

# **SCRUM MASTER**

## **Certification Guide**

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## Chapter 3

### Scrum Pillars and Values

'Scrum values' is one of the 13 categories upon which your Scrum Certification exam is graded.

The 'Scrum Pillars' don't constitute a specific category, but they frequently weave their way into answers about why a given event is taking place, or why a given Scrum artifact is important.

Memorize the values and pay close attention to the pillars. They are key to passing the Scrum Certification exam.



Figure 1. The five Scrum values are: commitment, focus, openness, respect and courage.

### The Scrum Pillars

We've already seen references to two of the Scrum Pillars in our discussion of the Scrum Guide:

Scrum combines four formal events for inspection and adaptation within a containing event, the Sprint.

— 2020 Scrum Guide page 3

Here's the Scrum Guide's formal declaration of the three of them:

These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.

— 2020 Scrum Guide page 3

It can't be emphasized enough. The three pillars of Scrum are:

- Transparency
- Inspection
- Adaptation

Everything that happens in Scrum harks back to these values and pillars. The question as to why a particular event happens or artifact is required typically harks back to the Scrum Pillars, with the Scrum values providing further support.

## Scrum Values

The five Scrum values that support the Scrum Pillars are:

- **Commitment:** The idea that a Scrum Team is made up of conscientious and motivated developers who are dedicated to achieving the Product Goal
- **Focus:** The idea that the Scrum Team concentrates at the work at hand and doesn't plan too far into the future
- **Openness:** The idea that developers work in a psychologically safe space where people can voice their opinion and share ideas without fear of reprisal
- **Respect:** The idea you will treat people with dignity and compassion, while do the same in turn
- **Courage:** The idea that a member of the Scrum Team will speak out against unethical practices or behaviors that put the project at risk

Memorize the Scrum pillars and values, and don't confuse them with each other.

## Test Yourself

What of the following are Scrum pillars?

- ☐ Commitment
- ☐ Inspection
- ☐ Openness
- ☐ Focus
- ☐ Adaptation
- ☐ Respect

Options B and E are correct.

The Scrum pillars are transparency, inspection, and adaptation.

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## The Endless Feedback Loop

The Scrum Pillars feed into each other. It's a feedback loop that drives the entire Scrum framework.

Transparency allows all participants to honestly inspect progress.

Inspection can reveal flaws in the plan. This leads to adaptation.

As teams adapt, they must be open about how well the adaptation has worked, which requires the team to be transparent, which then leads to inspection and adaptation. It's a constant loop.

## Inspection

The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.

To help with inspection, Scrum provides cadence in the form of its five events.

An inspection enables adaptation. Inspection without adaptation is considered pointless.

Scrum events are designed to provoke change.

— 2020 Scrum Guide page 4

Inspection is all about taking a look at what you and your team is doing so you can figure out if it's working or not.

- Why do we do the Daily Scrum? We do it so the developers can *inspect* their work and change their plans if they need to.
- Why do we do the Sprint Review? We do it so the team and the stakeholders can *inspect* what's been done and see if it's good or not.
- Why do we do the Sprint Retrospective? We do it to *inspect* how well the team worked together during the Sprint.
- Why do we have Scrum Artifacts? So people can *inspect* them and use them as a basis for adaptation.

The need for inspection throughout a Sprint is a common justification for Scrum events and artifacts. Events and artifacts enable the feedback loop that is built upon the Scrum Pillars.

## Test Yourself

Inspection in Scrum is: (choose 2)

- ☐ Done frequently to detect potential problems
- ☐ Done infrequently to allow teams to concentrate on development
- ☐ Done to identify undesirable variances
- ☐ Done to ensure undesirable variances do not occur

Options a) and c) are correct.

Inspection is done frequently to detect potential problems and to identify any undesirable variances so that the team can address them.

The concept that anything could ever be done to ensure variances never occur, as option D suggests, is just wishful thinking. In the real world, undesirable variances will always occur. Scrum recognizes that reality and helps teams deal with them early and adapt to them.

## Transparency

To know exactly how product development is progressing, everyone must be transparent about the work they are doing.

Empiricism doesn't work if we cannot look transparently into the results of the processes and methods we use within the Scrum framework.

The emergent process and work must be visible to those performing the work as well as those receiving the work.

With Scrum, important decisions are based on the perceived state of its three formal artifacts.

Artifacts that have low transparency can lead to decisions that diminish value and increase risk.

Transparency enables inspection. Inspection without transparency is misleading and wasteful.

— 2020 Scrum Guide page 3

One of the Scrum values is openness. One of the ways to be open is to be transparent about the work being done and transparent about the progress being made.

The Sprint Backlog creates transparency because it lists everything the Scrum Team is working on, what the team's goal is during this Sprint, and the team's plan for achieving that goal. If stakeholders want to know what the Scrum Team is working on, they can look at the Sprint Backlog. It provides transparency.

What is the quality standard the team is using? Transparency into that is provided by the team's Definition of Done.

What will the team try to build next? Transparency into that is provided by the way the Product Backlog is prioritized.

Like inspection, the Scrum pillar of transparency is woven into all of the Scrum events and artifacts.

### Test Yourself

Scrum allows important decisions to be made empirically by basing those decisions on:  
(Choose one)

- ☐ The Scrum values of Commitment, Focus, Openness, Respect, and Courage
- ☐ Lean thinking
- ☐ The Scrum pillars of transparency, inspection, and adaptation
- ☐ The perceived state of the three formal artifacts.

Empiricism requires decisions to be made on facts and evidence. In Scrum, evidence comes from the state of Scrum's three formal artifacts, namely the Product Backlog, the Sprint Backlog, and the Increment.

The state of these artifacts must be transparent to all, otherwise the team and the stakeholders don't have all of the facts they need to make the right decisions for the future of the product.

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## Adaptation

Things never go according to plan.

That's one of the reasons we don't spend months planning things in Scrum.

It's more important to produce something of value than it is to waste time planning because nothing ever goes according to plan.

And when plans do go awry, Scrum developers adapt. That's how they achieve their goals.

If any aspects of a process deviate outside acceptable limits or if the resulting product is unacceptable, the process being applied or the materials being produced must be adjusted.

The adjustment must be made as soon as possible to minimize further deviation.

Adaptation becomes more difficult when the people involved are not empowered or self-managing.

A Scrum Team is expected to adopt the moment it learns anything new through inspection.

— 2020 Scrum Guide page 4

It's understood that in the world of software development, things change quickly.

Things also change quickly in the field of construction, manufacturing, banking, etc.

The ability for teams to quickly adjust and change their plan when things go sideways is a core tenant of Scrum. It's one of the reasons we have the Daily Scrum - it allows developers to collectively discuss problems and adapt as needed.

## Always Adapt

The Scrum Guide describes several artifacts and time-boxed events that provide an opportunity to adapt. However, these are not the only times the team is allowed to meet, speak and adapt.

If a problem comes up during the day, a developer doesn't have to wait until the next day's Daily Scrum to adapt. Nor does a developer have to wait until the next day's Daily Scrum to discuss issues with fellow developers.

If a problem arises, teams are encouraged to inspect and adapt immediately.

If the team's war room catches fire, don't wait until tomorrow's Daily Scrum to leave the building. Ongoing inspection and adaptation are requirements in Scrum.

## Test Yourself

If the process used to track development throughout the Sprint deviates outside of an acceptable limit, the Scrum development team should:

- ☐ End the Sprint early and begin a new round of Sprint Planning
- ☐ End the Sprint early and do a Sprint Review with all stakeholders
- ☐ End the Sprint early and do an internal Sprint Retrospective to see what went wrong
- ☐ Adapt during the Sprint and continue to push towards the Sprint goal.

Scrum is all about adaptation. If things don't go according to plan, the team should adapt. They certainly shouldn't end the Sprint. For the most part, Scrum doesn't allow them to.

- The developers cannot end a Sprint early in Scrum.
- The Scrum Master cannot end a Sprint early in Scrum.

Only the Product Owner can do that, and only under the very special condition in which the Sprint Goal has become obsolete.

If things go sideways during a Sprint, the solution is not to cancel the Sprint or end the Sprint early. The solution is to adapt and continue to work towards the Sprint goal.

Sprints are short, typically between 2 to 4 weeks. Even if things go completely sideways, it won't be too long before a new Sprint begins, so continue to work hard toward the Sprint Goal. A new Sprint is always just around the corner.

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## Test Yourself

A serious security-related bug has appeared in the code written by a fellow developer and you need more details about it to fix it. When should this issue be discussed with the developer?

- ☐ When the Scrum Master can coordinate a meeting between the two of you
- ☐ After the Quality Assurance (QA) team has time to investigate
- ☐ During the next scheduled Daily Scrum
- ☐ You should go over to the developer's desk and discuss it now

Option D is correct.

There are scheduled events in Scrum that provide opportunities to inspect and adapt, but those should never be used to limit communication and interaction between members of the team.

If a problem arises in Scrum, there's no requirement to wait until a Scrum event happens to address it. Address problems immediately and adapt.

## Scrum Values

Scrum is a simple, incomplete framework that doesn't solve every possible problem a development team will encounter.

What Scrum does do is provide five values it believes are important. When problems arise, the best solutions will respect these five values.

Successful use of Scrum depends on people becoming more proficient in living five values:

- Commitment
- Focus
- Openness
- Respect
- Courage

The Scrum Team commits to achieving its goals and to supporting each other.

Their primary focus is on the work of Sprint to make the best possible progress toward these goals.

The Scrum Team and its stakeholders are open about the work and the challenges.

Scrum Team members respect each other to be capable, independent people and are respected as such by the people with whom they work.

The Scrum Team members dare to do the right thing, to work on tough problems.

These values give direction to the Scrum Team about their work, actions, and behavior.

The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.

The Scrum Team members learn and explore the values as they work with the Scrum events and artifacts.

When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.

— 2020 Scrum Guide page 10

Like the Scrum pillars, the Scrum help to justify why we perform the Scrum events and why we create the Scrum artifacts.

Quite often when a Scrum Master, Product Owner, or Scrum Developer is faced with a difficult challenge, the answer to the problem lies in how to conjure up a solution that is in line with these Scrum values.

For the exam, know the Scrum values and how each of them is defined. There is usually a question or two that will test to see if you know what the Scrum values are and what they mean.



## Test Yourself

According to the Scrum Guide, which of the following is not a Scrum Value?

- ☐ Agreeableness
- ☐ Commitment
- ☐ Conscientiousness
- ☐ Openness
- ☐ Respect
- ☐ Extroversion
- ☐ Focus
- ☐ Emotional stability
- ☐ Courage
- ☐ Honesty

The five Scrum values are Commitment, Focus, Openness, Respect, and Courage.

Honestly is not one of them, but that's not to say you shouldn't be honest. Always be honest!

The other traits, extraversion (also often spelled extroversion), agreeableness, openness, emotional stability (neuroticism), and conscientiousness are together known as the Big 5 personality traits.

Big 5 personality traits are worth looking into if you're into psychology and human behavior, but you won't be tested on them in the Scrum Master exam.

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## A Word on Iterative and Incremental Development

**NOTE**

We queried ChatGPT so you wouldn't have to! We actually found ChatGPT gave a lot of wrong info about Scrum, but occasionally it did pretty good. With some minor edits, we think it did a good job on how Scrum is both iterative and incremental.

How does the incremental and iterative nature of Scrum optimize predictability and control risk?

The incremental and iterative nature of Scrum, along with its short-sprints and empirical nature, helps optimize predictability and control risk in several ways:

**Regular inspection and adaptation:** Scrum provides regular opportunities for the Scrum team to inspect the work that has been done and to adapt their plan for the next iteration. This allows the team to make necessary adjustments to their process, product, and priorities to optimize their ability to deliver value and minimize risks.

**Short Sprints:** Scrum Sprints typically last 1-4 weeks, during which the team works to deliver a potentially releasable increment of the product. The short time-boxed nature of Sprints helps to control risk by reducing the amount of work in progress, thereby limiting the amount of unfinished work that could create risks and uncertainties.

**Incremental development:** Scrum emphasizes delivering the product in small increments, which helps to control risk by allowing the team to identify and address issues early on in the development process. This also helps to optimize predictability by allowing stakeholders to see working increments of the product more frequently, which can help reduce uncertainty and improve predictability.

**Empirical process control:** Scrum is based on the three pillars of transparency, inspection, and adaptation, which provide a framework for empirical process control. The team regularly inspects the work done and adjusts the plan for the next iteration, based on the feedback received. This empirical approach allows the team to optimize predictability and control risk by making data-driven decisions that are informed by their experience.

Overall, the incremental and iterative nature of Scrum helps to optimize predictability and control risk by providing opportunities for regular inspection and adaptation, limiting the amount of unfinished work, delivering the product in small increments, and providing an empirical process control framework.