Assignment no :- 02

Topics covered :-

- SRS documentation
- Data flow diagram
- Scenario Based model

Date of performance :- 26-07-2022

Evaluation Criteria	Marks (out of 3)	Date	Signature of Instructor
Punctuality	2.1	26-07-2022	C
Problem solving technique	2.1		
Attainment level (out of 3)	2.1		

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Assignment No-02

Q.1) SRS (Software Requirements Specification (SRS) Document format (IEEE)

⇒ • Basically SRS or Software requirement specification is an official document or the statement of what the system developers should implement.

• It includes both:
  • System requirement
  • User requirement

• The SRS has a set of user of users like senior management of the organization, engineers responsible for developing the Software.

• The details which are include in SRS depend on the type of system that is being developed and the type of the development process.
• A No. of large organisation, such as IEEE have defined Standards for Software requirements document
• The mostly widely used standard is IEEE/ANSI -830-1998.
This standard suggests the following structure for requirement document:

1) Introduction
   • purpose of SRS
   • Scope of product
   • Definition, acronyms, abbreviation

- Reference
- Overview

2.) General description
- product perspective
- product function
- User characteristics
- General constraints
- Assumptions and dependencies

3) Specific requirements
4) Appendices
5) Index

- SRS is very useful when an outside constructor is developing the software system.
- For business system, where requirement are unstable, SRS play an important role.

- writing software requirement specification:

- proper software requirement gathering is very important at the start of the software development generally it is done by potential software developer
- Document is created in the requirement analysis which is generally referred as SRS.0
- it is first project deliverable.
- SRS records the end user needs in certain format

Good SRS have accomplishes following goals:

- It give feedback to customer.
- To large problem can be divided into different small components
- it acts as input to design which is part of design specifications
- it acts as product validation check.

- Characteristics of an SRS

- Complete : All the project functionalities should be recorded by SRS.
- Consistent :- SRS should be consistent
- Accurate :- SRS define system ~~de~~ functionality in real world. We need to record requirement very correctly.
- Modifiable :- ~~Logical~~ and hierarchical modification should be allowed in SRS.
- Ranky :- Requirement should be ranked using different factor like stability, security, ease or difficult
- Testable :- The requirement should be realistic and able to implement.
- Traceable :- Every requirement we must be able to uniquely identify.

Q.2) • Data Flow Diagram Explain it.

A Data Flow Diagram (DFD) is traditional visual representation of the information flows within a system. A neat clear DFD can depict the right amount of the system requirement graphically. it can be manual, automated or a combination of both.

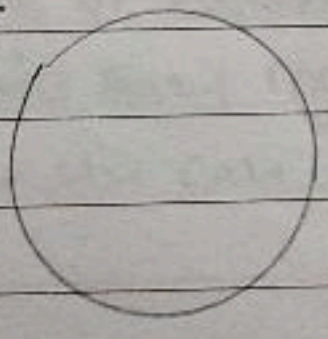
• it show how data enter and leaves the system, what change the system, what change the information, and where data is stored

• The objective of DFD is show the scope and boundaries of a system as a whole.

• The DFD is also called as "data flow graph' or bubble chart."

• Data Flow Diagram Symbol

1) Symbol :



Circle :- A circle (bubble.) show a process that transform data inputs into data outputs.

2)
• Symbol :

• Data Flow : A curved line show the flow into out of a process or data store

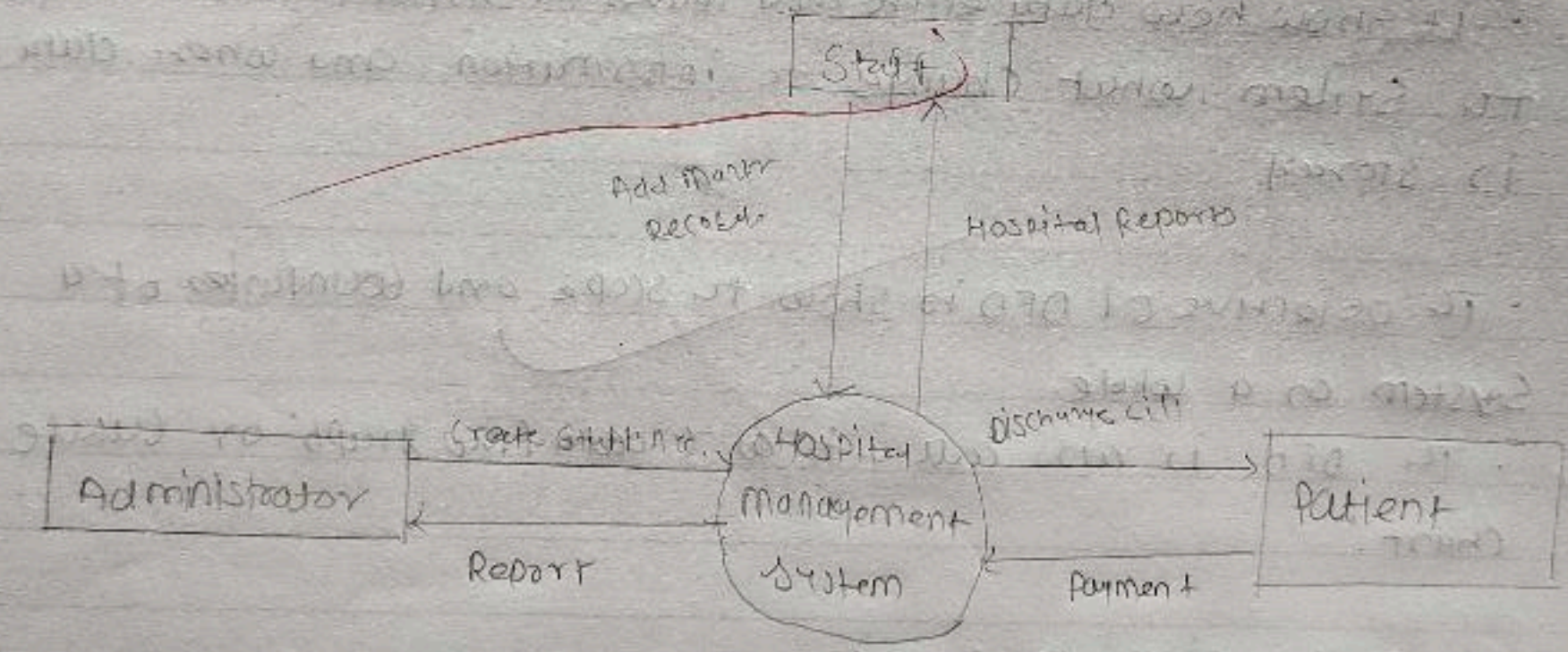
3) Symbol :

• Data Store :- A set of parallel line show a for the collection of data item

4) Symbol

• Source Link :- Source or sink is an exte entity & acts as source of system input or si of system output.

Ex. DFD for Hospital management system



- **Scenario Based model :-**

Requirement for computer-Based system can be seen in many different ways: some folk people argue that what using a number of different mode of representation while other believe that it's best to select one specific of representation

- **Scenario Based model**

Using a scenario Based - approach, system is desired from user's point of view. for example Based use-case diagram evolve into more elaborate template-Based use case

- UML activity diagram for eliciting requirement & representing them using use case. there are

Use Case Diagram :-

while technically there is no right way to go through the state of requirement modeling, it typically begins with scenario Based modeling & that's because it identifies the possible use case for the system.

- Use Case Diagram for Airline Company Application