Based on the provided description of the main functions of the vending machine in the PDF please produce a small project:

- A simple user interface that simulates the main interactions the customer and service operator would have with the vending machine as described in the PDF i.e. inserting money, making a selection, restocking the machine as well as anything else you can think of. A web based interface would be preferred.
- A corresponding back end that stores and updates state information i.e. the item inventory, coin counts etc.
- We want the implementation to make use of Java and JavaScript you can use any libraries or frameworks you need. Please explain your choices.
- Think about improvements or features that could be added to your vending machine. These don't need to be implemented – these are for discussion at the interview.
- We want to see the source code for your implementation.

Please provide the solution's code to this exercise one working day before your interview. During the interview, we would like to see the code executed and running. Please bring your laptop for a demonstration (there's a screen available) and include running instructions with your submission. If you do not own a laptop, we can supply a computer for the demonstration during your interview.