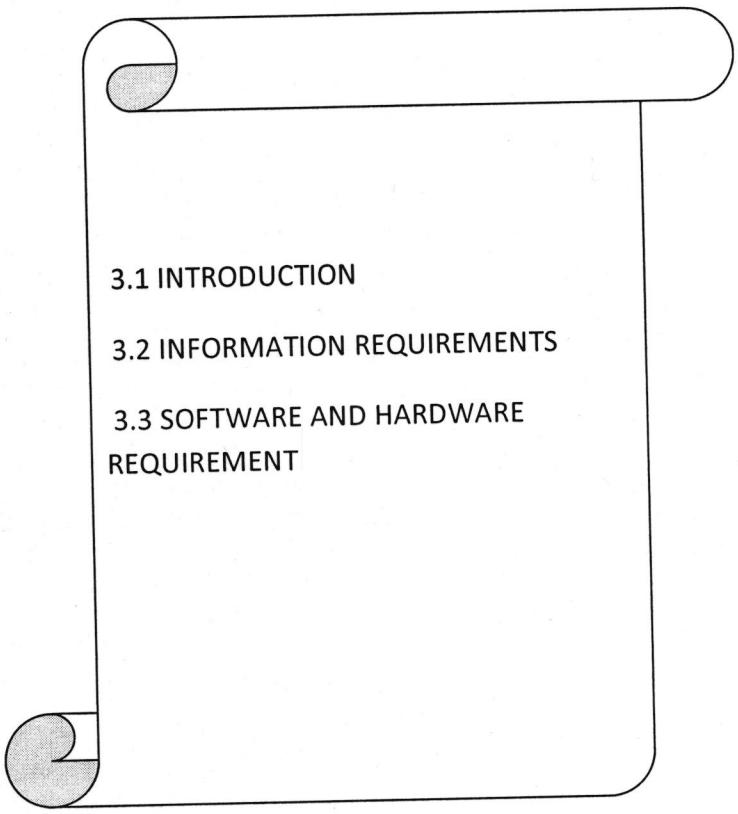
CHAPTER 3: REQUIREMENT ANALYSIS



CHAPTER 3: REQUIREMENT ANALYSIS

3.1 INTRODUCTION

As an analyst one should start the requirement gathering and analysis activity by collecting all information from the customer/user, which could be used to develop the requirements of the system. The two main activities involved in the requirements gathering and analysis phase:

3.1.1 Requirements Gathering:

This activity typically involves interviewing the end-users and customers and studying the existing documents to collect all possible information. There are many tools a system analyst may use; the most frequently used tools are given below:-

(a) Interviews

(b) Questionnaires

(c) On-site Observation

(d) Reviewing and deriving data from existing system

(a) Interviews -

Interview is most important and interactive method of gathering facts, their requirements and problems. Interviews help gather vital facts about existing problems, such as lack of co-ordination or security. Beside from these, it also allows the analyst to involve people in change, easing them into it.

(b) Questionnaires –

Questionnaires may be open-ended or closed. An open -ended questionnaire allows the respondent to formulate a response. It is used when feelings or opinions are important. In contrast a closed question request one answer from a specific set of response.

Advantages of questionnaires:

1. It is economical and requires less skill to administer than the interviews.

2. The questionnaires places less pressure on the subject for immediate response respondent have time to think the question over and do calculations to provide more accurate data.

(c) On-site Observation –

Obtaining information from the existing system has been called the data analysis approach .It simply ask the user what information is currently received and what other information is required .It relies heavily on the user to articulate information needs. The system analyst examines all reports Discusses with the user each piece of information examined and determines unfulfilled information needs by interviewing the users. The data analysis method is ideal for making structured decisions, although it requires that user articulate their information requirements.

(d) Reviewing and deriving data from existing system

One should review the existing system to get required data. Again most of data can be getting from the old system.

3.1.2 Analysis of gathered requirements-

The main purpose of this activity is to clearly understand the exact requirements of the user/customer. The following basis questions pertaining to the project should be clearly understood by the analyst in order to obtain a good grasp of the problem:

a. What is the problem?
b. Why is it important to solve the problem?
c. What are the possible solutions to the problem?
d. What exactly are the data input to the system and exactly are data output required of the system?
e. What are likely complexities that might arise while solving the problem?

3.2 INFORMATION REQUIREMENTS

There are four strategies available for determining information requirements. They are as follows:

a) Asking

b) Deriving from existing system

c) Synthesizing from the characteristics of the running system

d) Discovering from the experimentation with an evolving information system

All the above strategies were used to certain, for determining the information of the system. Though asking is not a very good strategy, still it is adapted for the purpose, as the system had to develop within a very short period of time. Following are the asking strategy which may be called as pure asking, for determining the information requirements of the system. In this case, it is assured that the able to structure its problem apace. After getting the information requirements, the system is tried to design in such a way that it may satisfy the need of the users.

3.3 SOFTWARE AND HARDWARE REQUIREMENTS

In order to operate this system, certain software and hardware requirements must be met. Without these minimum requirements the system would not run properly or in some case may not run at all. The specific requirements are listed below:

Software requirements

- Operating system — Any 32 bit or 64 bit OS
- Back End — MySQL Server 5.1
- Front End — A web explorer

Hardware requirements

- PROCESSOR : PENTIUM (IV), 1.6 GHz
- RAM : 128MB RAM or more

- HARD DISK : 40 GB or more
- 102 Keys ENHANCED KEYBOARD
- 1 SERIAL MOUSE
- 1 VGA MONITOR
- 1.PORTABLE (DOT MATRIX) PRINTER

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