Writing Clean Code Training

Course Content

Duration:2 days

Introduction

- Why this is needed
- Foundations
- Ownership
- Resources

Principles

- Tools & Core Principles
- Self Documenting Code
- DRY Principles
- Boundaries

Naming conventions

- Names with meaning
- Class Names
- Method Names
- Warning Signs

Writing functions

- Size is everything
- Single Responsibility Principles
- Arguments
- Side Effects
- Fail Fast
- Return early

Comments and usage guidelines

- When to write them
- Intent
- Warning Signs
- Necessary comments
- Clean Comments

Formatting

- Purpose and types of formatting
- Excessive Indentation

- Objects and data structures
- Law of Demeter
- Data Abstraction and Symmetry

How to Handle Errors

- Return Codes vs Exceptions
- Working with Nulls

Interface Boundaries

- Introduction
- Working with 3rd Party code
- Using non-existent code Unit Tests & Test-Driven Development
- Why TDD?
- Clean Tests

Classes

- Creation
- Small classes
- Cohesion
- Developing for change

Keeping going & Conclusion

- Reviews & Other Developer Practices
- Boy Scout Rule
- Refactoring tips