

Accepted language: Nodejs with Typescript (preferably NestJS)

Task: Manage a Pizza restaurant

The restaurant receives an array of orders, while each order is for one Pizza that contains an array of toppings.

The dough-to-pizza pipeline is:

Dough chef -> Topping chef -> Oven -> Serving

When a certain station within the pipeline is completed, the Pizza moves to the next one. There are no dependencies between the orders in the arrays - when an order is ready to be served, it is being deployed to the customer.

The restaurant personnel is:

2 dough chefs - each chef can handle a single dough at a time. It takes 7 seconds per single dough.

3 topping chefs - each chef can handle 2 toppings at a time. It takes 4 seconds to put each topping on the Pizza.

1 oven that takes one pizza each time and cooks it for 10 seconds.

2 waiters serve the pizza to the customers. From the kitchen to the table it takes 5 seconds.

Each process should print logs (start and end time).

At the end, when all the orders had been served, you need to print a report about the complete set of orders. The report should contain:

The preparation time from start to end.

The preparation time for each order.

When the Pizzas are ready - upload your code to Github, with a basic README.md file that includes execution instructions.

Bonus tasks:

- Prepare a Docker container that will run the restaurant management system and have it ready for deployment.
- Save the report to a DB (MySQL or MongoDB) that runs in the Docker container.
- Create a simple react app that shows the orders with the current station