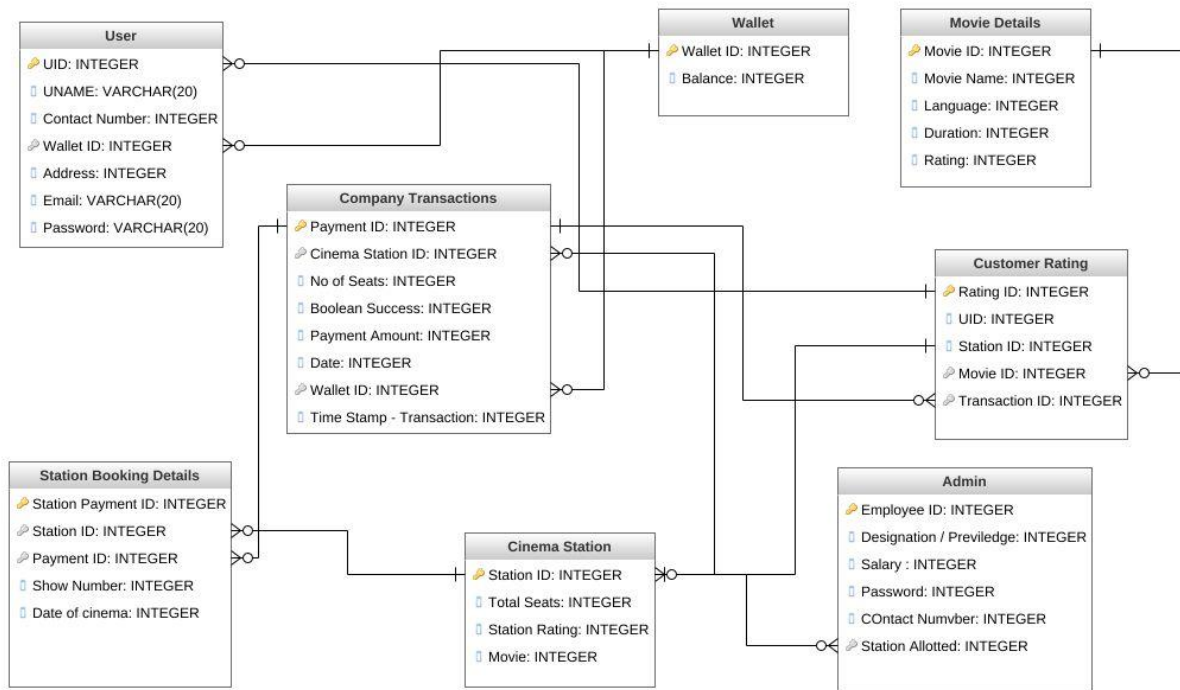


Movie Booking Database System

- 1) Github Link -
- 2) DataBase Overview-



3) Functionalities

- a) Movie Cineplex Management System
- b) Real Time ticket Booking and Cancellation
- c) The Corresponding Authorized Employee can see details like no.of bookings, profit
- d) User Registration and Login Management
- e) Individual Wallet Management

4) Technologies

- a) Java
- b) MySQL

Constraint -

- 1) Not NULL values/ Integer values for no. of seats. (data level)
- 2) Wallet payment only(app level)
- 3) Seats hum decide karege - only no. of seats by user (app level)
- 4) Every station has 2 screen (app level)
- 5) Four shows - same slots(app level)
- 6) Not displaying seats virtually (gui level)
- 7) Local database.
- 8)

GUI

Registration/login screen

Dashboard(city, display shows and their ratings)

Booking window

Wallet screen

Rating

Transaction

Admin side(login/updating shows/view transactions and user info/ Database access)

Checklist

GetListOfCities()

GetListOfEventsByCity(CityId)

GetLocationsByCity(CityId)

GetLocationsByEventandCity(cityid, eventid)

GetEventsByLocationandCity(CityId, LocationId)

GetShowTiming(eventid, locationid)

GetAvailableSeats(eventid, locationid, showtimeid)

VerifyUserSelectedSeatsAvailable(eventid, locationid, showtimeid, seats)

BlockUserSelectedSeats()

BookUserSelectedSeat()

GetTimeoutForUserSelectedSeats()

RDBMS Tables

- Place (To save the hierarchical data for any given theatre like country, state, city and street)
- Theatre

- Screen
- Tier (tier of seats)
- Seats
- Movie
- Offers
- Ticket
- User

Relationship Between RDBMS Tables

- **One to many:** Place and theatre.
- **One to many:** Theatre and screen
- **One to many:** Screen and Tier
- **One to many:** Tier and seats
- **One to many:** Screen and Movie
- **One to many:** User and Tickets
- **One to many:** Tickets and Seats

We are building an application which manages ticket bookings for multiple cinemas in different cities. There will be two types of users. 1) The admin side and 2). The customer. The role of admin is to add/update, cinema/ show details in the database while the customers will be able to book tickets for different shows at different timings. Our database will contain the following tables.

User side -

- 1) Each user has a unique user ID and a unique Wallet which is assigned to them by the company.
- 2) The company has one-to-many movie stations with different show timings(4-5).
- 3) Each user has a User ID(Primary Key) , Wallet ID, booking ID for each booking, transaction ID for each transaction(successful or failed)
- 4) Every user has access to a user rating system where he/she can rate the movies they've watched.
- 5) Every movie has a unique movie ID, show timing and a rating(provided by the users) associated with it.
- 6) Every cinema station has a unique station ID a city with one screen in it and a total number of seats(minimum of 10) and a station rating(provided by the users) associated with it.
- 7) Every transaction has a unique payment ID, time stamp, show timing, date and a boolean variable denoting the success or failure of the transaction associated with it.

Admin side -

- 1) Every employee has a unique employee ID, designation, password, salary, contact number and an allotted station associated with them.
- 2) Based on their designation an employee will be able to access only certain aspects of the database system thus providing restricted access to the employees.

- 1) A show is cancelled if a minimum of 5 bookings is not reached for it.
- 2) Every station is allotted only a single screen for a viewing experience.
- 3) Every employee is allotted only a single station to work with.
- 4) Every station has only 1 managing head.
- 5) The only method of payment is through the wallet allotted to the user by the company with an initial balance of Rs. 1000.

- 6) The database will be hosted and maintained locally.
- 7) While entering password it is displayed with asterisks.

User Side -

- 1) Providing GUI for ID creation and login.
- 2) Display shows available in cities and ratings of both the shows and the stations from the database.
- 3) Providing GUI to insert ratings for shows and stations.
- 4) Providing GUI to book tickets and make transactions
- 5) Display previous transaction details.
- 6) Providing GUI to check wallet balance and add money to it.
- 7) Report generation for transactions made by the user.

Admin side -

- 1) Providing GUI for ID login.
- 2) Providing GUI for inserting and updating show status, show details.
- 3) Providing Report Generation interface to the station head to generate a report of cinema station displaying all details including revenue, shows being displayed, show timings and number of seats booked for each show.

User Side -

- 1) GUI window for Registration/login screen
- 2) Dashboard to provide user interface and navigation.
- 3) Shows screen to display show details in the user's city.
- 4) Booking screen for show bookings.
- 5) Wallet screen to display and update wallet balance.
- 6) Rating screen to display and input ratings for the shows and stations.
- 7) Transaction window to display all transactions made.
- 8) Report Screen to generate report of the transactions.

Admin Side -

- 1) Update screen to insert and update show details in the cinema station allotted.
- 2) Station screen to view station details.
- 3) Report Screen to generate report of the cinema station allotted.

RDBMS - MySQL

Programming - Java

Database Connectivity Driver - JDBC

Development Platform - Eclipse IDE

