Managing Software Products Using Scrum

Course Summary

Description

There's more to Agile development than simply a different style of programming. That's often the easy part. However, it totally changes your methods for:

- Requirements Elicitation
- Project Estimation & Planning
- Team Leadership
- Working with your Stakeholders & Customers
- Focus on Team Development

While not a silver bullet, Agile is quickly becoming the most practical way to create outstanding software. We'll explore the leading Scrum methodology, and you'll learn the basic premise and techniques behind Agility — so that you can apply them to your projects.

This boot camp-style workshop prepares you to manage, lead, or participate on Scrum projects by learning how to apply the practices of Scrum on an actual project.

Objectives
At the end of this course, students will be able to:

- Understand how to maintain a regular cadence when delivering working software during each iteration
- Gain a practical appreciation on how to follow the team approach; start as a team, finish as a team
- Have knowledge and understanding of Agile principles with context on why they are so important for each team
- Embrace planning from Vision down to Daily activities, recognizing the value of continuous planning over following a plan
- Build a backlog of prioritized stories that provide emergent requirements for analysis that also fosters customer engagement and understanding
- Demonstrate an engaging technique for more effective estimating (planning poker) and become more accurate by being less precise
- Have knowledge of pulling together Agile release plans that connect you back to business expectations – including hard date commitments and fixed price models

Topics

- Introduction
- Agile Overview
- Scrum Overview
- Initiating a Scrum Project
- Initial Product Backlog
- Planning 30-day Sprint

- Checking Status in the Daily Scrum
- Sprinting
- Checking Progress in the Sprint Review
- The Role of the Scrum Master
- Closure

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Course Summary (cont'd)

Audience

This beginner level course is ideal for:

- Managers of software development
- Software team leads
- Specialists in software development processes and quality assurance

Prerequisites

There are no prerequisites for this course.

Duration

Two days

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Course Outline

I. Introduction
   A. Course Introduction
   B. Course Schedule
   C. Course Objectives
   D. Course Agenda

II. Agile Overview
   A. What is Agile?
   B. Agile Themes (change, communication, etc.)
   C. The Agile Manifesto
   D. The Four (4) Agile Principles

III. Scrum Overview
   A. Foundational Books (Sutherland, Schwaber, Beedle)
   B. The Scrum Process
   C. Team Roles and Responsibilities
   D. Team Exercise 1: Choose a Case Study

IV. Initiating a Scrum Project
   A. Who is the Product Owner?
   B. Team Exercise 2a: Identify the Product Owner
   C. What are Success Criteria?
   D. Defining the Project Success Criteria
   E. Team Exercise 2b: Define the Project Success Criteria
   F. Establishing the Project Time Box
   G. Team Exercise 2c: Establish the Project Time-Box
   H. Building the Scrum Team
   I. Team Exercise 2d: Build the Scrum Team

V. Initial Product Backlog
   A. Envisioning the Product using User Stories
   B. Team Exercise 3a: Envision the Product
   C. Defining Business Functionality
   D. Team Exercise 3b: Brainstorm Business Functionality
   E. Defining Technical Functionality

   F. Team Exercise 3c: Brainstorm Technical Functionality
   G. Estimating Effort (using Planning Poker)
   H. Team Exercise 3d: Estimate Effort (Course-Grain)
   I. Creating the Iteration Plan
   J. Team Exercise 3e: Create the Iteration Plan

VI. Planning 30-day Sprint
   A. Planning the Current Iteration
   B. Creating the Sprint Backlog
   C. Team Exercise 4a: Finalize Sprint Goal & Backlog
   D. Creating a Task List
   E. Team Exercise 4b: Product a Task List
   F. Estimating Effort (using Planning Poker) and refining the Sprint Plan
   G. Team Exercise 4c: Estimate Effort (Fine Grain)

VII. Checking Status in the Daily Scrum
   A. The Daily Scrum Roles
   B. The Scrum Master's Role
   C. Handling Issues
   D. Team Exercise 5: Hold a Daily Scrum

VIII. Sprinting
   A. Working through the Sprint Backlog
   B. Using the Story Board for Status Updates
   C. The Burn Down Chart
   D. Team Exercise 6a: Updating the Burn Down Chart
   E. Making Changes to the Product and Sprint Backlogs
   F. Team Exercise 6b: Change the Backlog

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Course Outline (cont'd)

IX.   Checking Progress in the Sprint Review
   A. Reviewing the Sprint and Checking Progress
   B. Gaining Customer Acceptance
   C. Team Exercise 7a: Gain Customer Acceptance
   D. Changing the Product Backlog
   E. Team Exercise 7b: Change the Product Backlog
   F. The Sprint Retrospective

X.   The Role of the Scrum Master
   A. Coaching the Scrum Team
   B. Class Exercise 8a: Coach the Scrum Team
   C. Integrity of the Scrum Practices
   D. Class Exercise 8b: Ensure the Integrity of Scrum
   E. Communicating among Stakeholders
   F. Class Exercise 8c: Facilitate Communication
   G. Removing Impediments
   H. Class Exercise 8d: Remove Impediments to Progress

XI.   Closure
   A. Scrum Summary
   B. Team Exercise 9: Implement Scrum Practices