

Test Driven Development

Overview

Test Driven Development (TDD) is one of the critical agile practices that has been widely adopted within the software industry (even in more traditional projects). You and your team should try to follow this practice as much as you can (with proper tool support). In particular, in the first few iterations during which many requirements are not well-understood, practicing TDD can help you and your team explore the solution and get a better understanding of the software requirements.

Note also that TDD works very well with CI (Continuous Integration) as both require the development team to create comprehensive test suites and automate as much as possible your tests. In fact, many agilists have argued that these two practices complement each other.

Purpose: To practice TDD with proper tool support and to demonstrate the benefits of TDD in exploring the design of your software solution. You and your team should also demonstrate the effectiveness of following TDD in the development of your solution with automated tests and build which allow new code to be efficiently tested and integrated.

Tasks: As a team, set up the project with proper tools for TDD and try to practice TDD as much as you can in the one or two iterations of the final project. As an individual, you will reflect on your own experiences following this practice.

Time: This task can be starting as soon as you start the Construction phase (i.e., right after the conclusion of the Inception phase). For your project, you have to start from sprint 2.

Resources: Your team members, the library and the Internet.

Submission Details and Assessment Criteria

You should create a personal (unique) document (~5-7 pages as a rough guide) that shows your individual contribution to the team in selecting the right tools and adopting/following the TDD practice.

Capture your individual contribution details and your personal reflection on the experiences gained through this practice in a document and submit the printed report.