

BOOK MY SHOW/ TICKET MASTER

```
public class BMSService {  
    List<CinemaHall> cinemas;  
    public List<Movie> getMovies(Date date, String city);  
    public List<CinemaHall> getCinemas(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;  
}  
  
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;  
}
```