

Agile Testing: What Is Different And Why ☺

Introduction:

Agile and especially scrum has been a buzz word now a days. Most of the big IT brands have either already moved to scrum or in process of. Agile means a self-organized and cross functional team. In that case does a tester's role change while working on agile projects? How is testing different when done with agile projects? If you have such questions in mind, this 2.5 days' workshop is aimed at familiarizing the participants with scrum methodology and testing methodologies with scrum. It will also provide an hands-on experience of testing with some of the tools like Cucumber.

Learning Objectives: The course will enable participants to ...

- Appreciate agile – why it originated, what problems of software projects can it address
- Familiarize with Scrum framework and terminologies
- Explore how testing strategies differ in agile environment – agile testing quadrants
- Appreciate how and why scrum is different from traditional waterfall methods
- Explore concept behind TDD, BDD, ATDD – why these concepts originated and how does it help
- Learn how and where does tester's role change on agile projects
- Experience an hands-on experience with a case study testing implemented with Cucumber

Participants' profile:

- It would help if participants have worked on projects, project management background will be an advantage.
- Basic know-how about Agile would be nice to have but not a must requirement

Duration: 2.5 days

Course Outline:

Day	Session	What Is Covered	Method Followed
1	1	<i>Introduction, expectation setting, agenda</i>	
1	2	<i>Agile PM</i> <ul style="list-style-type: none"> • <i>Understand concept of iterative and incremental development</i> • <i>How and why did it originate</i> • <i>What PM challenges it can address and how</i> • <i>Agile manifesto</i> 	<ul style="list-style-type: none"> • <i>Interactive discussion</i>
1	3	<i>Requirements management</i> <ul style="list-style-type: none"> • <i>User stories – why and how</i> • <i>How this differs from traditional requirements gathering approach</i> • <i>What benefits it can bring</i> 	<ul style="list-style-type: none"> • <i>Case study based</i> • <i>Activity based – participants to elicit requirements for a sample case study project</i>
1	4	<i>Estimating projects</i> <ul style="list-style-type: none"> • <i>Agile estimation techniques like poker, T-shirt sizing, etc (size, effort and duration estimates)</i> 	<ul style="list-style-type: none"> • <i>Case study based</i> • <i>Activity based – participants to estimates requirements captured on previous day for a sample case study project</i>

Day	Session	What Is Covered	Method Followed
		<ul style="list-style-type: none"> How it can help address challenge with uncertainty associated with estimates How is it different than traditional approach 	
1	5	Planning projects <ul style="list-style-type: none"> Why up-front planning may not work How does agile planning work (planning onion) Release and sprint planning overview How it can help address challenge with uncertainty associated with plans How is it different than traditional approach? 	<ul style="list-style-type: none"> Case study based Activity based
2	1	Explore scrum framework in more detail <ul style="list-style-type: none"> Scrum events Scrum roles Scrum artefacts 	<ul style="list-style-type: none"> Interactive discussion
2	2	Agile testing quadrants <ul style="list-style-type: none"> Technology facing tests that support team Business facing tests that support team Business facing tests that critique the product Critiquing the product using technology Agile test automation strategy	<ul style="list-style-type: none"> Interactive discussion
2	3 & 4	<ul style="list-style-type: none"> How cucumber implements BDD Set up cucumber project What is Gherkin language and its use in BDD Preparing a feature file Use of annotations and parameters, regular expressions Data table overview Background, scenario and examples in cucumber HTML and JSON reports 	<ul style="list-style-type: none"> Hands-on session
3	1 & 2	Build automation framework overview <ul style="list-style-type: none"> Derive and automate BDD scenarios Business focused cucumber feature file Introduce page object and multi browser testing Parallel test execution Parameterizing and repeating tests from feature classes Generating cucumber reports 	<ul style="list-style-type: none"> Hands-on session

Out of scope:

- More advanced topics like tools and techniques for test automation, user stories, estimating stories, release or iteration planning tools and techniques, various project monitoring tools and techniques will not be covered

Note: This overall flow of the course is subject to change based on participants' interactions & queries.