# Lecture 3 - 预定类: Hotel & Airline Ticket

## 餐馆OOD

## 初步设计

## Graphical user interface, diagram Description automatically generated

## 如何修改这个可以让他支持拼桌

## Graphical user interface, diagram Description automatically generated

## 用map来对应table和list of orders，map可以找到每个table对应有哪些order（这个暂时不用，因为复杂一些）

## 或者直接在table里加capacity这个变量，每次当有人坐就减去相应的人，如果剪完到0了那就把available变成false

### Clarify

* What
  + 管理: Party -> Restaurant -> Table
* How
  + 能否预约
  + 能否外送
* Who - Optional
  + 思考模式1: 过于复杂
    - Party 进入餐馆 -> Host指引到空桌 (find table) -> 一个waiter负责这桌客人 (assign waiter) -> 客人点菜 (take order) -> Chief 拿到order，按顺序做菜 (cook by order) -> Order做好后，waiter上菜 (serve order) -> 客人吃完后付钱 (check out)
  + 思考模式2
    - 客人进入餐馆，餐馆返回一个Table
    - 客人点菜，餐馆返回一桌菜
    - 客人付账，餐馆清空Table

### Use Case & Classes

* Restaruant
  + Find Table (serve)
  + Take Order (serve)
  + Checkout (checkout)

## 预定类OOD

* 题库
  + Restaurant reservation system
  + Hotel reservation system
  + Flight/Bus/Train reservation system
* 解题思路
  + What: 考虑预定的东西
  + Use Case = Reserve
    - Search Criteria -> search() -> List<Result> -> select() -> Receipt
      * Reservation findTableForReservation(Time slot) throws NoTableForReservationException
      * void confirmReservation(Reservation reservation)
    - select
    - cancle

关于search critia可以问的问题

Text

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Graphical user interface, text, application

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Description automatically generated

Diagram

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还需要的改进？如何判断table是否可预定

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判断它的前后时间段是否有人预定

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Diagram

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Hotel reservation system

## Hotel Reservation

* Can you design a hotel reservation system
* What
  + 是为一间酒店设计预定房间系统，还是先选择酒店的系统?
  + 搜索条件区别: 人数+时间 VS 人数+时间+地址
  + Search criteria -> Search() -> List -> Select() -> Receipt

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左边是给出不同hotel，右边是一个specific hotel

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Table

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实际上我们应该返回的是每个roomtype，然后给你选择每个roomtype你要定几间

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1. Table

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2. Table

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3.

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Text

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或者直接用java提供的linkedHashmap来实现，只需要提供他的capacity就行

A screenshot of a computer

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