

Course Outline

Introduction to Agile

Course AGILESS: 2 days Instructor Led

About this course

A common misconception is that Agility means lack of order or discipline. This is simply not the case. Those who try to incorporate an Agile methodology or practice with an expectation of shedding the discipline are on a path to failure. Agility requires strong discipline. In order to successfully create Agility, you must have a solid foundation in the practices and procedures you wish to adapt and learn how to follow those practices correctly while tying them to rigid quality goals.

This Introduction to Agile training will give you the foundation of knowledge and experience you need to begin. This course is a starting point for you to acquire the techniques, skills, and tools that enable you to build an Agile discipline.

In addition to defining Agile principles, we will cover the advantages of Agile development. Learn about organizing and participating in an agile team and understand the practices of the most popular Agile technique. Understand and learn how to take advantage of the opportunities for Agile. Finally, gain an understanding and practice the collaboration and communication needed between customers and developers for Agile to succeed.

Audience profile

This Introduction to Agile training course is designed for anyone who is considering the use of Agile Methods for software development or any other kind of work, including:

- Project Managers
- Program Managers
- Analysts
- Developers
- Programmers
- Testers
- IT Manager/Directors
- Software Engineers
- Software Architects
- Customers/Stakeholders
- Product Managers
- Or any business professional

At course completion

After completing this course, students will be able to:

- Understand Agile values and principles, and how to build the discipline to support those principles in your everyday practice
- Appreciate the history of Agile and how the collection of principles and practices came together to enable customer success
- Examine Agile methods, including Scrum, Extreme Programming, Lean Software Development, Kanban
- Draw best practices from the various methodologies that will contribute to your team success
- Talk the talk: learning the Agile terminology, roles and forums with their context

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- Walk through the processes that support Agile principles to enable the delivery of great products
- Discover the power of Agile teams through communication, collaboration and cadence
- Lay the foundation upon which you can build

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Kick-off Brainstorm: Why be Agile?

We introduce the class by discussing the class members' shared experiences with predictions. Why is it so hard to do, and what impact does that have on our ability to plan projects?

Module 1: Run a Sprint, Release a Product increment

We begin by experiencing day-to-day work on an Agile project

1. *Role-Play: Sprinting and Daily Scrums - After brief instruction about key concepts, you will participate or watch as an Agile team holds a Sprint's-worth of Daily Scrums, then engage in a class-wide discussion of these topics:*
 1. Agile Team Dynamics
 1. Iterative work
 2. Daily Status, plan & corrective actions
 1. Using a Task Board & Burn Down Chart to understand progress
 3. Team sharing work with each other
 4. Scrum Master:
 1. Facilitating interaction
 2. Removing impediments
 5. Product Owner:
 1. Real-time validation & feedback
 2. Adapting to change
 1. ... when un-planned-for tasks are discovered
 2. ... when tasks take more or less time than expected
 3. Agile quality management
 1. Using automated testing to get immediate feedback
 2. Using Test-Driven Development to ensure the goodness of what you build
 3. Using Continuous Integration to catch and correct inconsistencies right away
2. *Role-Play: End of Sprint Ceremonies - After brief instruction about key concepts, you will participate or watch as an Agile team holds the end-of-Sprint ceremonies, then engage in a class-wide discussion of these topics:*
 1. Holding a Sprint Review
 1. Effectively a Milestone-Review at the end of each Sprint
 2. Using a Release Burn-Down chart to visualize project progress
 3. Dealing with project issues
 4. Obtaining stakeholder concurrence on project progress
 5. Making release decisions
 2. Demonstrating what was built in the Sprint
 1. Getting feedback from stakeholders
 2. Identifying new User Stories
 3. Holding a team retrospective

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1. Agreeing what is working well, not working well, and possible improvements
2. Deciding to make improvements to the team's practices, rules & norms
4. Releasing a Product Increment
 1. Minimum Viable Product (MVP)
 2. Early Acceptance Testing
5. Quality Management – Integrating work with other teams' work

Module 2: Plan a Sprint

We look at how a Sprint Backlog is built

1. *Role-Play: Story Refinement - After brief instruction about key concepts, you will participate or watch as an Agile team refines their understanding of the User Stories for the up-coming Sprint, then engage in a class-wide discussion of these topics:*
 1. Collaborating to define requirements details
 2. Capturing Product Owner guidance
 3. Asking clarifying questions of the Product Owner
2. *Role-Play: Sprint Planning - After brief instruction about key concepts, you will participate or watch as an Agile team plans a Sprint, producing a Sprint Backlog, then engage in a class-wide discussion of these topics:*
 1. Identifying the tasks required to complete each User Story
 1. Using the team's Definition of Done as a guide
 2. Team members signing up for tasks
 1. Estimating task effort
 3. Ensuring the Sprint Plan is realistic
 4. Committing to the Sprint Plan

Module 3: Adapt to Change

Next, we see how changes to the Product Backlog are handled

1. *Role-Play: Changes to the Product Backlog - After brief instruction about key concepts, you will participate or watch as an Agile team incorporates new User Stories into their Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Product Backlog changes come from many sources
 2. Product Owner acting as the gatekeeper to the Product Backlog
 1. Deciding what's in or out
 2. Prioritizing against existing User Stories
 3. Team members estimate new User Stories in Story Points
2. *Role-Play: Changes to the Release Plan - After brief instruction about key concepts, you will participate or watch as an Agile team updates their Release Plan to accommodate additions to the Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Determining if changes impact Release Dates
 1. Using the Team Velocity and Story Point estimates
 2. Product Owner deciding if the Release Plan change is OK
 1. Based on knowledge of project constraints
 2. Communicating the change to project stakeholders

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3. *Role-Play: Product Discovery - After brief instruction about key concepts, you will participate or watch as an Agile team updates their product concept and Product Backlog as a result of feedback from users, then engage in a class-wide discussion of these topics:*
 1. The value of an early first release is to get early feedback from users
 2. Evolving the product concept in response to user feedback
 3. Using experimentation to validate understanding of users' needs & preferences

Module 4: Elaborate Stories and Plan a Release

Now we extend the Release Plan further into the future

1. *Role-Play: Elaborate Stories in the Product Backlog - After brief instruction about key concepts, you will participate or watch as an Agile team adds key information to the User Stories in their Product Backlog, then engage in a class-wide discussion of these topics:*
 1. Product Owner adjusting prioritization of the Product Backlog
 2. Product Owner articulating Acceptance Criteria for User Stories
 1. Team asking clarifying questions about Acceptance Criteria
2. *Role-Play: Story Point Estimation - After brief instruction about key concepts, you will participate or watch as an Agile team uses Planning Poker to estimate User Stories in Story Points, then engage in a class-wide discussion of these topics:*
 1. Estimating in Story Points
 1. What Story Points mean and don't mean
 2. How to play Planning Poker
 3. Resolving differences in estimates
 4. The role of discussion in coming to a consensus on estimates
 5. The Product Owner's role in clarifying User Stories during estimation
3. *Role-Play: Release Planning - After brief instruction about key concepts, you will participate or watch as an Agile team plans a release, then engage in a class-wide discussion of these topics:*
 1. Using Team Velocity
 1. What is Velocity
 2. When does a team's Velocity change?
 2. Mapping User Stories into Sprints
 1. Using Priorities to guide order
 2. Using Story Point estimates and team Velocity to limit capacity
 3. Determining release date using number of Sprints and Sprint length

Module 5: Begin an Agile Project

Having role-played or discussed all of the key Agile activities, we will now turn to how Agile projects are kicked off.

1. Collaborating with the Product Owner on a Product Vision
 1. Identifying all user roles
 2. Writing a Persona
 1. Choosing user roles that need a Persona
 3. Visualizing the Customer Journey
 1. Normal journey for a user
 2. Alternative journeys
 3. Breaking large customer activities into smaller steps

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4. Translating Journey Steps into Epics
 1. Using the “As a {} I need {} so that {}” format
 5. Breaking Epics down into User Stories
 1. Using the “As a {} I need {} so that {}” format
 6. Prioritizing releasing early and often
 1. Value delivered to Customer
 2. Feedback from users
 7. Defining Minimum Viable Product (MVP) – First Release
 1. Minimum time and effort for maximum value
 8. Defining other releases
 1. Deliver in Priority Order
2. Discussion: Beginning an Agile Project

Module 6: Agile Team & Mindset

Now that we have experienced all of the Agile practices, we will turn our attention to the team that makes it all happen.

1. *Discussion: Team Roles*
 1. Scrum Master
 2. Product Owner
 3. Small, cross-functional team
2. *Discussion: Self-Organizing Team Dynamics - After brief instruction and a video about key concepts, you will engage in a class-wide discussion of these topics:*
 1. What it means to be a Self-Organizing team
 1. Collaborating to establish team rules and norms
 2. Collaborating to plan and manage the project
 2. Interpersonal dynamics on a high-performance team

Module 7: Core Agile Concepts

We end the class by pulling together all of the ideas we have experienced and drawing the big picture Agile concepts.

1. *Discussion: Agile Manifesto - You will engage in a class-wide discussion of these topics:*
 1. The 4 Agile Values
 2. The 12 Agile Principles
2. *Discussion: Variety of Agile Methods - After brief instruction about them, you will engage in a class-wide discussion of these topics:*
 1. Agile is not a single method
 1. All Agile methods are Lean
 2. How Scrum differs from Kanban
 3. Why you would choose Scrum vs. Kanban
 2. Scaling Agile to large projects and bigger contexts
 1. Scrum of Scrums
 2. SAFe®
 3. DevOps
3. *Discussion: The Agile Mindset - After brief instruction about them, you will engage in a class-wide discussion of these topics:*
 1. Agile mindset enables Agile methods & practices

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2. Key elements to Agile success
 1. And what if any is missing