Phase 1: Requirements Analysis (RA)

The RA is a phase where the clients and the developer meet and discusses what the intended software system is to do. That is, the client will outline the products as (s)he conceptualize it and the developer is to determine what the client’s needs are and if there are any constraints. Therefore your task for this phase is as follows:

Task 1. Divide your group into two. One group represents the client and the other represents the developer. You might also want to change the rolls at a later time.

Task 2. Discuss and make notes for the intended software in terms of:
1. Functional Requirements
   a) Functionality
   b) Inputs and outputs (data) to the functions
   c) Constraints to the functions/data
   d) Error handling
2. External Interface Requirements
   a) User interfaces – interface standards with the user (keyboard, touch screen etc.)
   b) Hardware Interfaces – Hardware it needed
   c) Software Interfaces – Software it needed
3. Performance Requirements
   a) Reliability – the probability that the system will perform the functions for a given period of time
   b) Response time – Acceptable time to respond over defined set of operations & transactions
   c) Backup facility – what form, how often
   d) Recovery procedure – how to recover, the length of time to recover
   e) Initialization procedure – how the operator can reinitialize the system
4. Other requirements
   a) Time
   b) Cost
   c) Site Adaptation – any site preparation it is needed
   d) Security – any security requirements e.g., who has access to the system. How to detect unauthorized access/Attempts.
   e) …
I. Requirements

1. Introduction
   1.1 Purpose – describe the purpose of this document. It should also include information such as class name, semester, group name, members, contributions of each member etc.
   1.2 Scope of the Problem
   1.3 Definitions, Acronyms, or Abbreviations
   1.4 References
   1.5 Overview – describe how the remainder of the document is organized

2. Specific Requirements
   2.1 Functional Requirements
      2.1.1 Functional Requirement 1
         2.1.1.1 Functionality
         2.1.1.2 Inputs/Outputs
         2.1.1.3 Constraints in Functions and Data
         2.1.1.4 Error Handling
      2.1.2 Functional Requirement 2
         2.1.2.1 etc.
         2.1.2.2 …

      2.2 External Interfaces
      2.2.1 User Interfaces
      2.2.2 Hardware Interfaces
      2.2.3 Software Interfaces

      2.3 Performance Requirements
      2.3.1 Reliability
      2.3.2 Response Time
      2.3.3 Backup Facility
      2.3.4 Recovery Procedure

      2.4 Other Requirements
      2.4.1 Time
      2.4.2 Cost
      2.4.3 Site Adaptation
      2.4.4 Security