Clean Code, TDD, BDD Crash Course (Scala)

🕐 Duration: 2 Days

🗛 Available Languages: English German

Audience

Software Crafters: Software Developers, Architects.

Precondition

Good knowledge of Scala.

Goals

Learn how to develop software better using Clean Code, TDD, and BDD.

Contents

- Clean Code Introduction
    # Clean Code and Scrum/XP
    # The Two Values of Software
    # The 5 Design Smells
- Clean Code Basics
    # Form and Names
    # Functions and Function Structure
    # Programming Paradigms Revisited
- Clean Architecture: Principles of Object-Oriented Class Design
    # Coupling and Cohesion
    # SOLID Principles
    # Package Principles
    # The 4 Rules of Simple Design
- Refactoring
    # Goals
    # Techniques (rename, move, extract, convert, etc)
    # Protect against regression
    # Legacy code: Characterization testing, seams, sprouts, etc
- Test Basics
    # Testing and Scrum/XP
    # The Test Automation Pyramid
    # Test Automation, Testing, and CI/CD
- Test-Driven Design
    # Anatomy of xUnit Frameworks; ScalaTest
    # Definition of Testable
    # The Three Laws of TDD

- # The Red-Green-Refactor Cycle
- # The Red-Green-Refactor-Commit Cycle
- # The Test-Commit-Revert Cycle (TCR)
- # Principles of TDD
- Advanced TDD
  - # The Transformation Priority Premise, Test Sequence
  - # Test-Doubles, Mocking
  - # Stateism vs Mockism
  - # How TDD drives an emergent design
- Behavior-Driven Development
  - # The Gherkin Language, Feature Files
  - # Integrating and Mapping BDD in Scrum/XP - Acceptance Test-Driven Development
- Cucumber
  - # Step Definitions in Scala
  - # Assertions
  - # Reusing Feature Files on different levels of the test pyramid
  - # Managing Cucumber in large projects

In open classroom training, we use a specific set of tools listed below. In brackets are alternatives to which we can tailor the training in case of in-house training.

Language
    Scala (also available in C#, C++, Golang, Java, JavaScript, and Kotlin)
IDE
    IntelliJ IDEA (Eclipse / Scala IDE)
Unit Test Framework
    ScalaTest
BDD Framework
    Cucumber

Booking

Contact Siddhesh Nikude, +91-95-52572354, training@nelkinda.com