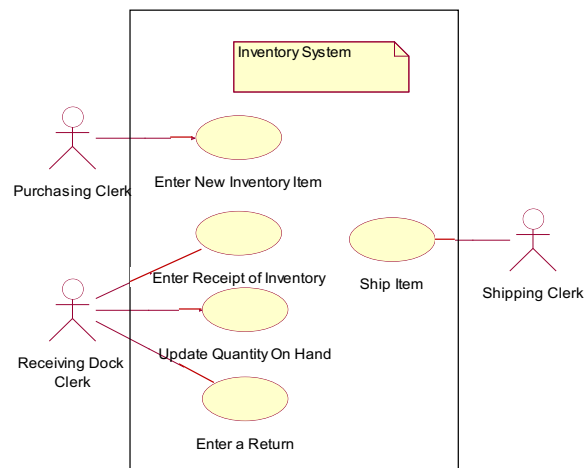# Week 1 Self Review Questions

1. What is the difference between functional requirements and nonfunctional requirements?

2. What are some of the reasons for iteration when performing information gathering?

3. What are some information-gathering techniques?

4. For Interview, Questionnaire and Prototyping technique, state an advantage and disadvantage.

5. When applying the Interview technique for information gathering, describe the flow of the process.

6. List and differentiate the 3 types of prototypes that can be developed for information gathering.

7. What are the benefits of a use case diagram?

8. The 3 items of interest that are present in a use case diagram are:
    (a)   Objects, activities, and communications
    (b)   Actors, messages, and activities
    (c)   Objects, use cases, and activities
    (d)   Actors, use cases, and communications

9. Interpret and explain the following use case diagram. Explain the various roles of those using the system and what functions each role requires.

10. Evaluate the following statements as true or false. Explain your answer by using an example.

    (a)   A use case illustrates a system function processing step.
    (b)   A use case may have several actors performing it.
    (c)   An actor may be an external system to interact with.

11. Explain what scenarios are and why these are so important in the context of a use case.

12. Explain what misuse cases in the context of UML use case diagrams are. Give a simple example say for the use case of when a bank customer views their bank account details. Illustrate your answer using a simple use case diagram.

13. Explain the difference between the extend and include relationships in a use case diagram and use examples to illustrate your explanation.