Agile Project Management for I.T. Professionals (3 Days)

Course Description

Agile software development is a software development life cycle which promotes adaptive planning, evolutionary development, early delivery, continuous improvement, and encourages rapid and flexible response to changes for software development projects.

In this course, you learn how to apply Agile project management principles and the Scrum framework through workshop activities to acquire the practical knowledge and skills to plan, manage and execute Agile software development projects. You will learn how to develop higher-quality software products at lower cost, and deliver software to your customer in less time.

Audience

This course is intended for information technology team leaders, software developers, software architects, systems analysts, project and program managers interested in applying Scrum and Agile techniques will benefit from this workshop.

Course Outline

Part I: Understanding Agile
- What is Agile?
- Why Agile?
- Agile Manifesto
- Agile Principles
- Agile Methodologies
- Agile Benefits

Part II: Forming the Agile Team
- Team Roles and Responsibilities
- Expectations
- Self-Organization
- Communication

Part III: The Agile Coach
- Role of the Agile PM or Agile Coach
- Agile Project Management
- Tips for working with Agile Teams
- Communication

Part IV: Agile Planning
- Project Planning
- 5 Levels of Planning
- Product Vision
- *Class Exercise*
  - *Working in small teams, you will "design the box" in order to establish a vision for a sample project. You may choose to utilize a project from your work as well.*

Part V: Focus on the Customer
- Customer Involvement
- User Roles
- Creating and Using Personas
- Constraints
- *Class Exercise*
  - *Within your teams you will brainstorm some customer roles for your Agile project. From the brainstorming, you will consolidate the larger list of roles into key roles that will be the focus of your sample Agile project.*

Part VI: Creating the Product Backlog
- The Product Backlog
- User Stories
- INVEST Model (Bill Wake, 2003)
- Acceptance Criteria
- Foundational Stories
- *Class Exercise*
  - *In small teams identified previously, you will engage in a story-writing workshop as a means of building a product backlog for your Agile project.*

Part VII: Prioritizing the Product Backlog
- Prioritization Themes
- Decision Matrix
- Kano Analysis
- Preventing Fire Alarms
- Continuous Prioritization
- *Class Exercise*
  - *Utilizing the prioritization techniques discussed, you will prioritize the Product Backlog for your sample Agile project taking into account the dependencies, risk and impact of your user stories.*

Part VIII: Agile Estimating
- Relative vs. Actual Estimating
- Introduction to Story Points
- Using Story Points
- Planning Poker (Grenning 2002)
- *Class Exercise*
  - *Using the Agile estimating techniques of story points to establish estimates for your highest priority stories. This is a critical tool for to use in the Agile estimating process.*

Part IX: Agile Release Planning
- Velocity
- What is a Release?
- Schedule Based vs. Feature Based Planning
- Building the Release Plan
- Communication
- *Class Exercise*
  - *Each team will establish a release plan for their sample Agile project incorporating priority, Agile estimates and velocity as appropriate. We'll discuss how real experiences of fixed time and fixed feature projects can work with an Agile release plan.*

Part X: Building Cadence
- Getting to the Details
- Building Trust
- Best Practices

Part XI: Iteration Planning and Execution
- Capacity
- Engaging the Team
- Planning the Iteration
- Executing the Iteration
- Daily Scrum/Stand-up
- Scrum of Scrums
- Iteration Review
- Demonstrating Working Software

Part XII: Measuring and Communicating Progress
- Taskboards
- Story/Task cards
- Metrics
- Burndown Charts
- Agile Tools

Part XIII: Retrospectives
- Elements of the Retrospective
- Facilitating Retrospectives
- Tips for effective Retrospectives
- *Class Exercise*
  - *The instructor facilitates a Retrospective for the class allowing participants to provide course feedback in addition to demonstrating how a Retrospective should be run.*

Part XIV: Adopting Agile Project Management
- Agile Process Overview
- Overcoming Resistance and Getting Started
- Agile Calendar of Events
- Challenges to Agile Adoption
- Team Roadmap Exercise