RADTAC
Smarter business
through IT transformation

SERVICES

TRAINING COURSE OUTLINE

www.radtac.co.uk

Test Driven Development (TDD) – 2 or 3 Days

Agile methods for software development are becoming increasingly popular as a way of delivering high quality solutions in complex project situations. Agile engineering practices, within an iterative 'test, code and refactor' cycle are key to an effective Agile approach.

This course provides detailed explanation and practical experience of all aspects of Test Driven Development. Together with the RADTAC Refactoring training course it provides complete coverage of the iterative 'test, code and refactor' cycle of Agile development.

Audience

This is a practical course that is intended for software developers, testers, architects and other technical staff with programming skills.

Content

This course comprises an Introductory module and two optional modules as outlined below:

1. Introductory Test Driven Development

To enable delegates to understand the purpose and benefits of TDD and the role of Unit Testing, Continuous Integration and refactoring in the development cycle, and to be able to apply TDD to develop simple programs and perform simple refactoring steps.

- Introduction to TDD
- Rules and Practices
- TDD Development Cycle
- JUnit, xUnit
- TDD Demonstration
- TDD as a Design Technique
- TDD as Documentation
- TDD Benefits

2. Intermediate Test Driven Development

To provide delegates with an understanding of improved TDD techniques, have a working knowledge of the benefits of mock objects, familiarity with test patterns / anti-patterns and a basic appreciation of the issues related to addressing legacy code.

- Unit Testing Patterns / Anti Patterns
- Unit Testing Legacy Code
- Managing Unit Test Suites
- Green Bar / Red Bar Patterns
- Refactoring Unit Test Code
- Unit Testing Legacy Code
- Mock Objects / Self Shunt

3. Advanced Test Driven Development

To enable delegates to address a full range of circumstances that may be encountered when applying TDD, e.g. Test driven development of GUI's, multi threaded applications etc.

- TDD of GUI Applications
- TDD Multi-Threaded Application
- Addressing Legacy Applications

Additional Details

Duration 2 or 3 days (for inclusion of optional Intermediate and Advanced Modules)

Setup Laptop projection; whiteboards, flip charts and pens; Facilities for Practical Exercises, PCs installed with appropriate IDE, a refactoring tool, unit test and FIT harness and source code repository, plus Ant and CruiseControl if possible