

1. Project topic is Restaurant.

2. Microservices:

- Employee service
- Order service
- Menu service
- Reservation service

3.

- Employee service

Employee service is a service which is responsible for looking through employees, hire new employees, fire old employees.

Methods:

- addEmployee(Employee employee) – add new Employee
- fireEmployee(Employee employee) – fire old employee
- getEmployees() – get all employees
- getEmployee(Long id) – get employee by id
- update(Employee employee) – update employee

- Order service

Order service is a service which is responsible for creating orders, adding meals to the order, calculating the bill.

Methods:

- createOrder(List<Meals> meals, Employee receiver) – creates new order with meals
- addMealsToOrder(List<Meals> meals) – adds meals to order
- calculateBill(Long id) – calculates order bill
- getOrders() – get all orders
- getOrder(Long id) – get order

- Menu service

Menu service is a service which is responsible for adding new meals, deleting old meals, creating new menus, adding meals to the menus.

Methods:

- addMeal(Meal meal) – add new meal
- deleteMeal(Long id) – delete old meal
- getMeals() – get all meals
- getMeal(Long id) – get meal by id
- getMealsWithoutMenu() – get meals which are not in any menu

- Reservation service

Reservation service is a service which is responsible for table reservation, changing table statuses.

Methods:

- `getReservations(LocalDateTime time)` – get all reservations on certain date
- `reserveTable(LocalDateTime time, String mobilePhone)` – reserve table on certain date

4.

Order service will communicate with meal service. Order service will get info about meals when order is going to be created or when bill is going to be calculated. Also, order service will communicate with employee service in case to get information about who took an order.

Reservation service will communicate with employee service in case to get information about employee who took reservation from customer.

Employee service will communicate with order service in case to get information about what orders took certain employee. Also, it will communicate with reservation service in case to get info what reservations took certain employee.