Ex No: 2	SOFTWARE REQUIREMENT ANALYSIS
Date : 19/07/2021	

AIM:

Write the objective of the exercise here:

DESCRIPTION:

Software requirements analysis:

Requirements Analysis is perhaps the most difficult, most error-prone and most communication intensive software development. It can be successful only through an effective customer-developer partnership. It is needed to know what the users really need.
There are a number of requirements elicitation methods. Few of them are listed below –

1. Interviews
2. Brainstorming Sessions
3. Facilitated Application Specification Technique (FAST)
4. Quality Function Deployment (QFD)
5. Use Case Approach

The success of an elicitation technique used depends on the maturity of the analyst, developers, users and the customer involved.

FUNCTIONAL REQUIREMENTS:

In software engineering, a functional requirement defines a system or its component. It describes the functions a software must perform. A function is nothing but inputs, its behavior, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform.

Functional software requirements help you to capture the intended behavior of the system. This behavior may be expressed as functions, services or tasks or which system is required to perform.

◦ Services the system should provide

◦ What the system should do or not in reaction to particular situations

◦ Example: “If a patient is known to be allergic to a particular medication, then prescription of that medication shall result in a warning message being issued to the prescriber”

Some of the more typical functional requirements include:

• Business Rules

- Transaction corrections, adjustments and cancellations
- Administrative functions
- Authentication
- Authorization levels
- Audit Tracking
- External Interfaces
- Certification Requirements
- Reporting Requirements
- Historical Data
- Legal or Regulatory Requirements

NON-FUNCTIONAL REQUIREMENTS:

A non-functional requirement defines the quality attribute of a software system. They represent a set of standards used to judge the specific operation of a system. Example, how fast does the website load?

A non-functional requirement is essential to ensure the usability and effectiveness of the entire software system. Failing to meet non-functional requirements can result in systems that fail to satisfy user need.

◦ Constraints on the services or functions offered by the system

◦ Example: "The system shall be available to all clinics during normal working hours (Mon-Fri, 0830-1730). Downtime during normal working hours shall not exceed 5 seconds in any one day"

Some typical non-functional requirements are:

- Performance – for example Response Time, Throughput, Utilization, Static Volumetric
- Scalability
- Capacity
- Availability
- Reliability
- Recoverability
- Maintainability
- Serviceability

- Security
- Regulatory
- Manageability
- Environmental
- Data Integrity
- Usability
- Interoperability

SYSTEM REQUIREMENTS:

A structured document setting out detailed descriptions of the system's functions, services and operational constraints.

Defines what should be implemented so may be part of a contract between client and contractor.

SRS

Write your SRS here:

RESULT