OSENSA Restaurant Full Stack Assignment

Summary

Write a web app to simulate ordering food by customers in a restaurant.

User Interface

This web app has a simple one page interface.

There are fixed number of tables in this restaurant (you can choose a number like 4). Tables should be numbered.

There will be an ORDER button for each table. The customer can click on ORDER button which should open a pop-up to take in the name of the food the customer wants to order. The name of the food is free text.

After the order is submitted, it will take a random amount of time for it get ready. When the ordered food is ready it should show up on the table of the customer that ordered it.

Customers can order at the same time.

Food should show up as soon as it is ready.

The UI can be as basic and simple as it can be. No styling is required.

Architecture

Design an event driven web app.

Frontend generates ORDER events that the backend would receive and process.

Backend generates FOOD events that the frontend would receive and process.

Communication

Only use MQTT over WebSockets as the communication protocol between the frontend and the backend. Do not use RESTFul API.

Frontend

Use Svelte with TypeScript to implement the frontend. You can use any lib you need.

Backend

Use python with async.io module to implement the backend. You can use any lib you need.

Requirements

- The code should be production ready:
  - Well tested
  - Handles edge cases
  - Takes care of errors
  - Provides logging
  - Is secure
  - Properly documented
  - Has tests

Deliverable

Email project's Git URL and demo link to fpanahi@osensa.com.

Deadline

This assignment is due 72 hours after it has been sent to you by email. Contact fpanahi@osensa.com in case you need more time to finish the assignment or if you have any question regarding the assignment.