Instructor Led, Online Training Session

Goal

Provide attendees with the fundamentals necessary to begin working with Telerik Test Studio to create automated functional tests. Attendees will come away with an understanding of common issues around functional automation and how to deal with them. More importantly, attendees will have the fundamental knowledge on how to create high-quality, maintainable tests that will continue to provide high value with minimal maintenance over the test suites' lifespan.

Major focus areas:

• Designing good automated test cases
   - Avoiding bad cases
• Understanding Test Studio's basic functionality
• Web application testing
   - Understanding element location
   - Dealing with common pitfalls
• Working with Silverlight & WPF applications
   - Dealing with XAML's challenges
• Succeeding with tests over time
   - Constant reassessment
   - Avoiding brittle tests
   - Keeping tests fast

Prerequisites

• Attendees must have the latest public release of Test Studio installed
 • Recommended to have Visual Studio 2010 installed
   - Knowledge of C# helpful, not required
• Optional: have the Telerik Demonstration Application installed locally
   - Download from https://github.com/PillarTechnology/Telerik-Demo
   ➔ **NOTE:** No time will be spent troubleshooting the demo application. If needed, attendees can use the online version at http://growing-planet-634.herokuapp.com/welcome

AGENDA

Segment 1: Introducing Test Studio
• The Test Studio IDE
• Getting Started in Test Studio
• Creating your first project
    - Test project organization
• Recording your first test
    - Tips on recording
    - Handling JavaScript and other validations
• Executing tests
• Test Automation Architecture & Design
    - Simplicity
    - Granularity
    - Accuracy
    - Maintainability

Segment 2: Web Application Testing
• Page loading lifecycle
• Document Object Model (DOM)
• Element Locators
    - Working with the Element Repository
    - Updating find logic
• Working with dynamic content
    - AJAX
• Dealing with pop-up windows
• Handling operating system dialog boxes

Segment 3: Beyond the basics
• Setup and Teardown actions
    - Coded test steps
    - Introduction to backing API concepts
• Data Driving tests
• Working with Test Studio Express
• Conditional Logic with If Else
    - If Else
    - Loop
    - While
• Test Lists
    - Static
    - Dynamic
    - Different lists, different functions
• Manual Tests
• Working with Telerik Controls
    - Additional benefits, Test Studio translators
• Testing Silverlight Applications
• Testing WPF apps (optional)

Segment 4: Wrapping it All Up
• Succeeding with tests over time
    - Constant refactoring
    - Avoiding brittle tests
        • What are brittle tests?
        • Keeping your UI flexible
        • Shutting off parts of the system
        • Using a backing API
• Keeping tests maintainable
    - Practical examples of modularity
    - Speed of execution
• Evolving your test suite
    - Starting out small
    - Focusing on high-value
    - When to prune out tests

SCHEDULE

Segment 1
Segment 2
15 minute break
Segment 3
Segment 4
Final Q&A and remarks