Title - Hospital Management System
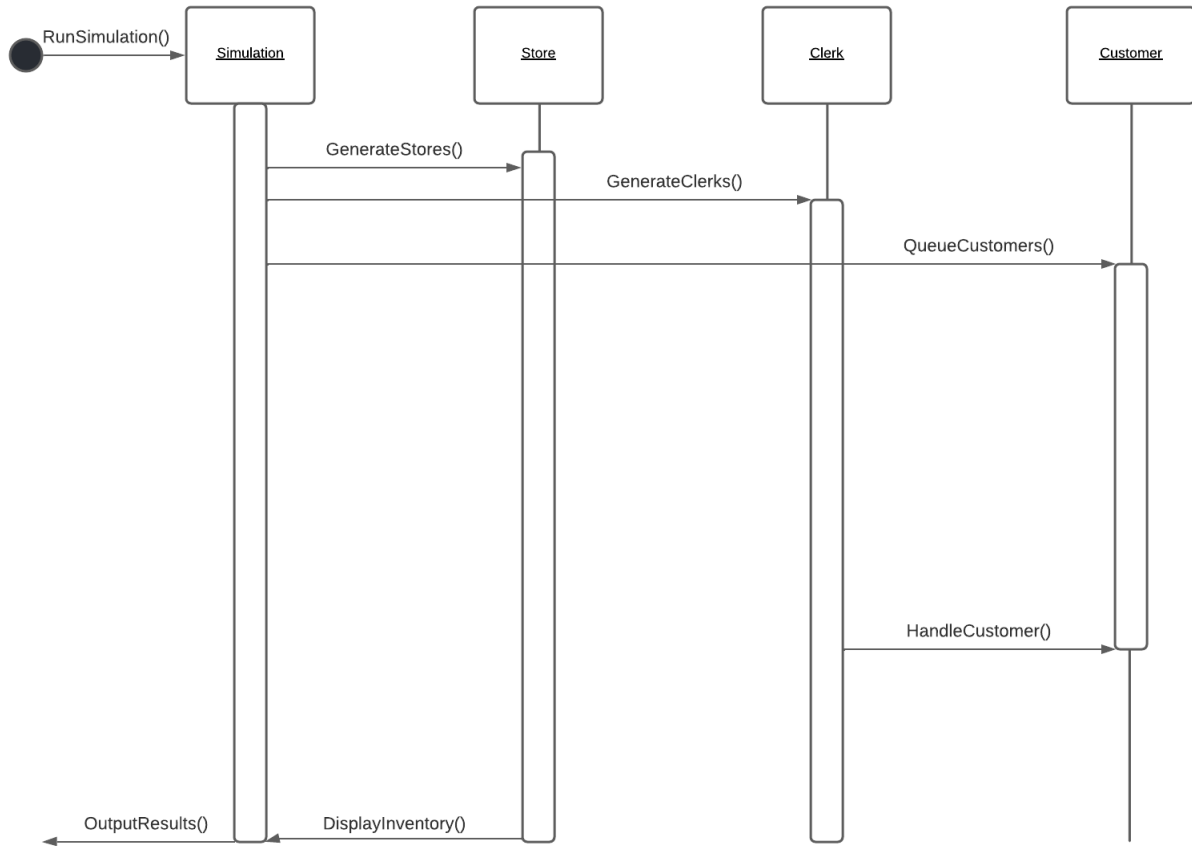
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Description - We are going to make a simulation of a hospital to help with managing one. It will allow you to enter how many different types of room and staff are available, and provide data about how many patients can be accommodated on average. Different types of rooms will be used for different things, IE there could be emergency rooms, operating rooms, and long-term care rooms. We plan to allow for different types of staff such as doctors, nurses, and specialists like anesthesiologists. Patients will present to the hospital with different types of injuries, they must be sent to the correct room. If there are no rooms it will be handled accordingly. Patients will leave rooms by being cured, this will be able to happen after a set amount of time, or could be improved if there are low amounts of patients and high doctor availability. Overcrowded rooms or hospitals could lead to the spread of disease. Patients will be billed according to the amount of time they stayed, as well as for the care they received.

Language - Java 11
Functional Elements: (2-4 per person so 6-12 in total)
1. Different kinds of patients
2. Different kinds of staff
3. Different types of rooms
4. Track available rooms
5. Allow user to enter room/staff numbers
6. Route patients to correct room
7. Allow patients to be cured
8. Have different types of injuries/diseases
9. Possible spread of disease
10. Patient Registration
11. Patient Billing
12. Prescription (etc.)
13. Immunization Records
14. Patient Insurance + Claims

Sequence Diagram:

Class Diagram: