

Introduction of System Analysis and Design

By

**Prof. Vinod S. Ramteke
Assistant Professor**

Department of Computer Science

Introduction of System

- ▶ *The term system is derived from the Greek word systema which means an organized relationship among functioning units or components. A system is designed to achieve one or more objectives.*
- ▶ *Example: Transportation system , telecom system, accounting system, production system, computer system etc.*
- ▶ *In other words, system is an orderly grouping of interdependent components link together according to a plan to achieved a specific objectives.*

Characteristics of system

A system has the following characteristics.

- ▶ *Organization (order)*
- ▶ *Interaction*
- ▶ *Interdependence*
- ▶ *Integration*
- ▶ *Central objectives*

Organization

component of the system.

Ex:- CPU must interact with the input to solve a problem. In term main memory horganization means structure and order. It is the arrangement of the components that help to achieved objective.

- ▶ *Organization shows:-*
- ▶ *System – subsystem relationship*
- ▶ *Authority*
- ▶ *Flow of information*
- ▶ *Chain of command*

Interaction

- *Interaction means the manner in which each component functions with other old the program and data that ALU uses for computation.*

Interdependence

- ▶ *Interdependence means the parts of the organization or computer system depend on one other. They are coordinate together according to the plan.*

Integration

- ▶ *Integration refers to the holism of the system. It means it concerned with how a system is tied together. Successful integration will produce a synergetic effect and greater total impact if each component work separately.*

Central objective

- *Objectives means real or stated the important point is that user must known the central objectives. The central objectives has highest priority that individual objectives.*

Element of system

System has the following elements.

- ▶ *Output and input.*
 - ▶ *Processor*
 - ▶ *Control*
 - ▶ *Feedback*
 - ▶ *Environment*
 - ▶ *Boundaries & interface*
- 

Types of systems:

The common classifications are

- ▶ *Physical or abstract*
- ▶ *Open or closed*
- ▶ *Man made information system*

System Design

Once the analysis is complete the next phase is to design the physical model of a system. Design stage consist of –

- ▶ *Input design.*
- ▶ *Output design.*
- ▶ *Form.*
- ▶ *Process*
- ▶ *File*
- ▶ *Database*
- ▶ *Programming*

OK.....

THANKS.....

EVERYONE.....

