

Frontend Software Engineer Interview Project

Background

Coco has robots living outside 24x7 across multiple cities. As a result, a critical tool for our operations team is a map view of all relevant information and the ability to intuitively and quickly resolve issues. For instance, if a robot flips over in the middle of the street during a delivery, ops needs to see this immediately and quickly dispatch an in-field agent to resolve the problem. Ops should be able to see all diagnostics on this robot and if it requires repair, this must be marked, and then the order will need to be transferred to the closest available robot (sometimes this may be a robot actually closer to the customer).

Task

Write a web application that an ops employee at Coco could use for the scenario above. This should include the following:

- A Map View (and any other appropriate view) showing:
 - All robots, intuitively indicating their state
 - All current orders in progress and any relevant information (such as time since order placed)
- Functionality to change a robot's state
 - o 0: available
 - 1: on way to store
 - o 2: at store
 - o 3: on way to customer
 - 4: at customer
 - 5: on way back to store
 - o 6: needs attention
 - o 7: needs repair
 - o 8: SOS!
- Functionality to change an order's robot assignment

Your end user is an operations employee assigned to the Los Angeles market, sitting at a computer at home, and needing to quickly assess any situation and resolve it.

This is purposefully open ended. Design this however you want, but the primary objective is to let ops do their job effectively, meaning they are prioritizing the right problems and they can clearly assess a situation and command in-field agents.

Also, don't reach out if anything on this spec is missing or you feel it's wrong. Just fix it and present why you did so.



Included Files

We've included a file called **database.json**. This is a sample response from our servers and includes information on several robots and orders.