

BOOK MY SHOW

```
public class BMSService {  
    List<CinemaHall> cinemas;  
  
    public List<Movie> getMovies(Date date, String city);  
    public List<CinemaHall> getCinemalHalls(String city);  
}  
  
public class CinemaHall {  
    int cinemaHallId;  
    String cinemaHallName;  
  
    Address address;  
  
    List<Audi>audiList;  
  
    public Map<Date, Movies> getMovies(List<Date> dateList);  
    public Map<Date, Show> getShows(List<Date> dateList);  
}  
  
public class Address {  
    int pinCode; //ZipCode  
    String street;  
    String city;  
    String state;  
    String country;  
}  
  
public class Audi {  
    int audiId;  
    String audiName;  
    int totalSeats;  
  
    List<Show> shows;  
}  
  
public class Show {  
    int showId;  
    Movie movie;  
    Date startTime;  
    Date endTime;  
    CinemaHall cinemaPlayedAt;  
    List<Seat> seats;  
}  
  
public class Seat {  
    int seatId;  
    SeatType seatType;  
    SeatStatus seatStatus;  
    Double price;
```

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}

public enum SeatType {
    DELUX, VIP, ECONOMY, OTHER;
}

public enum SeatStatus {
    BOOKED, AVAILABLE, RESERVED, NOT_AVAILABLE;
}

public class Movie {
    String movieName;
    int movieId;
    int durationInMins;
    String language;
    Genre genre;
    Date releaseDate;
    Map<String, List<Show>> cityShowMap;
}

public enum Genre {
    SCI_FI, DRAMA, ROM_COM, FANTASY;
}

public class User {
    int userId;
    Search searchObj;
}

public class SystemMember extends User {
    Account account;
    String name;
    String email;
    Address address;
}

public class Member extends SystemMember {
    public Booking makeBooking(Booking booking);
    public List<Booking> getBooking();
}

public class Admin extends SystemMember {
    public boolean addMovie(Movie movie);
    public boolean addShow>Show show);
}
```

```
}

public class Account {
    String userName;
    String password;
}

public class Search {
    public List<Movie> searchMoviesByNames(String name);
    public List<Movie> searchMoviesByGenre(Genre genre);
    public List<Movie> searchMoviesByLanguage(String language);
    public List<Movie> searchMoviesByDate(Date releaseDate);
}

public class Booking {
    String bookingId;
    Date bookingDate;
    Member member;
    Audi audi;
    Show show;
    BookingStatus bookingStatus;
    double totalAmount;
    List<Seat> seats;
    Payment paymentObj;

    public boolean makePayment(Payment payment);
}

public class Payment {
    double amount;
    Date paymentDate;
    int transactionId;
    PaymentStatus paymentStatus;
}

public enum BookingStatus {
    REQUESTED, PENDING, CONFIRMED, CANCELLED;
}

public enum PaymentStatus {
    UNPAID, PENDING, COMPLETED, DECLINED, CANCELLED, REFUNDED;
}
```