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Project - Movie Ticket Booking System using HIVE

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ABSTRACT

The Movie Ticket Booking System facilitates the users to enquire about the recent movies available movies, booking and cancellation of movie tickets according to theatre type and class type, enquire about the status of the booked tickets, etc. The aim of this project is to design a website that gives an easy platform for people to get details of trending films and to get movie tickets in the easiest possible way making it simple for all to buy tickets from anytime and anywhere. This project contains introduction to movie ticket booking system. It is computerized way of reserving the seats of movie in advanced. This online movie ticket booking system can make the process of booking movie tickets much easier than ever before. Then this project contains entity relationship model diagram based on movie ticket booking system an introduction to relational model also example of some sql queries to retrieve data from the database of this system.

INTRODUCTION

Database is an organized collection of data. The data is typically organized to model aspects of reality in a way that supports processes requiring information. A DBMS makes it possible for end users to create, read, update and delete data in a database. The DBMS essentially serves as an interface between the database and end users or application programs, ensuring that data is consistently organized and remains easily accessible. The DBMS manages three important Things: the data, the database engine that allows data to be accessed, locked or modified and the database schema, which defines the database's logical structure. These three foundational elements help provide concurrency, security , data integrity and uniform administration procedures. The DBMS can offer both logical and physical data independence. That means it can protect users and applications from needing to know where data is stored or having to be concerned about changes to the physical structure of data. The main purpose of maintaining a database for Movie Ticket Booking System is to reduce

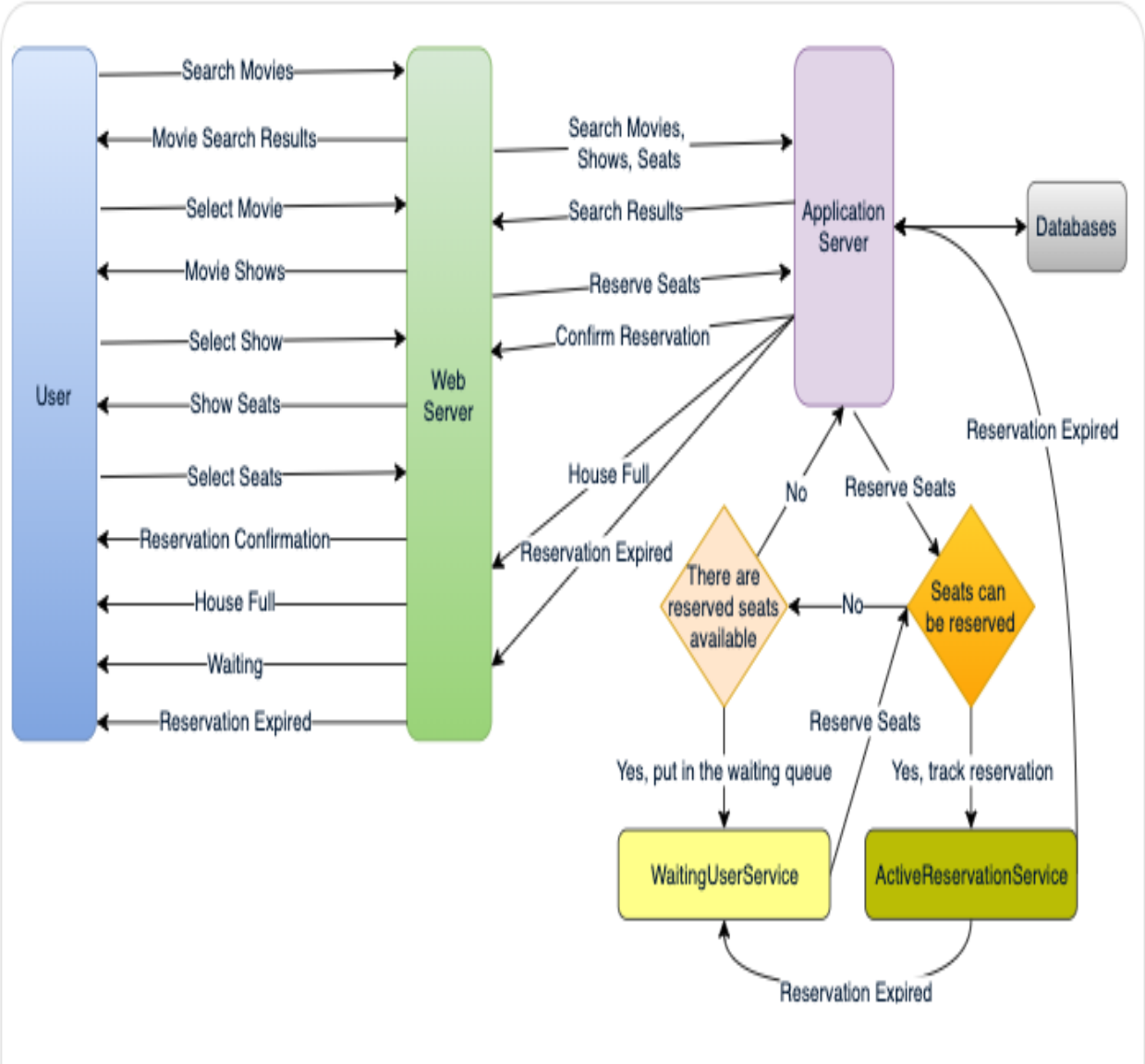
the manual errors involved in the bookings and cancellation of tickets and make it convenient for the customers and the providers to maintain the data about their customers and also about the seats available at them. Due to automation many loopholes that exist in the manual maintenance of the records can be removed. The speed of obtaining and processing the data will be fast. For future expansion the proposed system can be web enabled so that clients can make various enquiries about movie ticket booking. Due to this, sometimes a lot of problems occur and they are facing many disputes with the customers. To solve the above problem, we design a database which includes customer details, availability of movie seats, etc.

LIST OF ENTITIES & ATTRIBUTES

Entities	Attributes
Movie	MovieID Title Description Duration Language Releasedate Country Genre
Show	ShowID Date Starttime Endtime CinemahallID MovieID
Booking	BookingID NumberofSeats Time States UserID ShowID
User	UserID Name Password Email Phone

Cinema Hall	CinemahallID Name TotalSeats CinemaID
Cinema	CinemaID Name Total Cinemahalls CityID
Show Seat	ShowseatID Status Price CinemaseatID ShowID BookingID
Payment	PaymentID Account CouponID TransactionID Paymentmethod BookingID
City	CityID Name State Zipcode
Cinema Seat	CinemaseatID Seatnumber Type CinemahallID

ER DIAGRAM


User
Web Server
Application Server
Databases
Search Movies
Movie Search Results
Select Movie
Movie Shows
Select Show
Show Seats
Select Seats
Reservation Confirmation
House Full
Waiting
Reservation Expired
Search Movies, Shows, Seats
Search Results
Reserve Seats
Confirm Reservation
House Full
Reservation Expired
Reservation Expired
No
Reserve Seats
There are reserved seats available
No
Seats can be reserved
Reserve Seats
Yes, put in the waiting queue
Yes, track reservation
WaitingUserService
ActiveReservationService
Reservation Expired

Database Schema

MOVIE

MovieID	Title	Description	Duration	Language	Releasedate	Country	Genre

SHOW

ShowID	Date	Start Time	End Time	CinemahallID	Movie ID

BOOKING

BookingID	No of Seats	Time	States	UserID	ShowID

USER

UserID	Name	Password	Email	Phone

CINEMA HALL

CinemahallID	Name	Total Seats	CInemaID

CINEMA

CinemaID	Name	Total Cinemahalls	CityID

SHOWSEAT

Showseat ID	Status	Price	Cinemaseat ID	ShowID	Booking ID

PAYMENT

PaymentID	Account	Coupon ID	Transaction ID	Payment Method	Booking ID

CITY

CityID	Name	State	Zipcode

CINEMA SEAT

Cinemaseat ID	Seat Number	Type	CinemahallID

Create Database Using HIVE

Create Database

```
hive> create database Movie;
OK
Time taken: 0.865 seconds
hive> use Movie;
OK
```

Create Table Movies

```
hive> create table Movies(MovieID int,Title string,Description string,Duration string,Lang
ge string,Releasedate string,Country string,Genre string)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 2.778 seconds
```

Describe Movies table

```
hive> Desc Movies;
OK
movieid                 int
title                   string
description             string
duration                string
language                string
releasedate             string
country                 string
genre                   string
```

Show Table

```
hive> Create table Show(ShowID int,Date date,Starttime string,endtime string,CinemahallID
t,MovieID int)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
```

Describe show table

```
hive> Desc Show;
OK
showid                  int
date                    date
starttime               string
endtime                 string
cinemahallid            int
movieid                 int
```

Booking Table

```
hive> create table Booking(BookingID int
    > ,Numberofseats int,time string,States string,UserID int,ShowID int)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.373 seconds
```

User Table

```
hive> Create table User(UserID int,Name string,Password string,Email string,Phone string)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.317 seconds
```

```
hive> Desc User;
OK
userid                  int
name                    string
password                string
email                   string
phone                   string
Time taken: 0.312 seconds, Fetched: 5 row(s)
```

Cinema Hall table

```
hive> create table Theatre(CinemahallID int,Name string,Totalseats int,CinemaID int)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.269 seconds
```

```
hive> Desc Theatre;
OK
cinemahallid            int
name                    string
totalseats              int
cinemaid                int
Time taken: 0.196 seconds, Fetched: 4 row(s)
```

Cinema Table

```
hive> create table Cinema(CinemaID int,Name string,Totalcinemahalls int,CityID int
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.387 seconds
```

```
hive> Desc Cinema;
OK
cinemaid                int
name                    string
totalcinemahalls        int
cityid                  int
Time taken: 0.713 seconds, Fetched: 4 row(s)
```

Show seat Table

```
hive> create table Showseat(ShowseatID int,Status string,price int,CinemaseatID int,ShowID
nt,BookingID int)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.133 seconds
```

```
hive> Desc Showseat;
OK
showseatid              int
status                  string
price                   int
cinemaseatid            int
showid                  int
bookingid               int
Time taken: 0.135 seconds, Fetched: 6 row(s)
```

Payment table

```
hive> Create table Payment(PaymentID int,Account int,CouponID int,TransactionID int,Paymen
ethod string,BookingID int)
    > row format delimited
    > fields terminated by '\t'
    > lines terminated by '\n'
    > ;
OK
Time taken: 0.174 seconds
```

```
hive> Desc Payment;
OK
paymentid               int
account                 int
couponid                int
transactionid           int
paymentmethod           string
bookingid               int
```

Load data into tables

Movie Table

```
hduser@rahul-virtual-machine:~$ cat>Movie2
11      Master  Good    2Hrs    Tamil   22-10-2021      India   Drama
12      Doctor  Nice    3Hrs    Tamil   9-02-2022       India   Comedy
13      Valimai Good    2.5hrs  Tamil   19-02-2022      India   Action
14      RRR     Nice    3Hrs    Telugu  08-07-2022      India   Action
15      Veeram  Good    2Hrs    Tamil   10-05-2022      India   Drama
```

```
hive> select * from Movies;
OK
11      Master  Good    2Hrs    Tamil   22-10-2021      India   Drama
12      Doctor  Nice    3Hrs    Tamil   9-02-2022       India   Comedy
13      Valimai Good    2.5hrs  Tamil   19-02-2022      India   Action
14      RRR     Nice    3Hrs    Telugu  08-07-2022      India   Action
15      Veeram  Good    2Hrs    Tamil   10-05-2022      India   Drama
Time taken: 0.046 seconds, Fetched: 5 row(s)
```

Show table

```
hduser@rahul-virtual-machine:~$ cat>show2
21      9:00    11:00   31      11
22      10:00   12:30   32      12
23      8:00    11:00   32      13
24      9:00    12:00   33      13
25      6:00    8:30    34      14
26      12:00   2:00    35      15
```

```
hive> select * from show;
OK
21      9:00    11:00   31      11
22      10:00   12:30   32      12
23      8:00    11:00   32      13
24      9:00    12:00   33      13
25      6:00    8:30    34      14
26      12:00   2:00    35      15
Time taken: 0.021 seconds, Fetched: 6 row(s)
```

User table

```
hduser@rahul-virtual-machine:~$ cat>user
51      Sharan  sharan@345      sharan@gmail.com        1234567890
52      Nandhu  nandhu@678      nandhu@gmail.com        0987654321
53      Ajay    Ajay$69867      Ajay666@gmail.com       1236549870
54      Tharun  Tharun@342      Tharun@gmail.com        9874563210
55      Arjun   Arjun@9876      Arjun87@gmail.com       7890543219
```

```
hive> select * from user;
OK
51      Sharan  sharan@345      sharan@gmail.com        1234567890
52      Nandhu  nandhu@678      nandhu@gmail.com        0987654321
53      Ajay    Ajay$69867      Ajay666@gmail.com       1236549870
54      Tharun  Tharun@342      Tharun@gmail.com        9874563210
55      Arjun   Arjun@9876      Arjun87@gmail.com       7890543219
Time taken: 0.141 seconds, Fetched: 5 row(s)
```

Booking table

```
hduser@rahul-virtual-machine:~$ cat>booking
41      20      2hr40min        Confirmed       51      21
42      30      3hrs0min        Waiting##       51      22
43      20      2hr30min        Confirmed       52      21
44      25      2hr30min        waiting##       53      23
45      50      2hrs0min        waiting##       54      24
46      44      3hrs0min        confirmed       54      25
47      30      2hrs45min       confirmed       55      26
```

```
hive> select * from booking;
OK
41      20      2hr40min        Confirmed       51      21
42      30      3hrs0min        Waiting##       51      22
43      20      2hr30min        Confirmed       52      21
44      25      2hr30min        waiting##       53      23
45      50      2hrs0min        waiting##       54      24
46      44      3hrs0min        confirmed       54      25
47      30      2hrs45min       confirmed       55      26
Time taken: 0.024 seconds, Fetched: 7 row(s)
```

Cinema

```
hduser@rahul-virtual-machine:~$ cat>Cinema
61      Master  20      71
62      Vivegam 30      72
63      Avatar  20      73
64      Avenger 35      74
65      Doctor  40      75
```

```
hive> select * from cinema;
OK
61      Master  20      71
62      Vivegam 30      72
63      Avatar  20      73
64      Avenger 35      74
65      Doctor  40      75
```

Cinema hall table

```
hduser@rahul-virtual-machine:~$ cat>cinemahall
31      INOX    20      61
32      Vijaya  30      62
33      lakshmi 20      63
34      Mantri  25      64
35      Emperor 30      65
hduser@rahul-virtual-machine:~$ hive
```

```
hive> select * from cinemahall;
OK
31      INOX    20      61
32      Vijaya  30      62
33      lakshmi 20      63
34      Mantri  25      64
35      Emperor 30      65
Time taken: 0.019 seconds, Fetched: 5 row(s)
```

City table

```
hduser@rahul-virtual-machine:~$ cat>city
71      Kolar   Karnataka       123ft5
72      Malur   Karnataka       86jhkj
73      KGF     Karnataka       987hyt
74      Vkota   Karnataka       987kjh
75      Kolar   karnataka       123ft5
```

Cinema seat table

```
hduser@rahul-virtual-machine:~$ cat>cinemaseat
91      444     General 31
92      445     General 32
93      446     Classic 33
94      447     Balcony 34
95      448     Classic 35
```