

Star Cineplex Movie Theater Management System

Normalization

Appoints: (Owner_Id, Owner_Name, Owner_Address, Owner_Phone, Owner_Email, Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email)

1NF: Owner_Phone, Owner_Email, Manager_Phone, Manager_Email, Multivalued Attribute

2NF: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email, Owner_Id
Owner_Id, Owner_Name, Owner_Address, Owner_Phone, Owner_Email

3NF: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email, Owner_Id
Owner_Id, Owner_Name, Owner_Address, Owner_Phone, Owner_Email
No transitive dependency

Table: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email, Owner_Id
Owner_Id, Owner_Name, Owner_Address, Owner_Phone, Owner_Email
No transitive dependency

Manages: (Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email, Employee_Id, Employee_Name, Employee_Phone, Employee_Salary)

1NF: Manager_Phone, Manager_Email, Employee_Phone, Multivalued Attribute

2NF: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary, Manager_Id

3NF: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary, Manager_Id
No transitive dependency

Table: Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary, Manager_Id
No transitive dependency

Enroll: (Cashier_Id, Cashier_Name, Cashier_Address, Cashier_Salary, Cashier_Phone, Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email)

1NF: Cashier_Phone, Manager_Phone, Manager_Email, Multivalued Attribute

2NF: Cashier_Id, Cashier_Name, Cashier_Address, Cashier_Salary, Cashier_Phone, Manager_Id
Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email

3NF: Cashier_Id, Cashier_Name, Cashier_Address, Cashier_Salary, Cashier_Phone, Manager_Id
Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email
No transitive dependency

Table: Cashier_Id, Cashier_Name, Cashier_Address, Cashier_Salary, Cashier_Phone, Manager_Id
Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email
No transitive dependency

Serve: (Customer_No, Customer_Name, Customer_Address, Customer_Phone, Employee_Id, Employee_Name, Employee_Phone, Employee_Salary)

1NF: Customer_Phone, Employee_Phone, Multivalued Attribute

2NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary
ECID, Employee_Id, Customer_No

3NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary
ECID, Employee_Id, Customer_No

Table: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Employee_Id, Employee_Name, Employee_Phone, Employee_Salary
ECID, Employee_Id, Customer_No

Reserve: (Customer_No, Customer_Name, Customer_Address, Customer_Phone, Reservation_Number, Reservation_Date, Seat_Number)

1NF: Customer_Phone, Multivalued Attribute

2NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Reservation_Number, Reservation_Date, Seat_Number
RCID, Reservation_Number, Customer_No

3NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Reservation_Number, Reservation_Date, Seat_Number
RCID, Reservation_Number, Customer_No
No transitive dependency

Table: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Reservation_Number, Reservation_Date, Seat_Number
RCID, Reservation_Number, Customer_No
No transitive dependency

Schedule: (Customer_No, Customer_Name, Customer_Address, Customer_Phone, Show_No, Show_Name, Duration, Price)

1NF: Customer_Phone, Multivalued Attribute

2NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Show_No, Show_Name, Duration, Price
SCID, Show_No, Customer_No

3NF: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Show_No, Show_Name, Duration, Price
SCID, Show_No, Customer_No
No transitive dependency

Table: Customer_No, Customer_Name, Customer_Address, Customer_Phone
Show_No, Show_Name, Duration, Price
SCID, Show_No, Customer_No
No transitive dependency

Final Table:

1. Manager_Id, Manager_Name, Manager_Address, Manager_Phone, Manager_Email, Owner_Id
2. Owner_Id, Owner_Name, Owner_Address, Owner_Phone, Owner_Email
3. Show_No, Show_Name, Duration, Price
4. Customer_No, Customer_Name, Customer_Address, Customer_Phone
5. SCID, Show_No, Customer_No
6. Employee_Id, Employee_Name, Employee_Phone, Employee_Salary, Manager_Id
7. Cashier_Id, Cashier_Name, Cashier_Address, Cashier_Salary, Cashier_Phone, Manager_Id
8. ECID, Employee_Id, Customer_No
9. Reservation_Number, Reservation_Date, Seat_Number
10. RCID, Reservation_Number, Customer_No