TidBIT

Testing is a way of ensuring that the final product you deliver is of high quality. Though not every company will include testers as a part of their agile teams, doing so can add a lot of benefits. To be an effective tester on an agile team, it's important to build the right mindset. "A tester on an agile project will work differently than one working on a traditional project…the members in an agile project communicate with each other early and frequently, which helps with removing defects early and developing a quality product. **It is important to note that testers in agile projects, don't just focus on testing the product to find bugs, rather the focus should largely be on improving the processes to prevent defects, and testers play an important role in this."**

Reference

Ghahrai, A. (2017, Jan 6). *Agile testing mindset and the role of the agile tester*. DevQA. Retrieved from https://devqa.io/agile-testing-mindset-tester-role-agile-team/.

Required Resources

Textbook: *The Project Manager's Guide to Mastering Agile* ⬀ (https://search.ebscohost.com/login.aspx?direct=true&custid=shapiro&authtype=athens,ip&db=nlebk&AN=937009&site=ehost-live&scope=site), Chapter 5
In Chapter 5, Agile Development, Quality, and Testing Practices, you will find information related to project management from an agile point of view, which requires a much higher level of cross-functional leadership. An agile project manager (PM) needs to include several practices in their repertoire that include agile software development practices, quality management, and testing practices. As you read, consider the following questions:

- What is the definition of "done" in agile?
- How is QA testing different in an agile project?

Textbook: *The Project Manager's Guide to Mastering Agile* ⬀ (https://search.ebscohost.com/login.aspx?direct=true&custid=shapiro&authtype=athens,ip&db=nlebk&AN=937009&site=ehost-live&scope=site), Chapter 11

Chapter 11, Understanding Agile at a Deeper Level, provides a comprehensive view of agile. An agile project manager must understand agile at a deep level in order to apply it in various situations. This chapter provides a thorough description of agile principles and practices that include systems thinking, the influences of total quality management (TQM) and Lean manufacturing, and the principles of product development flow.

- What two principles are the root of agile principles?
- What is "systems thinking" in the context of agile?

Note: The textbook chapters have been assigned for you to read out of order intentionally. Please pay close attention to the chapter numbers that you are being asked to read in each module.

Reading: Amazonian Agility ⬀ (https://medium.com/frontira/amazonian-agility-e3720ff004f7)
This article describes how the company Amazon applies Agile principles in its work. Pay special attention to the alignment matrix toward the end of the article.

As you review this article, consider the following questions:

- How did Agile principles help Amazon achieve customer centricity?
- What are the advantages of the "Two Pizza Teams" principle?
- How did Amazon benefit from the bottom-up cross-functional collaboration?

A text version of the matrix is available: 12 Principles of Agile Business Manifesto Matrix ⬀ (course_documents/CS%20250%2012%20Principles%20of%20Agile%20Business%20Manifesto%20Matrix%20Text%20Version.docx?isCourseFile=true&ou=2019621).

Additional Support (Optional)

Reading: What Is Test Driven Development (TDD)? Agile Alliance ⬀ (https://www.agilealliance.org/glossary/tdd/#q=~(infinite~false~filters~(postType~ (~'page~'post~'aa_book~'aa_event_session~'aa_experience_report~'aa_glossary~'aa_research_paper~' aa_video)~tags~(~'tdd))~searchTerm~'~sort~false~sortDirection~'asc~page~1))
This optional reading provides additional context about "test-driven development". This reading will help you understand the origins of this type of development, its benefits, and its potential pitfalls.

Reading: Agile Testing Mindset and the Role of the Agile Tester ⬀ (https://devqa.io/agile-testing-mindset-tester-role-agile-team/)
This optional reading provides another perspective on an "agile testing mindset". This resource discusses the skills necessary for a tester, the role of a tester on an agile team, and ways a tester contributes to different Scrum events.

Reading: <u>How Is Software Developed at Amazon?</u> ⎘ (http://highscalability.com/blog/2019/3/4/how-is-software-developed-at-amazon.html)

This resource explains how the customer-focused software development process at Amazon begins with decomposition. View the video "Fireside Chat: DevOps at Amazon With Ken Exner, GM of AWS Developer Tools—AWS Online Tech Talks" (41:23) within the article.

When you review the video, consider the following questions:

- What are the main lessons learned from the actions taken by Amazon?
- What led Amazon to adopt the new practices?

A transcript of the video is available: <u>Transcript for Fireside Chat DevOps at Amazon</u> ⎘ (course_documents/CS%20250%20Transcript%20for%20Fireside%20Chat%20DevOps%20at%20Amazon.docx?isCourseFile=true&ou=2019621).