Design Restaurant Management System

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Person
- String name
- long phoneNumber

SeatingArrangement
- int tableCount
- List<Table> tables
- Byte[] tableSeatingImage

NotificationManager
- sendNotification(): void

Customer
- EmailID

Employee
- long employeeID
- Date joiningDate
- String password

Receptionist
- Search searchObj
- Reserve reserveObj
- checkIn(): bool
- all methods of two composed objects

Reserve
- NotificationManager
- reserveTable(): bool
- cancelReservation(): bool

asks for a →

Table
- int SeatingCapacity
- int tableNum

Chef
- notifyOrder(): void
- prepareFood(): void

Cash

UPI

CreditCard

Branch
- Receptionist receptionist
- Manager manager
- Address address
- List<Waiter> waiters
- List<Chef> chefs
- SeatingArrangement
- MenuComponent menu

Manager
- Search searchObj
- Reserve reserveObj
- OrderHandler orderHandler
- createMenu(): void
- addMenuSection(): void
- addMenuItem(): void
- printMenu(): void
- addTable(): void
- along with all the methods of three composed objects

Search
- getAvailTables(): List<Table>

TableRepo
- Map<Date, Map<Table, Status>>
- freezeTable(): bool
- freeTable(): bool
- customerOccupied(): bool
- addTable(): void
- getUngInst(): TableRepo

PendingOrderRepo
- List<Order> pendingOrders
- Chef chef
- addOrder(): bool
- orderFulfilled(): bool
- getUngInst(): PendingOrderRepo

<<IPayment>>
- execute(): bool

OrderHandler
- addMeal(): void
- createOrder(): void
- processPayment(): bool
- placeOrder(): bool
- generateBill(): Bill

generates →

Bill
- List<BillItem>
- addBillItems(): void

Waiter
- OrderHandler orderHandler
- all methods of orderHandler

creates →

Order
- List<Meal>
- Table table
- int orderNum
- Bill bill
- addMeal(): void

Meal
- List<MealItem>
- getMealItems(): List<MealItem>

Address
- String city
- String street
- String propertyNum

Restaurant
- List<Branch> branches

MenuSection
- List<MenuComoponent>
- addMenuComponent(): void
- removeMenuComponent(): void
- getChild(): MenuComponent
- print(): void

MenuComponent
- String Name
- String Description
- addMenuComponent(): void
- removeMenuComponent(): void
- getChild(): MenuComponent
- getName(): String
- getDescription(): String
- getPrice(): double
- isVegetarian(): bool
- print(): void

MenuItem
- bool isVegetarian
- double price
- getName(): String
- getDescription(): String
- getPrice(): double
- isVegetarian(): bool
- print(): void
- execute(): bool

<<DishExecutable>>
- execute(): bool

MealItem
- MenuItem menuItem
- int quantity

BillItem
- MenuItem menuItem
- int quantity
- double price

triggers