**Design Patterns**

Helps the developers to make good software design.

Provides solutions to real world software application design problems.

Makes application reliable, scalable and reusable when we use the design patterns.

A reusable solution to common software problems that can be used in multiple situations.

It is a template or description on how to solve problems that can be used in many situations.

Evolution of design patterns:

The four authors of the book “Elements of reusable object oriented software” are referred to as Gang of four.

The book is divided into two parts :

1. Pros and cons of object oriented programming.
2. Evolution of 23 classic software design patterns.

Types of Design patterns:

1. Creational

Deals with object creation and initialisation.

This pattern gives flexibility to the program in deciding which objects need to be created for a given case.

1. Structural

Deals with the class and object composition.

Decoupling interface and implementation of classes and objects.

1. Behavioral

Deals with communication between objects.

