Group Discussion referred to:

The importance of software requirements.

- Well written
- Clearly understood
- Unambiguous

Who is interested in these requirements?

- End users
- Business Analyst (BA)
- Database Designers
- Programmers
- QA testers
- Managers
- UI designer

Distinguish between:

- Functional Requirements
- Non-functional requirements (efficiency, response times, security, etc)
- Domaine requirements (web platform, mobile platform, etc)

Focus is on *Functional Requirements* for a Stock Control Administration System.

Requirements Analysis (Requirements Elicitation):

Discuss the requirements that the different stakeholders might request. What functionality do they want the system to provide?

Distinguish between essential and non-essential requirements.

Discuss how budget and deadline constraints can impact on the **scope** of the system.

Methods of Requirements Analysis (Elicitation)

- Informal meetings
- Workshops
- Surveys
- Questionnaires
- Past experience

Requirements specification:

Each functional requirement is specified in **two** ways:

- User Requirement
- System Requirement

User Requirement: A **high-level** description of a functional requirement.

Generally written as an abstract statement (1 sentence)

e.g. "The system will register new stock"

Can also be specified using diagrams e.g. UML Use case Diagram

System Requirement: A low-level description of a functional requirement.

Specifies <u>in detail</u> what the system (software) must do to deliver the function i.e. all the tasks to be performed by the piece of software.

This specification includes details of:

- Which data store(s) are accessed for data retrieval
- The processing performed by the function
- The data input by the user
- The validation to be performed
- The data store(s) where data is to be saved
- The business rules which must be implemented by the function
- Any feedback/communication with the user.

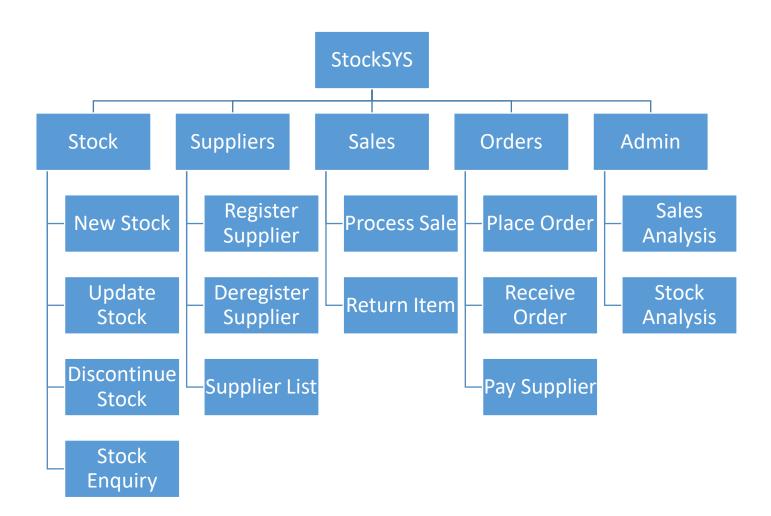
Methods of Requirements Specification:

Organisations customise/tailor to suit their own framework.

- Text/narrative
- Graphical (system models)
- Combination of both (UML Use case Diagram & Use case Narrative)

Functional Components/Modules of StockSYS

A *Hierarchy Chart* is a simple graphical methodology which can be used to show <u>the functional</u> <u>components</u> (modules) of a software system. The following hierarchy chart models the functional requirements as a set of functional components (modules) for GPSYS:



Note: The structure (modules) shown above would be discussed with the stakeholders and the development team and might be subject to several revisions before being finalised. The finished, agreed functional components define the **scope** of the project.

Discuss the above requirements. Have any requirements been omitted? Are there any requirements that are not necessary?

NOTE: The functional requirements shown above may vary slightly from class discussions.