



Fundamentals of Agile

A Pragmatic Approach to Adopting Agile

Description

Organizations today are seeking ways to improve the efficiency of their software development efforts while still meeting quality objectives. Competitive pressures and customer demands continue to reduce software product release schedules, driving organizations to seek fresh new approaches to building software. Agile software development methods are often cited as a way to accelerate software delivery and get more done with less. However, blindly following the high level advice given in Agile books and presentations often does not address the realities of making Agile work in the real-world.

This course teaches you how to pragmatically apply Agile methods to your software development process and organization. You will learn how to plan, communicate, implement, and deploy software applications using Agile. Key topics that are discussed include:

- Why Agile works and how it differs from traditional software development approaches
- Common misperceptions and myths about Agile
- How to build product release plans using Agile methods
- Iteration planning and delivery approaches
- Building and estimating testable User Stories
- SCRUM and Extreme Programming practices
- Agile software development techniques such as team-based design, unit testing, and pairing
- Agile testing approaches such as ATDD, TDD, and Exploratory Testing
- Roles and responsibilities within an Agile project
- Agile communication mechanisms and meetings
- Agile for both large teams and distributed teams

Fundamentals of Agile includes a running case study that allows course participants to apply Agile planning and implementation techniques throughout the course. Small groups are formed and a product is planned and implemented from scratch. Teams present their product to the class at the end of the course.

Attendees will leave *Fundamentals of Agile* with an in-depth understanding of how to apply Agile to a variety of software development situations. Bring your specific issues and problems to the training course for discussion as well. Time will be available to delve into particular situations and challenges that members of the class have.

Who Should Attend?

The audience includes software developers, software test professionals, project managers, business analysts, product managers, line of business owners. No specific prerequisites are assumed. However, attendees are expected to have some software experience.

Fundamentals of Agile is accredited to meet certification training requirements established by the **International Consortium for Agile (ICAgile)**. Participants completing the course are eligible to receive The ICAgile Certified Professional (ICP) designation.



Coveros has also been reviewed and approved as a Registered Education Provider (R.E.P) by the **Project Management Institute (PMI)**. As an R.E.P, we have been approved by the PMI to issue contact hours for certification eligibility and Professional Development Units (PDUs) for continuing certification requirements for both the Project Management Professional (PMI-PMP) and Agile Certified Practitioner (PMI-ACP) certifications upon completion of this course.

Course Structure

DevOps Fundamentals is a 2-day course consisting of lecture and in-class participatory exercises and quizzes

2-Day Course Outline

1. Introduction to Agile
 - a. What is Agile?
 - b. Benefits of Agile
 - c. Why does Agile work?
 - d. Myths about Agile
 - e. Who is using Agile?
2. Agile Software Process
 - a. Overall agile development process
 - b. Agile best practices
3. Agile Planning
 - a. Introduction to SCRUM
 - b. The planning process
 - i. Backlogs
 - ii. Initial release planning
 - iii. Iterative Sprint planning
 - c. Roles during initial planning
 - d. Building good user stories
 - e. Estimating work
 - f. Building a release plan
4. Agile Development
 - a. Introduction to extreme programming (XP)
 - b. Iterative development process
 - c. Key meetings & activities
 - i. Sprint kickoff
 - ii. Daily SCRUMs
 - iii. Sprint planning
 - iv. User Acceptance Testing and Reviews
 - v. Retrospectives
 - d. Roles during Sprints
 - e. Agile development best practices
 - i. Team-based Design
 - ii. Pair programming
 - iii. Continuous integration
 - iv. Test Driven Development (TDD) and unit testing
 - v. Refactoring
 - f. Agile testing best practices
 - i. Agile testing framework
 - ii. Acceptance Test Driven Development (ATDD)
 - iii. Exploratory testing
 - iv. Agile test automation
5. Wrap Up Discussion

Class Daily Schedule

Sign-In/Registration 7:30-8:30 a.m.

Morning Session 8:30 a.m.-12:00 p.m.

Lunch 12:00-1:00 p.m.

Afternoon Session 1:00-5:00 p.m.

Times represent the typical daily schedule and do not include morning and afternoon breaks typically included. Please confirm your schedule at registration.

Contact Us for More Information:

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