

The following paragraph is a scenario of a restaurant. Understand and design the scenario using Object oriented concepts.

A restaurant (sultans dine) is located on the 1st floor, Samsuddin Mansion, House: 41 Road: 52, Dhaka 1212. The restaurant has a website address. Many staffs work there who has a different identity like name, address, and mobile number. Staff can be categorized into waiting staff, cleaning staff, cooking staff, etc. Waiting staffs are two types, waiter, sommelier. Cooking staff can be head chef, deputy chef, dishwasher. They all perform different tasks based on their role in the restaurant. Many persons go to visit the restaurant and some turn into a customer. Each person has a different identity. Customers can reserve a date and note down their special preferences and allergies.

- Use an appropriate name to define a class.
- Identify the properties and methods of each class
- Use constructor for classes
- Apply OOC like encapsulation, inheritance if necessary
- Write a separate class to create objects of other classes and call their properties/methods.  
(write a simple statement within the method body to distinguish their activity)