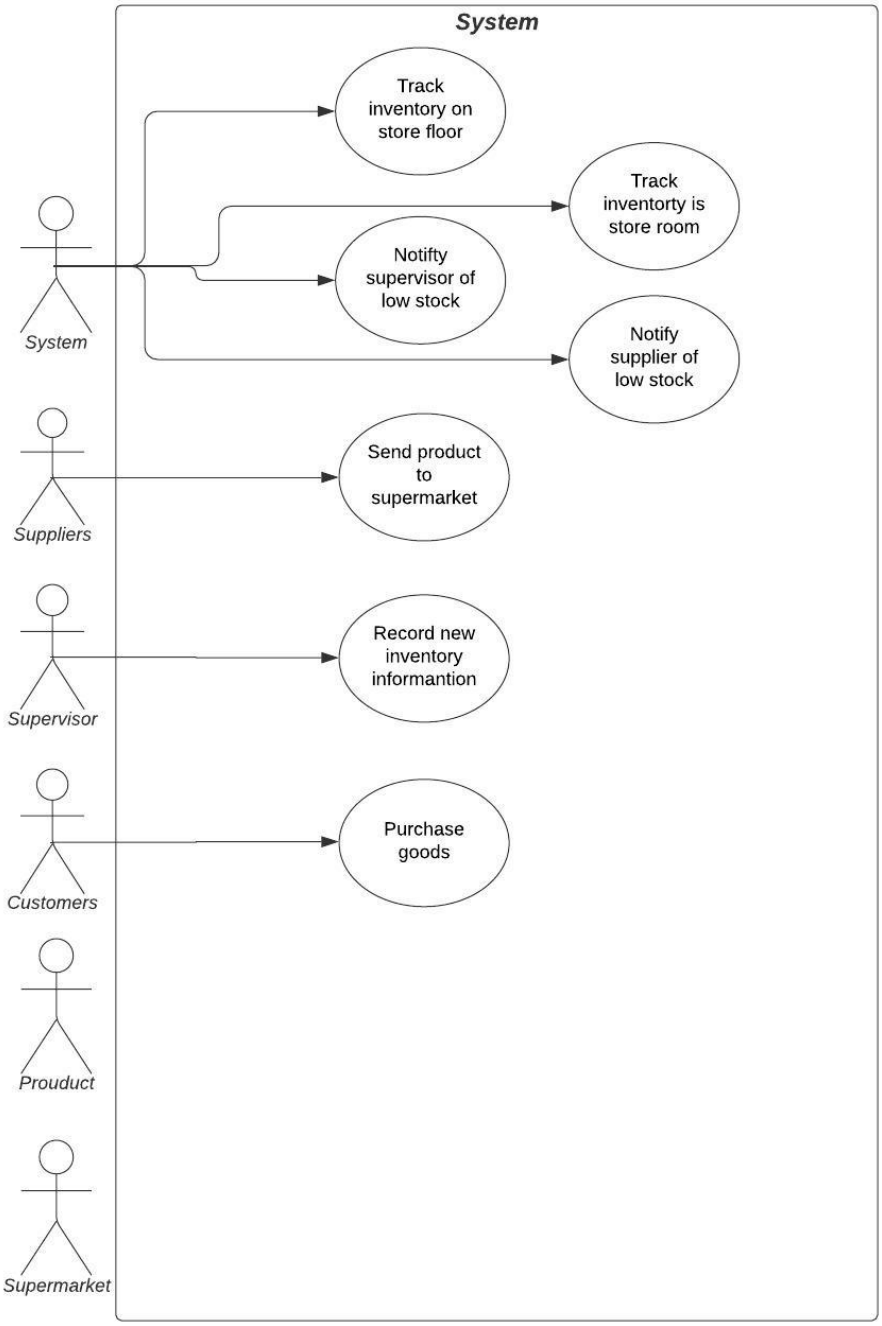
Assignment 3 – System Design

Part 1: System Modelling:

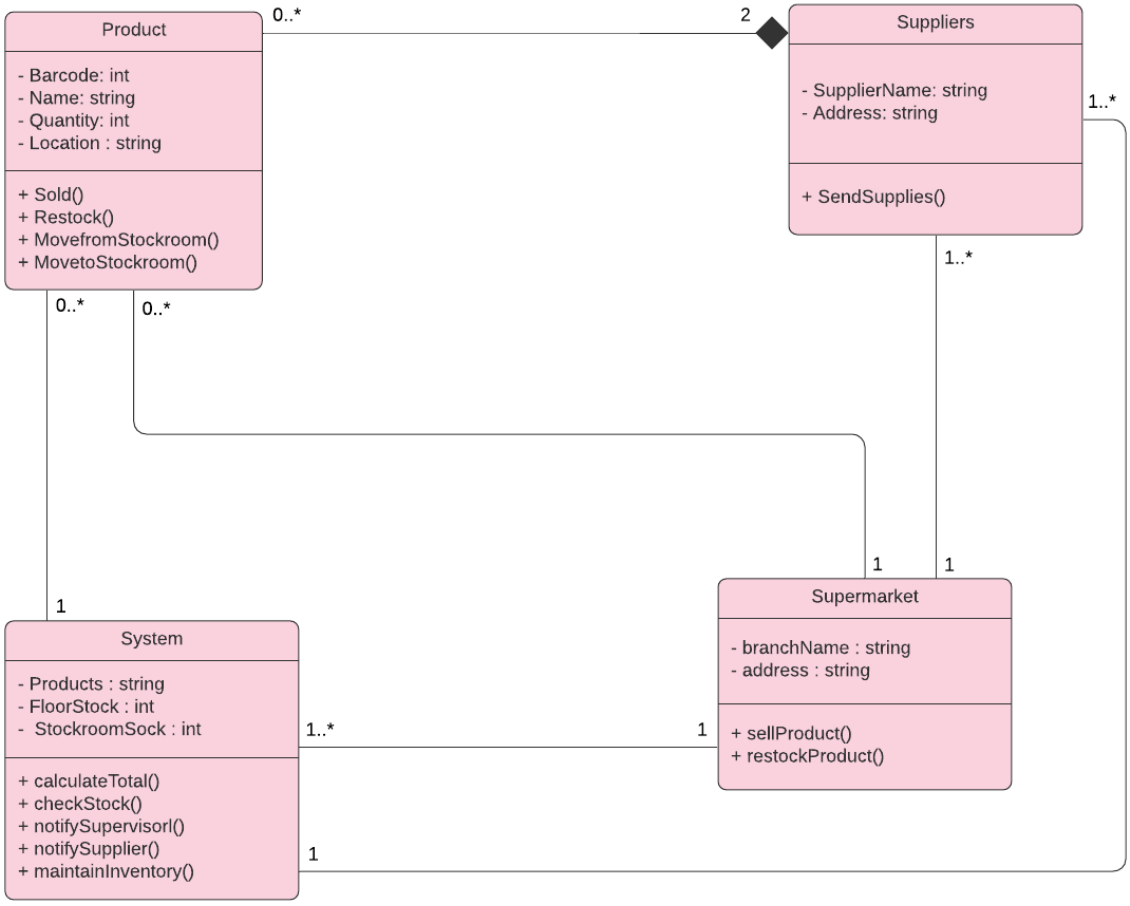
1. **Provide a complete use case diagram for the stock control system of the supermarket chain described in the case study.**



2. **Consider a class diagram for the stock control system of the supermarket chain described in the case study.**
   a) **4 significant candidate classes which should be included in the class diagram.**
      System class
      Supplier class
      Supermarket class
      Product class

b) 1 candidate class which should not be included in the class diagram.
The supervisor class should not be included in the class diagram because the case study specifies that "the system is only required to maintain the current inventory amounts for a given product", meaning that we do not need to track information on the supervisor.

c) Prepare a class diagram for the stock control system for the supermarket chain



Part 2: Reflecting on Learning Experience:

1. **Explain briefly what you learnt in this assignment?**
   Through completing this assignment, I refined my skills in creating user diagrams and class diagrams. Furthermore, I learnt about how to use multiplicities within a class diagram.

2. **List the specific learning resources, techniques, tactics, strategies that you used to learn for this assignment.**
   When completing this assignment, I used a variety of sources in order to answer the questions. Firstly, I consulted was the lecture slides provided on my uni. By using these slides, I was able to find information about determining relevant classes, attribute and functions for class diagrams. In order to create these diagrams, I utilised the online diagram software system LucidChart.

3. **Evaluate and reflect on your own learning ability/performance/achievement in this assignment. What challenges did you face in learning about and completing the requirements analysis task in this assignment? What and how will you improve for next assignment?**
   The mains challenge I faced when completing this assignment was my misunderstanding of how to implement multiplicities into a class diagram. However, after conducting some research and consulting the lecture slides, I felt confident in my understanding and application of multiplicities.

   For the next assignment, I will make sure to look at multiple examples of the diagram I am creating. This will help to ensure that my diagrams are properly formatted and accurately represent the system.