

## Advance System Design

**Duration: 3 Days**

Module 1: Introduction:

OOPS overview

The Singleton Pattern part 1

The Singleton Pattern part 2

The Singleton Pattern part 3

Module 2: Creational Pattern

The Factory Pattern

The Factory Method Pattern

The Abstract Factory Pattern

The Singleton Pattern

The Builder Pattern

The Prototype Pattern

Summary of Creational Patterns

Module 3: Structural Patterns

The Adapter Pattern

The Bridge Pattern

The Composite Pattern

The Decorator Pattern

The Façade Pattern

The Flyweight Pattern

The Proxy Pattern

## Summary of Structural Patterns

### Module 4: Behavioural Patterns

Chain of Responsibility Pattern

The Command Pattern

The Interpreter Pattern

The Iterator Pattern

The Mediator Pattern

The Memento Pattern

The Observer Pattern

The State Pattern

The Strategy Pattern

The Template Pattern

The Visitor Pattern

Null Object pattern

### Important Concepts : Quick Walkthrough

Latency and Throughput

Availability

Caching

Data Partitioning

Indexes

Replication