

Course Goals and Non Goals



Course Goals

- Introducing participants to the Agile Software Development Model
- Introduction to Agile Practices & Methods
- Understanding SCRUM
- At the end of this program, participants gain an understanding of how to transition sound traditional test practices into an Agile Development Environment
- Understand the key differences between traditional and Agile Testing Practices
- Understand the roles and responsibilities of a typical Agile Testing Team



Course Non Goals

- This course does not cover other than anything the course goals

Pre-requisites



Basic knowledge of Software Development Life Cycle
Basic knowledge of Programming Concepts
Basic Knowledge of Software Testing Fundamentals

Intended Audience

Novice Developers



Day Wise Schedule



Day 1

- Lesson 1: Agile Process Framework
- Lesson 2: Agile Methods and Practices

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Lesson 1: Agile Process Framework

- 1.1. History of Traditional Software Development Model
- 1.2 Software Development Model and SDLC
- 1.3 "Waterfall Model" – An Overview
- 1.4 Waterfall or Sequential Based Development Model
- 1.5 "Real Life" – Waterfall Model
- 1.6 "Waterfall Model" – Advantages
- 1.7 "Waterfall Model" – Disadvantages
- 1.8 Agile Software Development – Definition
- 1.9 Agile Development Model
- 1.10 Graphical Illustration of Agile Development Model
- 1.11 Why use Agile?
- 1.12 Agile Manifesto and Principles
- 1.13 12 Principles of Agile Methods
- 1.14 Agile Values

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Lesson 1: Agile Process Framework (Cont.)

- 1.15 What is NOT an Agile software development?
- 1.16 Foundation of an Agile software development Method
- 1.17 Common Characteristics of Agile Methods
- 1.18 Agile Methods and Practices
- 1.19 When to use Agile Model?
- 1.20 Advantages of Agile Model
- 1.21 Disadvantages of Agile Model
- 1.22 Difference between Agile and Waterfall Model
- 1.23 Agile – Myths and Reality
- 1.24 Agile Market Insight

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Lesson 2: Agile Methods and Practices - SCRUM

2.1 Introduction to SCRUM

2.2 Scrum Framework

2.2.1 Scrum Roles

- Product Owner
- Scrum Master
- Team

2.2.2 Ceremonies

- Sprint planning
- Sprint review
- Sprint retrospective
- Daily scrum meeting

2.2.3 Artifacts

- Product backlog
- Sprint backlog
- Burndown charts

2.2.4 Definition of "Ready"

2.2.5 Definition of "Done"

2.3 Introduction to Extreme Programming

2.4 Introduction to Lean Software Development

2.4.1 Principles of Lean Software Development

2.5 What is Kanban?

References




Websites :

- www.extremeprogramming.org
- www.agilemanifesto.org
- www.wikipedia.org
- www.scrum-institute.org
- www.agilealliance.org
- www.agilemodeling.com
- www.scrumguides.org
- www.mountangoatsoftware.com

Books :


- User Stories Applied: For Agile Software Development – Mike Cohn

Other Parallel Technology Areas



None

Next Step Courses



None