Darcy DeClute's
Scrum Master
CERTIFICATION GUIDE

@scrumtuous

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Chapter 5: The Developers

Scrum has its roots in software development, but the stewards of the framework have worked hard to push Scrum into other domains including:

- Construction
- Manufacturing
- Engineering
- Bee Keeping

To pass the Scrum certification exam, you must shake yourself out of the mindset that Scrum is all about software development.

A big mental transition many software developers have difficulty with is realizing that in terms of Scrum, a 'developer' isn't necessarily a 'software developer.'

> Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.

— 2020 Scrum Guide page 5

Who is a Developer?

According to Scrum, the term 'developer' refers to anyone on the team who is adding value and working towards the creation of a usable and valuable increment of work.

- In construction, a developer could be the person painting the walls
- For castaways on a deserted island, a developer could be the person digging a trench for irrigation
- In beekeeping, a developer might be the person who disposes of the slumgum

As you read this section about the 'developer', it is easy to fall into the trap of thinking that Scrum is specifically talking about a 'software developer.' They're not.

Quite often, framing a scenario or exam question outside the world of software development will help you see things more clearly and choose the correct answer.

Feature Development vs. Overall Accountability

The Scrum Certification exam will likely ask you one of these two questions:

- Who is accountable for creating a useful Increment?
- Who is committed to creating *aspects* of a usable Increment?

The two questions sound very similar, and if you're unprepared, the nuance between the job of the Scrum Developers and the duties of the Scrum Team might lose you an exam mark.

The Scrum Team as a whole is accountable for creating a useful Increment, not just the Scrum Developers.

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However, it is the developers who create the various features, or **aspects**, of the usable Increment.

Compare the quote prior to the one below and notice the difference the Scrum Guide makes between the Scrum Team and the Developers when it comes to the Increment:

> The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.
>
> — 2020 Scrum Guide - Scrum Team Section

> Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.
>
> — 2020 Scrum Guide - Developer Section

The whole point of Scrum is to deliver value to the stakeholders, and it is the developers who create all of the parts of the Increment, which is the additive unit of value in Scrum.

The Developer's Job is Simple: Create

Despite the importance of the developer to the Scrum framework, the Guide only dedicates 84 words to them. It's because their job is quite simple - just create the product.

The remaining verbiage about the Scrum Developers outlines the key tasks they are accountable for:

> The specific skills needed by the Developers are often broad and will vary with the domain of the work. However, the Developers are always accountable for:
>
> - Creating a plan for the Sprint, the Sprint Backlog;
> - Instilling quality by adhering to a Definition of Done;
> - Adapting their plan each day toward the Sprint Goal; and,
> - Holding each other accountable as professionals.
>
> — 2020 Scrum Guide - Developer Section

Developer Accountabilities

Let's look at the accountabilities of the Developer one point at a time.

> Developers are always accountable for creating a plan for the Sprint: the Sprint Backlog.
>
> — 2020 Scrum Guide - Developer Section

There are two backlogs in Scrum:

- One is the Product Backlog owned by a Product Owner. It outlines all of the work necessary to build the product.
- The other is the Sprint backlog which is owned by the developers.

The Sprint Backlog is the developer's plan of what they intend to get done during the Sprint.

The developers own it, and nobody tells them how to manage it, not even the Scrum Master.

Test Yourself

Who on the Scrum Team has the right to add new items to the Sprint Backlog? (Choose 1)

☐ A) The Scrum Master

☐ B) The Product Owner

☐ C) The Stakeholders

☐ D) The Developers

The answer is D.

Only the Developers have the authority to add or remove items from the **Sprint** Backlog.

In contrast, only the Product Owner can add or remove items from the **Product** Backlog.

Instilling Quality

> Developers are always accountable for Instilling quality by adhering to a Definition of Done.
>
> — 2020 Scrum Guide page 5

Notice the connection between quality and the Definition of Done.

Any time the Scrum Master certification asks how to enforce quality, the answer will usually get mapped to the application of the Definition of Done.

Test Yourself

The gatekeeper of quality for the Scrum Framework is: (Choose 1)

☐ A) The Scrum Master

☐ B) The Product Owner

☐ C) The Product Goal

☐ D) The Definition of Done

The answer is D. The Definition of Done is the quality gate all increments must pass through to become valid.

NOTE The Scrum Guide uses a maddening set of rules for capitalization. They always capitalize 'Developer.' I just can't do that. I capitalize 'Scrum Developer', but other references to developer I leave lower case.

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Daily Adaptation

> Developers are always accountable for adapting their plan each day toward the Sprint Goal.
>
> — 2020 Scrum Guide page 5

It is an assumption that things will change and plans will go awry during a Sprint. Developers are expected to constantly adapt their plans and adjust to changing condition.

Since the developer's plan is the Sprint Backlog, that means the developers will be tinkering with, adding, deleting, and managing their Sprint Backlog constantly throughout the Sprint.

Test Yourself

When are developers allowed to adapt their plan by changing the Sprint Backlog? (Choose 1)

☐ A) Any time during the sprint

☐ B) Only during Sprint Planning

☐ C) Only during the Daily Scrum

Option A is correct.

If the developers see an opportunity to adapt to changes, they are encouraged to update their plans immediately. In Scrum, the Sprint Backlog is the developer's plan. The developers can update the Sprint Backlog anytime during the Sprint if they feel it is necessary.

Interpersonal Accountability

> Developers are always accountable for holding each other accountable as professionals.
>
> — 2020 Scrum Guide page 5

You are guaranteed to get a question on the Scrum Certification exam about who holds the developers accountable for monitoring or tracking their progress.

The answer is the developers. The developers hold each other accountable.

People new to Scrum will often think the 'Scrum Master', by virtue of their official sounding name, holds the developers accountable for their work. That's not the case. The Scrum Master is really just a coach and facilitator.

It might also be understandable if you thought the whole team keeps the Scrum Developers accountable. Again, that's not the case, which makes sense, because the Scrum Master or the Product Owner might not interact with the developers every day. On the other hand, the developers interact with each other at least once during the Daily Scrum.

In Scrum, the developers hold each other accountable for what they do and how they perform.

Test Yourself

Who holds the Scrum Developers accountable for their work?

☐ A) The Scrum Master

☐ B) The Product Owner

☐ C) The Management Team

☐ D) The Development Team as a whole

The answer is D. The Scrum Developers on the development team holds each other accountable for their actions.

What's not said about Developers

About 90% of the question on the Scrum certification exam come directly out of the Scrum Guide. However, there are a few questions that require some additional knowledge.

Two topics you'll want to familiarize yourself with in regards to developers on a Scrum Team are:

- The fact that adding new developers can temporarily slow down a team's velocity
- The fact that new developers can be added any time throughout the Sprint

Adding New Developers

When should you add new developers to a Team?

- During Sprint Planning?
- During the Sprint Review?
- During the Sprint Retrospective?

The Scrum Guide doesn't say anything decisive about this subject. It doesn't need to.

You can add new developers to a project any time you need them.

If you're halfway through a Sprint, and Human Resources just hired the four new programmers you've wanted for months, it wouldn't make sense to just keep those developers on the bench for two weeks so they can 'officially start' at the beginning of the next Sprint. That would be silly and wasteful. Scrum is lean and pragmatic.

Sustainable Development

When should new developers be added to a team?

Scrum says developers should always work at a sustainable pace. Any time the pace starts to become unsustainable, add some new developers to the team.

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The Scrum Certification exam might talk about budget money or internships or something like that, but those factors don't have anything to do with Scrum.

In terms of Scrum, developers can be added to a project any time they are needed. They can be removed at any time too.

The Impact of Adding Developers

One reality of adding new developers to a team is that it temporarily slows the rest of the team down.

When new developers are onboarded, they usually take other developers away from their work, as the new developers are given help setting up printers, finding out where the washrooms are, learning about the project and figuring out how to connect to GitHub.

That's just the reality of adding new people to a team.

For the short term, the productivity of individual members on the team will dip. Over time, individual productivity will go back to normal.

Just be aware of that fact on the Scrum Certification exam.

Figure 1. A new log thrown on a hot campfire will temporarily lower the fire's temperature. The same holds true for a new developer added to a hot project.