

# Course Content Object Oriented Design patterns Duration: 3 Days



# **COURSE NAME**

### **GOF Design patterns**

### **DURATION**

3 Days

# **COURSE OUTLINE**

# Day-1

- Encapsulation
- Abstraction
- Objects
- Classes
- Responsibilities
- Attributes
- Composite Classes
- Operations and Methods
- Visibility
- Inheritance
- Polymorphism
- Use Case Diagrams
- Class Diagrams
- Object Diagrams
- Case study -1 to cover above patterns
- Sequence Diagrams
- Communication Diagrams
- Deployment Diagrams
- Cohesion
- Coupling
- Open Close Principle
- Case study on the above pattern
- Dependency Inversion Principle
- Use Case-1
- Interface Segregation Principle
- Use Case-2
- Single Responsibility Principle
- Use Case-3
- Liskov's Substitution Principle
- Use Case-4



### Day-2

- Design Patterns Overview
- Design Patterns Factory Pattern
- Abstract Factory Pattern
- Design Patterns Singleton Pattern
- Design Patterns Builder Pattern
- Case study on the above pattern
- Design Patterns Prototype Pattern
- Design Patterns Adapter Pattern
- Design Patterns Bridge Pattern
- Design Patterns Filter Pattern
- Case study on the above pattern
- Design Patterns Composite Pattern
- Design Patterns Decorator Pattern
- Design Patterns Facade Pattern
- Case study on the above pattern
- Design Patterns Flyweight Pattern
- Design Patterns Proxy Pattern
- Chain of Responsibility Pattern
- Design Patterns Command Pattern
- Design Patterns Interpreter Pattern
- Case study on the above pattern
- Design Patterns Iterator Pattern
- Design Patterns Mediator Pattern
- Design Patterns Memento Pattern
- Design Patterns Observer Pattern
- Design Patterns State Pattern
- Case study on the above pattern

### Day-3

- Design Patterns Null Object Pattern
- Design Patterns Strategy Pattern
- Design Patterns Template Pattern
- Design Patterns Visitor Pattern
- Case study on the above pattern
- Design Patterns MVC Pattern
- Business Delegate Pattern
- Composite Entity Pattern
- Data Access Object Pattern
- Front Controller Pattern



- Case study on the above pattern
- Intercepting Filter Pattern
- Service Locator Pattern
- Transfer Object Pattern
- MVC pattern
- Layered Pattern
- Front Controller
- Case study on the above pattern
- Application Controller
- Intercepting Filtert
- Composite View
- View Helper
- Service to Worker
- Case study on the above pattern