design element be traceable to the requirements. ... that can get design verification. It requires that the

2.5.2 Approaches to Design

- The design methodologies provides guidelines to add the designer during the design process. The design methodology is an approach to create a design for a system using a set of principles, concepts and techniques.
- The systems design may be function-oriented or object-oriented as explained below.
  1. **Function-Oriented Design** is a software design approach in which the system is decomposed into a set of interacting modules, with each module having a specific function.
  2. **Object-Oriented Design** is a design approach in which the system is decomposed into a set of objects which interact with each other by the services they provide. The main objective of this approach is to break down complex software projects into objects so that changes made to one part of software do not adversely affect the other parts.

2.5.3 Types of System Design

- The process of design starts with the logical design and then proceeds to the physical design of the new system. The logical design focuses on the system specifications. It is then translated to a detailed physical design which is used to actually produce the system by the programmers.

1. Logical Design:

- Logical design pertains to an abstract representation of the data flow, inputs, and outputs of the system.
- It describes the inputs (sources), outputs (destinations), databases (data stores), procedures (data flows) all in a format that meets the user requirements.

2. Physical Design:

- Physical design relates to the actual input and output processes of the system. It focuses on how data is entered into a system, verified, processed, and displayed as output.
- It produces the working system by defining the design specification that specifies exactly what the candidate system does. It is concerned with user interface design, process design, and data design.

2.5.4 Problem Partitioning

problem can be tackled at once. For solving larger/bigger ...inple suggests