ITMD: 511 Application Development Methodologies

Chapter 3 & 4: Agile and Requirements Engineering

Exercise

1: At the end of their study program, students in a software engineering course are typically expected to complete a major project. Explain how the agile methodology may be very useful for the students to use in this case.

2: Explain how the principles underlying agile methods lead to the accelerated development and deployment of software.

3: Extreme programming expresses user requirements as stories, with each story written on a card. Discuss the advantages and disadvantages of this approach to requirements description.

4: In test-first development, tests are written before the code. Explain how the test suite may compromise the quality of the software system being developed.

5: Suggest four reasons why the productivity rate of programmers working as a pair might be more than half that of two programmers working individually

6: Explain why agile methods may not work well in organizations that have teams with a wide range of skills and abilities and well-established processes.

7: One of the problems of having a user closely involved with a software development team is that they "go native." That is, they adopt the outlook of the development team and lose sight of the needs of their user colleagues. Suggest three ways how you might avoid this problem, and discuss the advantages and disadvantages of each approach

References