# **Group Assignment - Embedded System**

## Kaitenzushi (Conveyor Belt Sushi)

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## 1. DESCRIPTION

In the midst of busy restaurants that are flooded with visitors, a good restaurant is a restaurant that is able to improve and maintain its quality, be it from the quality of food taste, comfort and service. Development of System Experts in sushi restaurants is one of the solutions that can overcome the problem of human error in restaurants.

One of the expert systems that is applied is the sushi train. This system functions to deliver sushi directly from the kitchen to the customer's table safely and quickly. We can order sushi using the small table screen that is on each table besides that we can also take the sushi that is displayed on the rotating belt which is located under the sushi train. To further improve service there is also AI to put dirty dishes after eating

### 2. WRSPM

### A. World/Domain(W)

- 1. All staffs/waiters must be have knowledge about their system.
- 2. There are 2 electric currents flowing through 2 belts that have normal speed which can be controlled using a power button.
- 3. There is a screen that is used to display the order menu and record the buyer's order, record the table location so that food can be delivered automatically and consumers can finish payments by scanning the QR Code that appears after being totaled by the system.
- 4. There is a hole to put the buyer's dirty dishes in so that there is no buildup of the buyer's plates

## **B.** Requirement

Buyers enter their orders into the display screen, when ordering food on the screen, consumers can pay directly using the qr code, or use other payments. Then when it's finished, the buyer can insert the dirty plate into the hole provided

## C. Specifications

- 1. Orders that are ready to be served will come to the customer's table using a train with fast lanes
- 2. After the consumer is finished with the dish, she/he can immediately put the plate into the dirty plate hole

## D. Program

- 1. Displays a list of menus (dessert, beverage, drink, etc) and payments in an attractive appearance
- 2. The sushi train is programmed to run according to the line and also for special trains, it is programmed to come to the table according to the order.

### E. Machine

Hardware:

- 1. Display screen
- 2. Special train
- 3. Normal train
- 4. Dish hole

#### F. Control

Er: Train Sushi

E<sub>v</sub> : order, payment

S<sub>v</sub>: display screen

Sh: appropriate order