

eXtreme MATLAB[®] Workshop

Applied Agile Programming

Course Outline

Agile Development

Values, principles and practices
Differences from other methods
Strengths and weaknesses

Extreme Programming

Iterative and incremental
Test driven development
Automated tests and releases
Frequent code delivery

SCRUM

Sprinting with agility
Timeboxing meetings and tasks

Best coding practices

Refactoring for design
Code change management
Standards and style
Agile documentation

Teamwork and collaboration

Team structure and roles
Capturing requirements
Setting priorities
Managing iterations
Shared code ownership
Pair programming
Retrospectives and learning
Adopting and adapting agile

Tools and infrastructure

MATLAB IDE
Version control
Organizing deployment
Tracking progress

Summary

This workshop deals with agile software development methods that provide timely delivery of high quality software. These methods emphasize development that is both iterative and disciplined. This experiential training stresses the best ways to use agile methods for MATLAB software development.

What you will learn

- Refactoring code for better design
- Working with user stories
- Using MATLAB tools
- Delivering software in iterations

Who should attend

This workshop is for developers, project leaders and technical managers who are interested in learning more about XP and other agile methods and how they can help improve the quality and responsiveness of their software development projects. Participants should have a good understanding of MATLAB.

Instructor

Richard Johnson has taught dozens of MATLAB courses. He is the author of the MATLAB Style Guidelines and developer of the Data Visualization Toolbox for MATLAB. He has a B.S. in Mathematics from Purdue University, a Ph.D. in Engineering Science from UCSD, and was a professor at Oregon State University.