

# **Java with Springboot Essential Training**

Day - 1 Day - 2

#### Introduction

o Java Fundamentals - Object-oriented Design

## • Thinking in Objects

- Basics
- o Coherence, Coupling, and God Classes
- O What Is an Object?

#### Defining Behavior and State

- o Problems with println()
- Money and Delegation: Getters and Setters Are Evil

### Extending Classes

- o The Is-a Test
- o Simple Extension and Template Method
- o Delegation Under Inheritance: Shape
- o Liskov Substitution: Stack, Ver. 1
- o Fragile Base Classes: Stack, Ver. 2

## Defining Class Contracts with Interfaces

- Defining Contracts
- Fixing Fragility
- o Dependency Inversion

## Working Without Getters and Setters

- o The Open Closed Principle
- o Builder

### Testing OO systems

- o Dependency Injection
- o Summing Up

### • What Is Object Orientation?

- o Course Overview
- O What is Object Orientation?
- o From Use Cases to Conceptual Classes
- Class Relations
- Deriving Software Classes, Part 1
- Deriving Software Classes, Part 2
- o Demo: Instance and Static Methods