; //Timings of the show
cout<<"\n\n\t\t\t\t\t Please select the timings: ";
cin>>b;
cout<<"\n\n\t\t\t\t\t Enter your name: ";
cin>>t.name;
cout<<"\n\n\t\t\t\t\t Enter your contact number: ";
cin>>t.cno;
cout<<"\n\n\t\t\t\t\t Enter the number of tickets you want to purchase: ";
int x;
cin>>x;
pay(x);
cout<<"\n\n\n\t\t\t\t\t Your ticket is here: ";
cout<<"\n\t\t\t\t\t Name : "<<t.name;
cout<<"\n\t\t\t\t\t Contact No : "<<t.cno;
cout<<"\n\t\t\t\t\t Show timings :";
switch(b)
{
case 1: cout<<"08.00";
break;
case 2: cout<<"13.00";
break;
case 3: cout<<"14.50";
break;
case 4: cout<<"18.00";
break;
case 5: cout<<"21.00";
break;
case 6: cout<<"01.00";
break;
}
cout<<"\n\n\t\t\t\t\t Do you want to choose another option(y/n)";
cin>>ans;

```

```

system("CLS");
break;
case 2:
system("CLS");
cout<<"\n\n\t\t\tSelect the the timings:";
cout<<"\n\t\t\t1. 08.00";
cout<<"\n\t\t\t2. 13.00";
cout<<"\n\t\t\t3. 14.50";
cout<<"\n\t\t\t4. 18.00";
cout<<"\n\t\t\t5. 21.00";
cout<<"\n\t\t\t6. 01.00";
cout<<"\n\t\t\tPlease select the timings: ";
cin>>b;
cout<<"\n\n\t\t\tEnter your name: ";
cin>>t.name;
cout<<"\n\t\t\tEnter your contact number: ";
cin>>t.cno;
cout<<"\n\t\t\tEnter the number of tickets you want to purchase: ";
cin>>x;
pay(x);
cout<<"\n\n\t\t\tYour ticket is here:";
cout<<"\n\t\t\tName : "<<t.name;
cout<<"\n\t\t\tContact No : "<<t.cno;
cout<<"\n\t\t\tShow timings :";
switch(b)
{
case 1: cout<<"08.00";
break;
case 2: cout<<"13.00";
break;
case 3: cout<<"14.50";
break;
case 4: cout<<"18.00";
break;
case 5: cout<<"21.00";
break;
case 6: cout<<"01.00";
break;
}
cout<<"\n\n\t\t\tDo you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;

```

```

case 3:
system("CLS");
cout<<"\n\n\t\t\tSelect the the timings:";
cout<<"\n\t\t\t\t1. 09.00";
cout<<"\n\t\t\t\t2. 13.00";
cout<<"\n\t\t\t\t3. 14.50";
cout<<"\n\t\t\t\t4. 18.00";
cout<<"\n\t\t\t\t5. 21.00";
cout<<"\n\t\t\t\t6. 01.00";
cout<<"\n\t\t\t\tPlease select the timings";
cin>>b;
cout<<"\n\t\t\t\tEnter your name: ";
cin>>t.name;
cout<<"\n\t\t\t\tEnter your contact number: ";
cin>>t.cno;
cout<<"\n\t\t\t\tEnter the number of tickets you want to purchase: ";
cin>>x;
pay(x);
cout<<"\n\n\t\t\tYour ticket is here: ";
cout<<"\n\t\t\t\tName : "<<t.name;
cout<<"\n\t\t\t\tContact No : "<<t.cno;
cout<<"\n\t\t\t\tShow timings :";
switch(b)
{
case 1: cout<<"09.00";
break;
case 2: cout<<"13.00";
break;
case 3: cout<<"14.50";
break;
case 4: cout<<"18.00";
break;
case 5: cout<<"21.00";
break;
case 6: cout<<"01.00";
break;
}
cout<<"\n\n\t\t\tDo you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;
case 4:
system("CLS");

```

```

cout<<"\n\n\t\t\tSelect the the timings: ";
cout<<"\n\t\t\t1. 08.00";
cout<<"\n\t\t\t2. 13.00";
cout<<"\n\t\t\t3. 14.50";
cout<<"\n\t\t\t4. 18.00";
cout<<"\n\t\t\t5. 21.00";
cout<<"\n\t\t\t6. 01.00";
cout<<"\n\t\t\tPlease select the timings: ";
cin>>b;
cout<<"\n\t\t\tEnter your name: ";
cin>>t.name;
cout<<"\n\t\t\tEnter your contact number: ";
cin>>t.cno;
cout<<"\n\t\t\tEnter the number of tickets you want to purchase: ";
cin>>x;
pay(x);
cout<<"\n\n\t\t\tYour ticket is here: ";
cout<<"\n\t\t\tName : "<<t.name;
cout<<"\n\t\t\tContact No : "<<t.cno;
cout<<"\n\t\t\tShow timings : ";
switch(b)
{
case 1: cout<<"0800";
break;
case 2: cout<<"13.00";
break;
case 3: cout<<"14.50";
break;
case 4: cout<<"18.00";
break;
case 5: cout<<"21.00";
break;
case 6: cout<<"01.00";
break;
}
cout<<"\n\n\t\t\tDo you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;
case 5:
system("CLS");
cout<<"\n\n\t\t\tSelect the the timings:";
cout<<"\n\t\t\t1. 08.00";

```

```

cout<<"\n\t\t\t 2. 13.00";
cout<<"\n\t\t\t 3. 14.50";
cout<<"\n\t\t\t 4. 18.00";
cout<<"\n\t\t\t 5. 21.00";
cout<<"\n\t\t\t 6. 01.00";
cout<<"\n\t\t\t Please select the timings: ";
cin>>b;
cout<<"\n\t\t\t Enter your name: ";
cin>>t.name;
cout<<"\n\t\t\t Enter your contact number: ";
cin>>t.cno;
cout<<"\n\t\t\t Enter the number of tickets you want to purchase: ";
cin>>x;
pay(x);
cout<<"\n \n\t\t\t Your ticket is here: ";
cout<<"\n\t\t\t Name : "<<t.name;
cout<<"\n\t\t\t Contact No : "<<t.cno;
cout<<"\n\t\t\t Show timings :";
switch(b)
{
case 1: cout<<"08.00";
break;
case 2: cout<<"13.00";
break;
case 3: cout<<"14.50";
break;
case 4: cout<<"18.00";
break;
case 5: cout<<"21.00";
break;
case 6: cout<<"01.00";
break;
}
cout<<"\n\n\t\t\t Do you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;
}break;
case 2: system("CLS");
cout<<"\n\nThank you for booking the tickets online \n To print out the tickets please enter your
transaction ID in the portal"; //Finding about a prebooked ticket
struct pre
{

```



```

int trsnid;
char name[10];
} p;
cout<<"\n Enter your transaction id\n (Eg.last five digits of the transaction id) ";
cin>>p.trsnid;
cout <<"Enter your name";
cin>>p.name;
cout<<"Sorry to say that but you will need to get the print out of the booking because our
database shows no booking by this name";
cout<<"\n Do you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;
case 3: system("CLS");
cout<<"For further information about movies you can download our Application(from
the Google Play Store or from the iOS App Store) or contact us at 01234567896523"; //Finding
out more about our cinemas
cout<<"\n Do you want to choose another option(y/n)";
cin>>ans;
system("CLS");
break;
case 4: system("CLS");
cout<<"Good Morning/Evening \n Welcome to start a new journey with our cinemas \n"; //card
membership
card();
cout<<"Thankyou. \n It will take us a week for completing your registration for the card. \n
Please see the benefits of the card on the next page. -->";
char f;
cout<<"\n For selecting the page to go to benefits say (y/n)\n";
cin>>f;
if(f=='y')
{
cout<<"Thank you for registration once again \n The priveleges provided with this card are as
follows:";
cout<<"\n 1. For every purchase of a movie ticket you get 25 points(1point = 1Rs.) so after 16
movies you get a free movie ticket.";
cout<<"\n 2. You are provided with regular updates regarding the movie and the showtimings.";
cout<<"\n 3. Anytime prebook tickets for the upcoming movie and preffered seats will be
provided.";
}
cout<<"\n Do you want to choose another option(y/n)";
cin>>ans;
if(ans=='y')

```

```

{
system("CLS");
break;
}
else
{
exit(0);
}
break;
case 5:
system("CLS");
cout<<"\n\t\t\t\tThank You For Choosing Us \n\n\t\t\t\t";
system("PAUSE");
exit(0);
break;
}
}while(ans=='y');
}

```

//Function Declaration for Card

```

void card()
{
int cardid;
cout<<"\t\t\t\tWelcome to register for card facility in our cinemas";
cout<<" \n\t\t\t\tEnter your name: ";
cin>>v.name;
cout<<"\t\t\t\tEnter your mobile number: ";
cin>>v.cno;
cout<<"\t\t\t\tEnter the address: ";
cin.ignore();
cin.getline(v.address,30);
cout<<"\t\t\t\tEnter the mail id: ";
gets(v.emailid);
system("CLS");
int ID;
srand (time(NULL));
ID = rand() % 400000 + 4000000;
if (ID<0)
ID=(ID*-1);
cout<<"\t\t\t\tYour new card number is - : " <<"\t"<<ID;
fstream fout;
fout.open("card2.dat", ios::out|ios::app);
//fout<<"\n Name : "<<v.name<<"\n"<<"\n Mobile No. : "<<v.cno<<"\n"<<"\n Address

```

```

:<<v.address<<"\n"<<"\n Mail ID : "<<v.emailid<<"\n"<<"\nCard Number:"<<ID;
fout<<v.name<<v.cno<<v.emailid<<ID<<v.address;
//fout.write((char*)&t, sizeof(t));
fout.close();
cout<<"\n\t\t\t\tThank you for the registration for the card. \n";
}

```

//Payment system for the interface

```
void pay(int a)
```

```

{
int normal, gold, amt[2];
time_t t = time(NULL); //time setup
tm* timePtr = localtime(&t);
fstream is;
//fstream is("card.dat", ios::in | ios::out);
is.open("card2.dat", ios::in|ios::app);

```

```

cout<<"\t\tThank you for selecting the show. Now we request you to select your type of seating
\n\n\t\t\t\t1.Normal Class \n\t\t\t\t\n\t\t\t\t2. Gold Class";

```

```

int c;
cout<<"\n\n\t\t\t\tplease select class: ";
cin>>c;
if(c==1)
{
cout<<"\n\n\t\t\t\tYou selected for a Normal show \n\n\t\t\t\t";
system("PAUSE");
system("CLS");
amt[1] = a * 400;
char final;
cout<<"\n\n\t\t\t\tDo you have Premium card(y/n): ";
cin>>final;
if(final=='y')
{
// int cid;

```

```
//fin.read((char*) &v, sizeof(v));
```

```
// cout<<"\n\t\t\t\tEnter the card number[ digits]: ";
```

```
// cin>>cid;
```

```
//fin>>id;
```

```
//sanjeev
```

```
char id[10];
```

```

char *p;
cout<<"\t\t\t\tEnter id:"<<endl;
cin>>id;

is.seekg (0, is.end);//putting object at end
int length = is.tellg();//getting length
is.seekg (0, is.beg);//object at starting

char * buffer = new char [length];

is.read (buffer,length);
p=strstr(buffer,id);
if(p)
{

    cout<<"found"<<endl;
is.close();

    delete[] buffer;
amt[1]=amt[1] - (0.2*amt[1]);
}
else
{
cout<<"\n\t\t\t\t details not found ";
}
}
cout<<"\n\t\t\t\tWant to pay by Card(y/n): ";
char rep;
cin>>rep;
cout<<"\n\t\t\t\t"<<"Paying : "<<amt[1]<<"\n";
if (rep=='y'||rep=='Y')
{
cout<<"\t\t\t\tName of the card holder: ";
char n[10];
//gets(n);
cin>>n;
cout<<"\n\t\t\t\tEnter the card number: ";
char Card[16];
//gets(Card);
cin>>Card;
cout<<"\t\t\t\tExpiry(MM/YYYYY)";
int expirymm,expiryyy;

```

```

cin>>expirymm;
getch();
cout<<"/";
cin>>expiryyy;
while(expirymm<(timePtr->tm_mon) || expiryyy<(timePtr->tm_year + 1900)){
if(expirymm<=(timePtr->tm_mon))
{
cout<<"\t\t\tEnter the month again: ";
cin>>expirymm;
}
if(expiryyy<(timePtr->tm_year + 1900))
{
cout<<"\t\t\tPlease enter a valid year: ";
cin>>expiryyy;
}
};
char password[3],vh;
int h;
puts("\t\t\tEnter the CVV/CVV2: \t\t\t");
while (1)
{
if (h<0)
h=0;
vh=getch();
if (vh==13)
break;
if (vh==8)
{
putch(0);
putch(0);
putch(0);
h--;
continue;
}
password[h++]=vh;
vh='*';
putch(vh);
};
password[h]=='\0';
}
}
else
{

```

```
cout<<"\n\n\t\t\tYou selected for the Gold Class \n\t\t\t";
system("PAUSE");
system("CLS");
amt[2] = a * 700;
char final;
cout<<"\n\t\t\tDo you have DTcard(y/n): ";
cin>>final;
if(final=='y')
{
// int cid;
// cout<<"\n\t\t\tEnter the card id number: ";
// cin>>cid;
char id[10];
    char *p;
    cout<<"\t\t\tEnter id:"<<endl;
    cin>>id;
    fstream is("card2.dat", ios::in | ios::out);
    is.seekg (0, is.end);//putting object at end
    int length = is.tellg();//getting length
    is.seekg (0, is.beg);//object at starting

    char * buffer = new char [length];

    is.read (buffer,length);
    p=strstr(buffer,id);
    if(p)
    {

        cout<<"found"<<endl;
        is.close();

        delete[] buffer;
amt[1]=amt[1] - (0.1*amt[1]);
}
else
{
cout<<"\n\n \t\t\t\t\t details not found: ";
}
}
cout<<"\n\t\t\tWant to pay by Card(y/n): ";
char rep;
cin>>rep;
```

```

cout<<"\n\t\t\t"<<"Paying : "<<amt[2]<<"\n";
if (rep=='y'||rep=='Y')
{
cout<<"\t\t\tName of the card holder: ";
char n[10];
//gets(n);
cin>>n;
cout<<"\n\t\t\tEnter the card number: ";
char Card[16];
//gets(Card);
cin>>Card;
cout<<"\n\t\t\tExpiry(MM/YY): ";
int expirymm, expiryyy;
cin>>expirymm;
getch();
cout<<"/";
cin>>expiryyy;
while(expirymm<(timePtr->tm_mon) || expiryyy<(timePtr->tm_year + 1900)){
if(expirymm<=(timePtr->tm_mon))
{
cout<<"\n\t\t\tEnter the month again: ";
cin>>expirymm;
}
if(expiryyy<(timePtr->tm_year + 1900))
{
cout<<"\n\t\t\tPlease enter a valid year: ";
cin>>expiryyy;
}
};
char password[3],vh;
int h;
puts("\n\t\t\tEnter the CVV/CVV2: \t\t\t");
while (1)
{
if (h<0)
h=0;
vh=getch();
if (vh==13)
break;
if (vh==8)
{
putch(0);
putch(0);

```

```
putch(0);  
h--;  
continue;  
}  
password[h++]=vh;  
vh='*';  
putch(vh);  
};  
password[h]=='\0';  
}  
};  
}
```