Managing Agile Projects with Scrum and Lean (3 Days)

Overview

This course takes a deeper dive into project management tactics and allows for extended hands-on lab time. After a one-day overview of Scrum and a brief synopsis of Lean, students will have an opportunity to practice what they've learned with two days of intensive lab work.

Learning Objectives

- Provide a refresher on the origins and basics of Scrum and Agile
- Present a detailed explanation of the key Scrum "artifacts"
- Grasp the Scrum Master's role in-depth
- Understand Lean principles and how to apply them with Scrum
- In-depth understanding of Scrum practices through experiential exercise

Prerequisites

No experience needed, this course can fit any skill level.

Course Outline

Agile Overview
 The Agile Potential
 The Agile Manifesto
 Agile alone is NOT enough
 Can Agile fail?
 THE Best Agile

SCRUM Overview
 Roles and Responsibilities
 How It Works
 Artifacts
 Rules of Scrum
 Definition of Done

Lean Practices Specific to Software Projects
 Lean Principles
 Value Stream Mapping
 Set Management – Backlog, Throughput, Expenses
 Kanbans and Queues
 Smaller Batches Penny Lab
 WIP Limits – Airplane Lab
 Goals and Measurements
 Leveraging Lean Principles in Scrum Lab

Product Owner Roles and Responsibilities
 Will the Real Product Owner Please Stand Up?
 Product Backlog and Requirements
 Roles and Personas
 Spikes and Special Stories

Guiding the Self-Managing Team
    Leadership versus Management
    Agile Leader's Role
    Leadership Lab
    Servant Leadership
    Changing Culture and Behavior
    Motivating Knowledge Workers
    Small Changes, Knowing When to Act
    Force Field Analysis Lab
        Encouraging Agile behavior versus slowing
        adoption

Agile Planning
    Agile Planning Concept and Terms
    Business Case and Value Analysis
    The Project Charter
    Customer Value Prioritization
    Minimally Marketable Feature/Minimal Viable
    Product

Product Backlog
    Defining the Product Backlog
    User Stories – Business Functionality
    Prioritizing the Backlog
    Creating a Product Backlog Lab
        Class will intermittently revisit this lab

Agile Estimation
    Stories and Sizing
    Relative Sizing
    Wideband Delphi
    Planning Poker
    Affinity Estimating
    Team Estimation Method
    Agile Estimation Lab

Release Planning
    Release Planning Inputs and Outputs
    Velocity-Driven Release Planning
    Fixed Schedule Release Planning
    Release Planning for Course Project Lab

Metrics and Measuring Progress
    Planning as You Go
    Reviewing Information Radiators
    Velocity and Measuring Progress
    Scrum Metrics
    Lean Metrics
    Even Easier Metrics
    Metrics Lab
    Watching The Horizon

Sprints
    Sprint Planning
    Sprint Activities
    Sprint Review
    Sprint Retrospective
    Sprint Planning and Execution Lab
    Sprint Review Lab
    Sprint Retrospective Lab

Final Review and Next Steps