Specification Document

Data that Management Team Receives from Front-Of-House Team

To ensure that we (the management team) can perform all of our tasks, we require the front-of-house team to send us the following data.

An individual table implies a logical grouping of data. Each entry in the table has the proposed data name, the proposed data type and the details of the data. Any information required to interpret the table has been specified directly before the table. In addition, the source (the document or lecture recording from which we have identified this requirement) and the source details (any relevant notes from the source) have been specified directly after the table.

The management team requires that the front-of-house team send us a record of all sales (presumably daily or weekly - the exact frequency is not required for interpretation of the table). The record of sales will be an ArrayList of Sale objects. Each sale will be an object of class Sale. The sale object must contain a saleID (int) field, a total (int) field, a method (String) field and a dishList (ArrayList<int>) field. In order for us to use the saleList as intended, we require the sale object to conform to the requirements detailed below. However, when we request data, we will only request the saleList itself, not the individual instances of data it contains.

Data Name	Data Type	Data Details
saleList	**ArrayList<Sale>**	An ArrayList of Sale objects. The management team receives a list of sales.
sale	Object	Each sale is an object of class Sale. The sale object must contain a saleID (int) field, an nhsDiscount (boolean) field, an armyDiscount (boolean) field, an optionalCharge (boolean) field, a total (int) field, a method (String) field and a dishList (ArrayList<String>) field.
saleID	int	The primary key for a sale.
nhsDiscount	boolean	If the NHS discount is applied, then nhsDiscount will have the value of true. If the NHS discount is not applied, then NHSdiscount will have the value of false.
armyDiscount	boolean	If the army discount is applied, then armyDiscount will have the value of true. If the army discount is not applied, then armyDiscount will have the value of false.
optionalCharge	boolean	If the optional 18% service charge is accepted, then optionalCharge will have the value of true. If the 18% optional service charge is declined, then optionalCharge will have the value of false.
total	int	The total amount of payment taken.

method	String	The method of payment ("card" or "cash").
dishList	ArrayList<int>	An ArrayList of dishID values. We use an ArrayList instead of a HashSet to allow duplicate values. Instead of having a HashMap with dishID as the key and quantity as the value (which would add complexity), we opt for an ArrayList that only stores the dishID value. Multiple instances of the same dishID translates to a quantity greater than 1.
dishID	int	A unique identifier for a dish.

Source(s): Case Study -> Front of House -> Billing and Payment

Source details: The case study document states the front-of-house team keeps a record of all sales so that they know which dishes sold well and the monies taken.

The management team requires that the front-of-house team send us a record of all bookings (presumably daily or weekly - the exact frequency is not required for interpretation of the table). The record of sales will be a HashSet of Booking objects. Each booking will be an object of class Booking. The booking object must contain a bookingID (int) field, a name (String) field, a phoneNumber (String) field, a type (String) field, and a noOfCovers(int) field. In order for us to use the bookingSet as intended, we require the booking object to conform to the requirements detailed below. However, when we request data, we will only request the bookingSet itself, not the individual instances of data it contains.

Data Name	Data Type	Data Details
bookingSet	**HashSet<Booking>**	A HashSet of Booking objects.
booking	Object	Each booking is an object of class Booking. The booking object must contain a bookingD (int) field, a name (String) field, a number (String) field and a type (String) field.
bookingID	int	A unique identifier for a booking.
name	String	The name the booking is under.
phoneNumber	String	The telephone number given for the booking.
type	String	The type of booking ("phone", "in-person", "walk-in", "online)
noOfCovers	int	The number of people the booking is for.

Source(s): Case Study -> Management (-> Tracking)

Source details: The case study document states the management team keeps track of bookings. Furthermore, under the "Tracking" heading, it is implied/stated that this information is used to predict future bookings.