Agile Estimating & Planning

Agile planning processes balance the effort and investment in planning with the knowledge that the plan will evolve throughout the project. Agile planning and estimating happens at several levels – release planning, iteration planning, and daily planning. This course provides techniques and approaches for project estimation and planning that are consistent with the core principles of agile methods such as Scrum and Extreme Programming (XP). You will learn how to estimate using story points and ideal days, and how to use estimation techniques such as planning poker. You will learn how to plan and schedule an agile project, and how to monitor performance against the plan. You will apply what you learn in a series of activities that take you through the agile estimating and planning process.

Objectives:

❮ The differences between the different levels of plans in an agile project
❮ How to estimate with story points and ideal time
❮ Techniques for team estimating
❮ When and how to re-estimate
❮ How and when to perform release and iteration planning
❮ How to monitor progress against your plans

Audience:

This course is intended for all project team members, customers and stakeholders who are responsible for deriving, approving or understanding the fundamentals of a project estimate or project plan.

Pre-requisites:

❮ IconATG's "Developing Agile Requirements with User Stories" or a basic understanding of user stories and product backlogs.
❮ IconATG's "Applying Scrum with User Stories" or attendance at a Certified ScrumMaster (CSM) course.

Duration:

1 day

Outline:

1. **The Big Picture**
   - Introductions
   - Agile and Lean principles
   - Iterative development
   - The purpose of planning
   - Problems with traditional planning
   - Overview of agile planning
   - Overview of Scrum

2. **Agile estimating**
   - Roles in agile development
   - Creating the product backlog
   - Estimating size with story points
   - Estimating size with ideal days
   - Using Planning Poker
   - Exercise: Select stories for an iteration and estimate using story points
   - Using velocity to derive duration

3. **Planning releases**
   - Levels of planning in agile
   - Prioritizing the product backlog
   - Prioritization techniques
   - Activity: Prioritize stories for a release
   - Creating a release plan
   - Estimating velocity
   - Exercise: Create a release plan

4. **Planning iterations**
   - Selecting an iteration length
   - The iteration planning meeting
   - Identifying tasks from user stories
   - Creating an iteration plan
   - Exercise: Identify tasks from user stories and create an iteration plan

5. **Running an iteration**
   - Events during an iteration
   - Daily planning during the daily stand-up
   - Using burndown charts to track progress
   - Dealing with changes in estimates
   - Techniques for splitting user stories
   - Exercise: Handling an under-estimated user story
   - The iteration review meeting

6. **Retrospective**
   - Workshop review
   - Using agile retrospectives to inspect and adapt
   - Exercise: Workshop retrospective