

## Systems Analysis and Design Life Cycle

- 2.1** Who do you think should participate in determining the information requirements of a student's hostel?
- Warden of hostel
  - Hostel Superintendent
  - Accountant
  - Student Representatives
  - Principal of college is consulted at the beginning
- 2.2** What is the difference between information requirement determination and specification?
- Information requirement determination attempts to find out what strategic, tactical, operational information is needed to effectively manage an organization.
  - Information specification defines the manner in which the information will be presented and what analyzed data it
- 2.3** **Why is feasibility analysis necessary before designing a system?**
- Feasibility analysis mean to analyze whether there is a reasonable chance of the project succeeding given the constraints of computing equipment, human resources, data availability i.e. before investing money and time one should know what resources are needed for it to succeed and whether the resources are available. If the resources are limited, then the goals to be met by the system can be curtailed. One should have a quantitative and qualitative idea of cost of the system and what benefits one may gain from the system.
- 2.4** **What benefits do you expect if an information system for a hostel is designed?**
- Mess bills will be promptly generated and can give itemized details of extras.
  - Can control mess expenses by finding out consumption of various items against an average.
  - Can try to optimize daily menus based on cost of vegetables etc.
  - Can find out the names of the students with large dues left and sending them reminders.
  - Can quickly find out which student stays in which room and his home address when needed.
- 2.4) What activities will you carry out during implementation of a hostel information System?**
1. PROGRAMS WRITTEN FOR
    - Mess accounting
    - Billing
    - Stores control
  2. DATABASE CREATED
    - Students
    - Mess stores

- Mess finance

### 3. TRAINING

Hostel office staff will be trained to input data and generate queries

### 4. DOCUMENTATION

Documentation of the system will be created.

### 5. TESTING

The computerized system will be operated in parallel with the manual system and tested.

## 2.6) When should a system be evaluated?

A rough thumb rule is to evaluate a system when the "transients" die down and it reaches a quasi "steady-state". Transients are caused by changes made due to errors in the system and when some minor changes are introduced. Normally a system is evaluated after being in use for 6 months, but this period may vary according to the application.

## 2.7) Are excellent programmers necessarily excellent system analysts? Justify your answer.

An Programmer is not necessarily an excellent system analyst. A programmer is given clear specification and designs efficient programs. He need not have good communication skills and inter-personal relations. A programmer works with clear specifications whereas an analyst has to arrive at clear specifications from fuzzily stated requirements.

## 2.8) Why should a systems analyst be able to communicate well?

He has to understand users' requirements mostly by interviewing them and thus he has to ask the right questions, listen carefully and summarize orally the gist of conversation. He also must be able to present and explain orally to the users the system designed by him and clarify doubts they may have after the oral presentation. His main job is to interact with the management, users' and the programmers so it is obvious that he must possess good communication skills.