


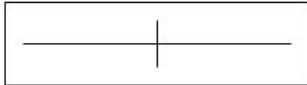
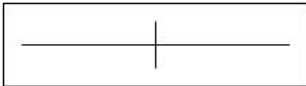

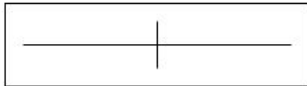
Project for SDE Backend: Restaurant

Instructions:

You are going to design and implement RESTful web service for a restaurant in order to support menu and bill order management.

Requirements:

1. Menu management
 - a. Implement RESTful API for CRUD operation (Create, Retrieve, Update and Delete) to manage menu in restaurant
 - b. Menu item consist of
 - i. Name
 - ii. Description
 - iii. Image
 - iv. Price
 - v. Additional details (type, ingredient for example Pizza, Hot, Cold, Italian, Thai etc.)
 - c. Implement RESTful API for listing menu and support pagination
 - d. Implement RESTful API for searching menu by keyword that matches title, description, additional details

<p>Hawaiian pizza</p> <p>All-time favourite toppings, Hawaiian pizza in Tropical Hawaii style.</p>  <p>\$300</p> <p>Italian Ham Pineapple</p>	<p>Chicken Tom Yum pizza</p> <p>Best marinated chicken with pineapple and mushroom on Spicy Lemon sauce. Enjoy our tasty Thai style pizza.</p>  <p>\$350</p> <p>Italian Thai Chicken Mushroom Hot</p>	<p>Xiaolongbao</p> <p>Chinese steamed bun</p>  <p>\$200</p> <p>Chinese Pork Recommended</p>
<p>Kimchi</p> <p>Traditional side dish made from salted and fermented vegetables</p>  <p>\$50</p> <p>Korean Radish Cabbage</p>	<p>Oolong tea</p> <p>Partially fermented tea grown in the Alishan area</p>  <p>\$30</p> <p>Hot Non-alcohol</p>	<p>Beer</p> <p>Fantastic flavors and authentic regional appeal beer</p>  <p>\$60</p> <p>Alcohol</p>

Example of menu (No need to implement UI)

Name	Description	Image	Price	Types
Hawaiian Pizza	All-time favourite toppings, Hawaiian pizza in Tropical Hawaii style.	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu1.jpg	\$300	Italian Ham Pineapple
Chicken Tom Yum Pizza	Best marinated chicken with pineapple and mushroom on Spicy Lemon sauce. Enjoy our tasty Thai style pizza.	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu2.jpg	\$350	Italian Thai Chicken Mushroom Hot
Xiaolongbao	Chinese steamed bun	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu3.jpg	\$200	Chinese Pork Recommended
Kimchi	Traditional side dish made from salted and fermented vegetables	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu4.jpg	\$50	Korean Radish Cabbage
Oolong tea	Partially fermented tea grown in the Alishan area	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu5.jpg	\$30	Hot Non-alcohol
Beer	Fantastic flavors and authentic regional appeal beer	https://s3-ap-southeast-1.amazonaws.com/interview.ampostech.com/backend/restaurant/menu6.jpg	\$60	Alcohol

2. Bill order management

- e. Implement RESTful API for CRU operation (Create, Retrieve and Update) to manage bill order. Retrieval of bill order should return detail of
 - i. Menu items
 - ii. Quantities
 - iii. Total price
- f. Update operation can add or remove menu items and quantities
- g. Implement RESTful API for checkout operation that returns
 - i. Menu items
 - ii. Quantities
 - iii. Total price

Bill #	Menu	Quantity	Ordered time
1	Hawaiian Pizza	1	1/1/2017 10:00:00 AM
1	Kimchi	2	1/1/2017 10:00:00 AM
1	Kimchi	1	1/1/2017 11:00:00 AM
2	Xiaolongbao	1	1/1/2017 12:00:00 PM
2	Beer	1	1/1/2017 12:00:00 PM
3	Oolong tea	1	1/1/2017 3:00:00 PM
3	Beer	3	1/1/2017 3:00:00 PM