




Workbook for

CSM
(Training)

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MANIFESTO FOR AGILE SOFTWARE DEVELOPMENT



We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value:

INDIVIDUALS AND
INTERACTIONS

over

processes and tools

WORKING SOFTWARE

over

comprehensive
documentation

CUSTOMER
COLLABORATION

over

contract negotiation

RESPONDING TO CHANGE

over

following a plan

That is, while there is value in the items on the right, we value the items on the left more.

12 PRINCIPLES OF AGILE SOFTWARE



#1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

#2 Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

#3 Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

#4 Business people and developers must work together daily throughout the project.

#5 Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

#6 The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

#7 Working software is the primary measure of progress.

#8 Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

#9 Continuous attention to technical excellence and good design enhances agility.

#10 Simplicity --the art of maximizing the amount of work not done-- is essential.

#11 The best architectures, requirements, and designs emerge from self-organizing teams.

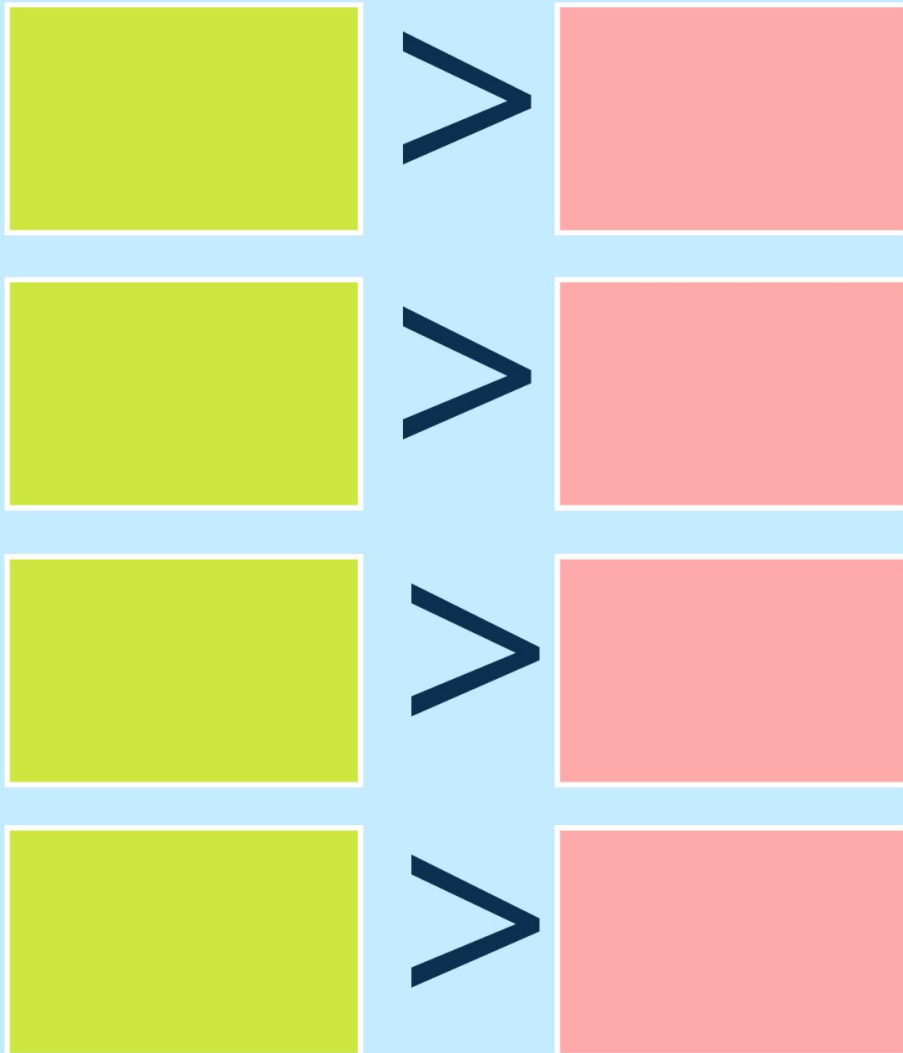
#12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Fill in the value pairs.

Agile Manifesto, values

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:



That is, while there is value in the items on the right, we value the items on the left more.

Read the principles and reflect on them.

Agile Manifesto, principles

Principles behind the Agile Manifesto

We follow these principles:

#1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

#2 Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

#3 Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

#4 Business people and developers must work together daily throughout the project.

#5 Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

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#11 The best architectures, requirements, and designs emerge from self-organizing teams.

#12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

<https://agilemanifesto.org/>

Scrum and the Agile Manifesto...

How do you see Scrum aligned to the Agile Manifesto?

Where do you see this **value or principle of the Agile Manifesto** implemented in **Scrum**?

Individuals and interactions

Scrum...

#1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Scrum...

#6 The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Scrum...

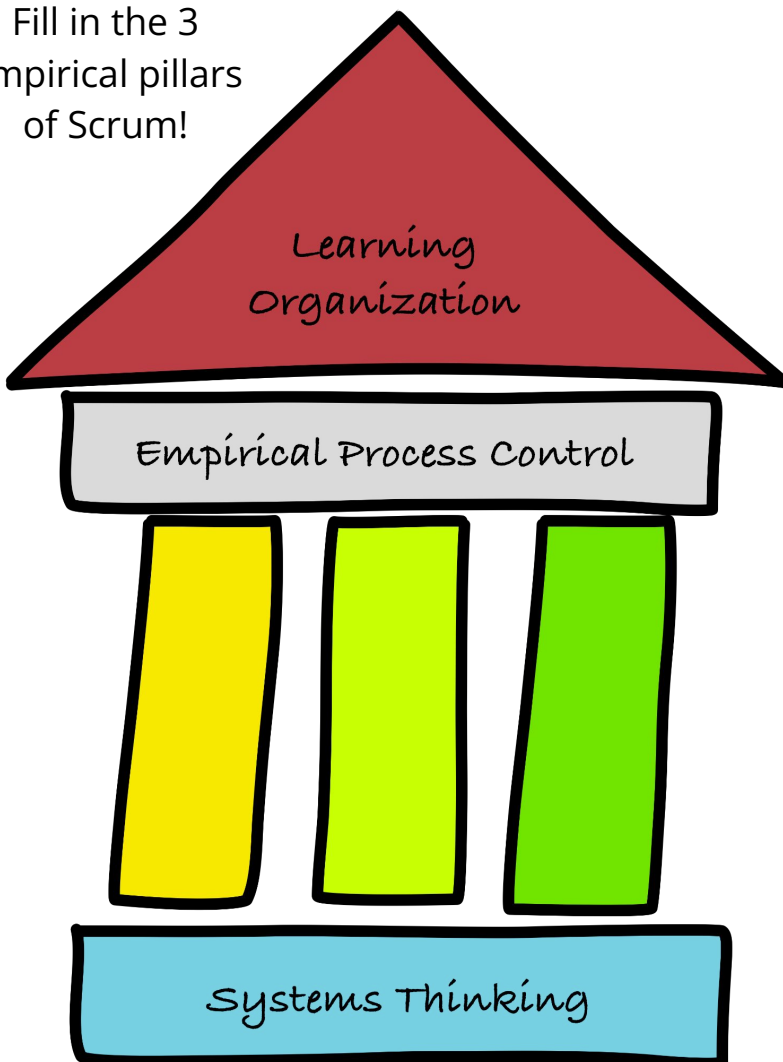
#12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Scrum...

Empiricism + 3 Pillars of Scrum

Define Empiricism in your own words:

Fill in the 3
empirical pillars
of Scrum!



What are advantages of an
iterative incremental approach?

Three empty rectangular boxes with blue, orange, and purple borders, stacked vertically, intended for writing the advantages of an iterative incremental approach.

5 Scrum Values

Draw the 5 Scrum Values and reflect their presence in your work life.

Commitment

Courage

Focus

Respect

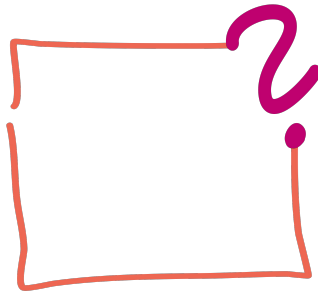
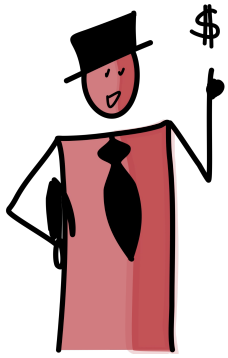
Openness

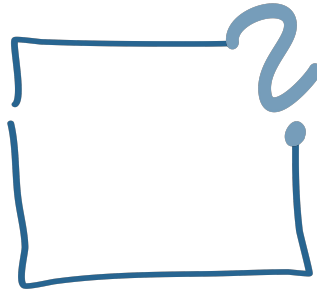
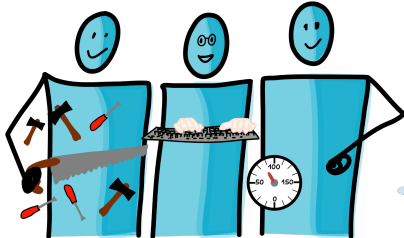
Scrum Team

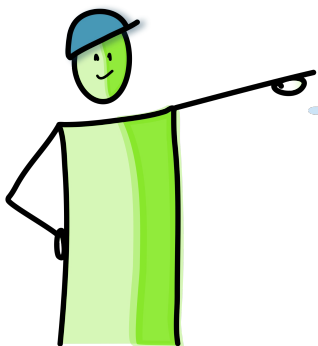
Label the Accountabilities.

Which question describes their main focus?

Describe responsibilities and accountabilities of each.

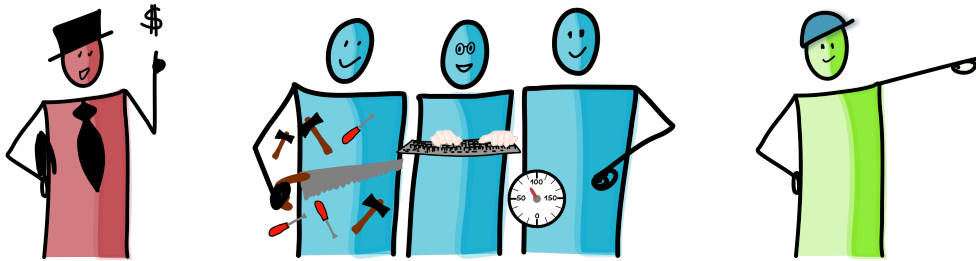






Scrum Team

Describe accountabilities and responsibilities of the Scrum Team (all together).



What are accountabilities and responsibilities that the Scrum Team together take care of?

How are these tasks of project management handled?

Time Management

Scope Management

Quality Management

Risk Management

Problem Solving

List benefits of a cross-functional self-managing Scrum Team.

Scrum Team Quiz

Which answer(s) fit(s) best?

	Who is it?	Devs	PO	SM	Scrum Team
1	Accountable for creating a plan for the Sprint (=the Sprint Backlog)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Accountable for the Scrum Team's effectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Committed to creating any aspect of a useful Increment each Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Accountable for creating and clearly communicating Product Backlog Items, and ordering them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Instilling quality by adhering to the Definition of Done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Cohesive unit of professionals focused on one objective at a time, the Product Goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Accountable for the Product Backlog and that it is transparent, visible and understood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Helping understand and enact an empirical approach for complex work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	Helping everyone understand Scrum's theory and practise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Adapting the plan each day toward the Sprint Goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Removing barriers between stakeholders and Scrum Teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Causing the removal of impediments to the Scrum Team's progress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	Accountable for creating a valuable, useful Increment every Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	Accountable for developing and explicitly communicating the Product Goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	Ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	Cross-functional and self-managing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	Help the Scrum Team focus on creating high-value Increments that meet the Definition of Done	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scrum Master

Find characteristics and traits of a great Scrum Master.

Reflect what strength you bring for a great Scrum Master!



Reflect: what makes you a great Scrum Master?

Scrum Event:

Fill in this Cheat Sheet!

Sprint

when? duration?

participants?

purpose?

outcome?

structure, format, agenda?

responsibilities: who does what?

Scrum Event:

Fill in this Cheat Sheet!

Sprint Planning

when? timebox?

participants?

purpose?

outcome?

structure, format, agenda?

responsibilities: who does what?

Scrum Event:

Fill in this Cheat Sheet!

Daily Scrum

when? timebox?

participants?

purpose?

outcome?

structure, format, agenda?

responsibilities: who does what?

Scrum Event:

Fill in this Cheat Sheet!

Sprint Review

when? timebox?

participants?

purpose?

outcome?

structure, format, agenda?

responsibilities: who does what?

Scrum Event:

Fill in this Cheat Sheet!

Sprint Retrospective

when? timebox?

participants?

purpose?

outcome?

structure, format, agenda?

responsibilities: who does what?

Product Backlog Refinement

Product Backlog refinement is the act of breaking down and further defining Product Backlog items into more precise items.

Which activities are visualized here?



Why would a Scrum Team dedicate time for Product Backlog refinement?

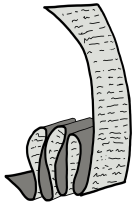
- 1) _____
- 2) _____

Scrum Events & Activity Quiz

What are the correct answers?

	Check your Events & Activity knowledge!	Sprint	Sprint Planning	Daily Scrum	Sprint Review	Sprint Retrospective	Refinement
1	plan ways to increase quality and effectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	4-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	container for the other events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	timebox: 15 minutes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	strategic work to prepare for future sprint(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	3 topics: why? what? how?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	by the Developers, for the Developers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	fixed length of up to one month	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	during the ... the Sprint Backlog is created	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	the act of breaking down and further defining Product Backlog items into smaller more precise items is called ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	inspect the outcome of the Sprint and determine future adaptations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	concludes the Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	8-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	one immediately after the other, no gap in between	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	ongoing activity to add details, such as a description, order, and size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	inspect progress toward the Sprint Goal and adapt the Sprint Backlog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	3-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	the ... is a working session for the Scrum Team and stakeholders to discuss progress toward the Product Goal and adjust the Product Backlog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scrum Artifacts







Name the artifacts and their commitments.

For each artifacts write their purpose and 3 attributes.

For commitments answer questions.



How does it differ from a Product Vision?



Why does it not change during a Sprint?



How does it evolve over time?

Deep dive: Increment and Definition of Done

Discuss and
generate ideas!

Explain one way to create a Definition of Done!

What are advantages of a strong Definition of Done?

How does the Definition of Done evolve over time?

Why do multiple teams who work on the same product share their Definition of Done?

How could multiple increments be created during one Sprint?

Scrum Artifacts Quiz

Which answer fits best?

3 for each Artifact and Commitment.

	What is it?	Product Goal	Product Backlog	Sprint Goal	Sprint Backlog	Definition Of Done	Increment
1	... is a concrete stepping stone toward the Product Goal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	During the Sprint work Developers keep the ... in mind.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	... is an emergent, ordered list.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	... is in the Product Backlog.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Refinement is the act of breaking down and further defining ... items into smaller more precise items.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	... is updated throughout the Sprint as more is learned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	If multiple Scrum Teams work together on a product, they must mutually define and comply with the same ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	... describes a future state of the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	In order to provide value, the ... must be usable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	... provides flexibility in terms of the exact work needed to succeed in the Sprint.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	... is a formal description of the quality required for the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Multiple ... may be created within a Sprint.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	Developers are responsible for the sizing of the items in the ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	... is a highly visible, real-time picture of the work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	... is the single objective for the Sprint.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	... creates transparency by providing everyone a shared understanding of what work was completed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	... can serve as a target for the Scrum Team to plan against.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	... contains an actionable plan for delivering the Increment (how).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Distinguish these 4 stances of a Scrum Master's daily work.

Working modes “stances”

What do they have in common?

Teaching

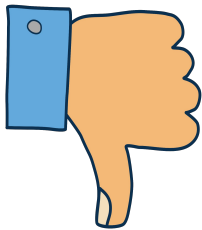
Facilitating

Mentoring

(Professional) Coaching

Team Decision Making

How are these techniques of team decision making called?





Wie erklärt man seinen Beruf als Scrum Master einem "Fremden" oder Kind

Agile Preisgestaltung

Best Practice

Die Scrum Events sind bekannt, best Practice Beispiele wären ideal

Mehr über Don'ts / Fallstricke für Scrum Master lernen

Praxisbeispiele für schwierige Situationen

Umgang mit schwierigen Personen, Scrum Gegnern / Verweigerern

Warum in der Praxis fast immer Scrum butt gemacht wird, bzw. das verhindert wird

What other strategies of team decision making do you know?

Scrum-but...

Collect ideas what might happen if Scrum is not lived and applied in full!

Scrum is a minimal framework and works best if applied and lived holistically. Analyze what might be missing if it is only partially implemented:

If the Scrum Master is missing...

If the Scrum Team has no Sprint Backlog...

If ...

If ...

Identify 3 possible effects if the Scrum Team **skips the Retrospective**:

- 1)

- 2)

- 3)

Development Practices

Below you find 3 Agile development practices (blue boxes) and 3 non-software situations (green).

How could they match?

Continuous Integration

is the practise of merging all working copies of developers into one common place. It helps to to detect integration errors earlier and speed up releasing.

Refactoring is the process of restructuring existing computer code without changing its external behavior.

It improves product quality and thus minimizes adjustments for new features.

Collective code ownership

means that the code is owned by the entire team and anyone may make changes anywhere.

This reduces island knowledge or bottlenecks due to unnecessary specialization.

Documents for the approval are missing. After resubmission, another office clerk will continue with further processing.

A woman takes dishes out of the dishwasher and resorts them, so that more fit in.

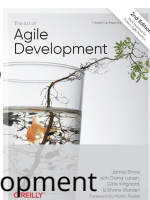
3 authors write a book together use use GoogleDoc as their one place to write.

book recommendation

James Shore

The Art of Agile Development

<https://www.jamesshore.com>



Appendix

SOLUTIONS

Fill in the value pairs.

Agile Manifesto, values

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:

Individuals and
Interactions



Processes
and Tools

Working
Software



Comprehensive
Documentation

Customer
Collaboration



Contract
Negotiation

Responding
to Change



Following
a Plan

That is, while there is value in the items on the right, we value the items on the left more.

Not in Software
development?
Substitute "software"
by product or solution:

Working
Product

Working
Solution

Scrum and the Agile Manifesto...

How do you see Scrum aligned to the Agile Manifesto?

Where do you see this **value or principle of the Agile Manifesto** implemented in **Scrum**?

Individuals and interactions

Scrum...

- Scrum defines values and works with them.
- Scrum gives decision authority to the Scrum Team and the individual accountabilities. This fosters motivation. This gives respect.
- The Scrum Master protects the Scrum Team and helps to make the workplace a safe space.
- Scrum gives a framework for people to collaborate. This fosters humanity.

#1 Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Scrum...

- Scrum defines the PO to collaborate with the stakeholders and customer on their needs.
- Scrum invites stakeholders and customers to the Sprint Review to share feedback.
- Scrum demands an valuable, usable Increment by the end of each Sprint. Earlier possible. Multiple Increments possible.

#6 The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Scrum...

- Scrum invites all in the Scrum Team and stakeholders to regular events... for sharing and aligning on information in face-to-face conversations.

#12 At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Scrum...

- One of the mandatory Scrum Events is the Sprint Retrospective to plan ways to increase quality and effectiveness.

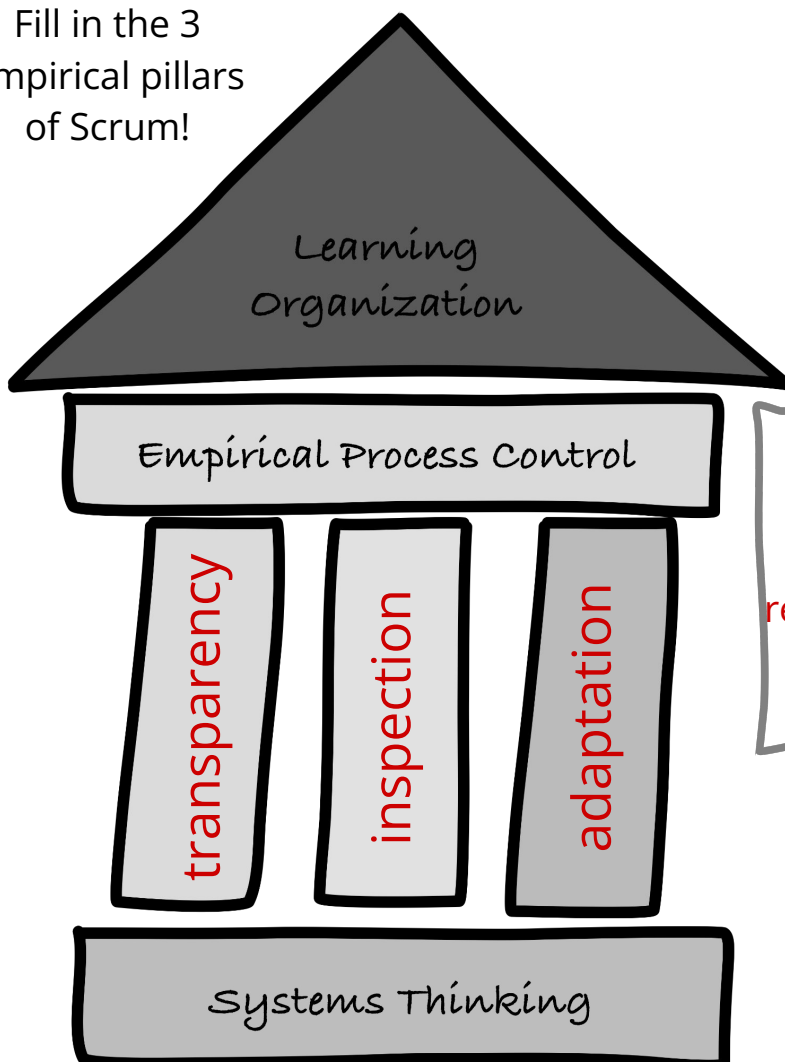
Empiricism + 3 Pillars of Scrum

Define Empiricism in your own words:

Empiricism means generating knowledge from the past and from past experiments for the future. Of course, this works best when other changes are kept to a minimum.

It means being transparent about the status, situation, and progress, inspecting and adapting accordingly.

Fill in the 3
empirical pillars
of Scrum!



What are advantages of an
iterative incremental approach?

deliver value early
-> happy
customers
-> early feedback

adapting to
change
(e.g. changing
requirement from
the market)

ability to
experiment and
learn for further
development

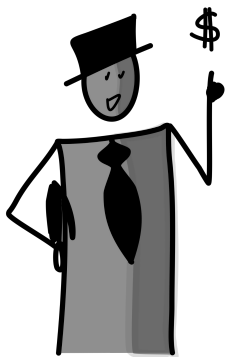
reduced risk
by early feedback
and learning

Scrum Team

Label the Accountabilities.

Which question describes their main focus?

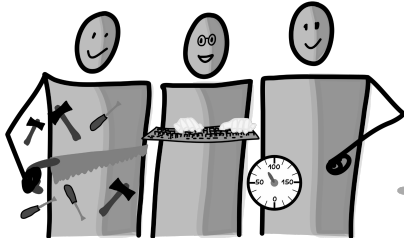
Describe responsibilities and accountabilities of each.



Product Owner

**Why?
and
What?**

- ☐ Owns the product, empowered
- ☐ Owns the Product Backlog
- ☐ Prioritization
- ☐ Just 1 person
- ☐ Communication to stakeholder
- ☐ Stakeholder management
- ☐ Working with developers



Developer

How?

- ☐ Own the technical solutions
- ☐ Multiple people
- ☐ Own the Sprint Backlog
- ☐ Size the Product Backlog items
- ☐ Cross functional (=sw-dev, tester, designer, ...)
- ☐ T-shape
- ☐ Collective code ownership



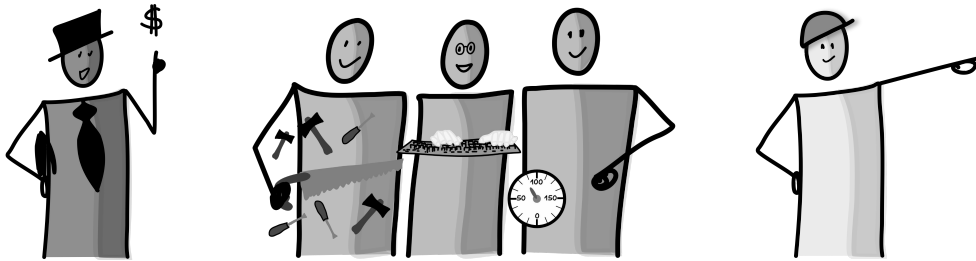
Scrum Master

**How
do we get
better?**

- ☐ Coaches the Developers
- ☐ Coaches the Product Owner
- ☐ Coaches the organization
- ☐ Trains people on Scrum
- ☐ Facilitates the Scrum Flow
- ☐ Agile-lean practitioner

Scrum Team

Describe accountabilities and responsibilities of the Scrum Team (all together).



What are accountabilities and responsibilities that the Scrum Team together take care of?

- ☐ Responsible for all product related activities
- ☐ ≤ 10 people
- ☐ Cross-functional
- ☐ Self-managing
- ☐ Empowered
- ☐ Craft a Sprint Goal
- ☐ Time-, Scope-, Quality, Risk-Management
- ☐ Accountable for creating a valuable, useful Increment every Sprint

How are these tasks of project management handled?

=> this means the additional role of Project Manager is not required!

Time Management	When do we release? -> PO	Who does what when? -> Devs	Timeboxing? -> SM
Scope Management	What is in our scope? -> PO	How much is in our scope? -> Devs	
Quality Management	Quality of requirements? -> PO	Quality of Increment -> Devs	Quality of Process? -> SM
Risk Management	Market risks? -> PO	Technical risks? -> Devs	Individuals, Teams, and Interaction risks? -> SM
Problem Solving	-> Scrum Team together	Technical Problems? -> Devs	People / Process problems -> SM

List benefits of a cross-functional self-managing Scrum Team.

Definitions

Cross-functional: has all the skills necessary to create value each Sprint

Self-managing: they internally decide who does what, when, and how.

Benefits

- Has all the skills to create an Increment (no dependencies)
- Decentralized decision making (best informed by the specialists)
- chooses how best to accomplish their work rather than being directed by others outside the team
- Motivation through autonomy (see: Daniel Pink "Drive")

Scrum Team Quiz

Which answer(s) fit(s) best?

	Who is it?	Devs	PO	SM	Scrum Team
1	Accountable for creating a plan for the Sprint (=the Sprint Backlog)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Accountable for the Scrum Team's effectiveness	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3	Committed to creating any aspect of a useful Increment each Sprint	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Responsible for all product-related activities from stakeholder collaboration, verification, maintenance, operation, experimentation, research and development, and anything else that might be required.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5	Accountable for creating and clearly communicating Product Backlog Items, and ordering them	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Instilling quality by adhering to the Definition of Done	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Cohesive unit of professionals focused on one objective at a time, the Product Goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8	Accountable for the Product Backlog and that it is transparent, visible and understood	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	Helping understand and enact an empirical approach for complex work	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
10	Helping everyone understand Scrum's theory and practise	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
11	Adapting the plan each day toward the Sprint Goal	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	Removing barriers between stakeholders and Scrum Teams	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
13	Causing the removal of impediments to the Scrum Team's progress	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
14	Accountable for creating a valuable, useful Increment every Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
15	Accountable for developing and explicitly communicating the Product Goal	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	Ensuring that all Scrum events take place and are positive, productive, and kept within the timebox.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
17	Cross-functional and self-managing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
18	Help the Scrum Team focus on creating high-value Increments that meet the Definition of Done	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Scrum Master

Find characteristics and traits of a great Scrum Master!

Reflect what strength you bring for a great Scrum Master!



Reflect: what makes you a great Scrum Master?

This is very individual and depends on your personality.

There is no one perfect answer.

All of the above apply, and so do many more.

Scrum Event: Sprint

some answers are examples

Fill in this Cheat Sheet!

SOLUTION

when? duration?

Heartbeat of Scrum
One after the other, no gap
Constant length

Duration: Up to 1 month

participants?

Scrum Team

purpose?

Container for all
other Scrum Events

outcome?

valuable, usable
Increment

Ideas to improve product

Action items to improve
process and collaboration

structure, format, agenda?

responsibilities: who does what?

Developers follow Sprint Goal and
create Increment(s) accordingly,
adhering the Definition of Done.

Scrum Master helps all to use Scrum
effectively, to understand and live the
Scrum values, to use Agile
development practices effectively.
SM removes impediments.

Product Owner manages the Product
Backlog and refines it for upcoming
Sprints, with stakeholders and with
Developers.

Daily
Scrum

Sprint
Planning

Sprint
Review

Sprint
Retrospective

Scrum Event: Sprint Planning

some answers are examples

Fill in this Cheat Sheet!

SOLUTION

when? timebox?

first Event in the Sprint

timebox:
8 hours for 1 month Sprint

participants?

Scrum Team

Guests / stakeholders permitted
(recommendation: clarify
their topics in advance)

purpose?

Create a Plan for the Sprint
a.k.a. Sprint Backlog

outcome?

Plan for the Sprint,
including the Sprint Goal

Understanding and alignment
of the goal and the work
in this Sprint

structure, format, agenda?

- 1 - Why?
- 2 - What?
- 3 - How?

responsibilities: who does what?

Product Owner brings
prepared Product Backlog
(and an idea for a Sprint Goal).

Developers clarify with Product Owner
questions about next
Product Backlog items.
Developers decide how much they
trust to be achieved in the Sprint.

Scrum Team crafts a Sprint Goal.

Developers decide how to create the
Increment from the Product Backlog
items, according to the Sprint Goal.

Scrum Master facilitates it all.

Scrum Event: Daily Scrum

some answers are examples

Fill in this Cheat Sheet!

SOLUTION

when? timebox?

Daily
Same time, same place
Up to 15 minutes

participants?

by the Developers
for the Developers

(guests by request
and permission)

purpose?

Align and adjust
the Sprint Backlog

outcome?

Adjusted Sprint Backlog

structure, format, agenda?

As it is helpful
to the Developers

typical: 3 questions
or "walk the board"

responsibilities: who does what?

by the Developers
for the Developers

Scrum Master is responsible that it is
effective (e.g. in timebox, all important
information heard, ...)

PO only silent guest

Scrum Event: Sprint Review

some answers are examples

Fill in this Cheat Sheet!

SOLUTION

when? timebox?

2nd to last Event in the Sprint

timebox:
4 hours for 1 month Sprint

participants?

Scrum Team
+
stakeholders!

purpose?

- inspect the outcome of the Sprint
- determine future adaptations

outcome?

Adjusted Product Backlog
to meet new opprtunities

structure, format, agenda?

Working session,
not a presentation, not a demo!

Scrum Team presents the
results to key stakeholders and
progress toward the Product Goal
is discussed: what was accomplished,
what has changed?

No defined structure.

Useful information might be:

- ☐ PO informs about general roadmap, upcoming features
- ☐ Scrum Team shares impediments and how they solved them, or not.
- ☐ What was not achieved?

responsibilities: who does what?

Scrum Team +
stakeholders work
together

Scrum Event: Sprint Retrospective

some answers are examples

Fill in this Cheat Sheet!

SOLUTION

when? timebox?

last Event in the Sprint

timebox:
3 hours for 1 month Sprint

participants?

Scrum Team

(others only in rare occasions
by demand and permission)

purpose?

Plan ways to
increase quality
and effectiveness

outcome?

- most helpful changes to improve effectiveness identified
- most impactful improvements to be addressed as soon as possible

structure, format, agenda?

Scrum Team inspects the last Sprint
with regards to individuals,
interactions, processes, tools,
and Definition of Done (and other)

responsibilities: who does what?

Scrum Master facilitates
(and stays neutral if possible)

Other Scrum Team members
participate actively

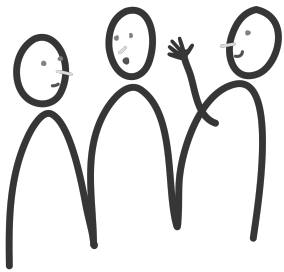
Product Backlog Refinement

some answers are examples

Product Backlog refinement is the act of breaking down and further defining Product Backlog items into more precise items.

SOLUTION

Which activities are visualized here?



having a conversation
about the Product
Backlog and its items

adding more details, like
description, size, value, additional
information...

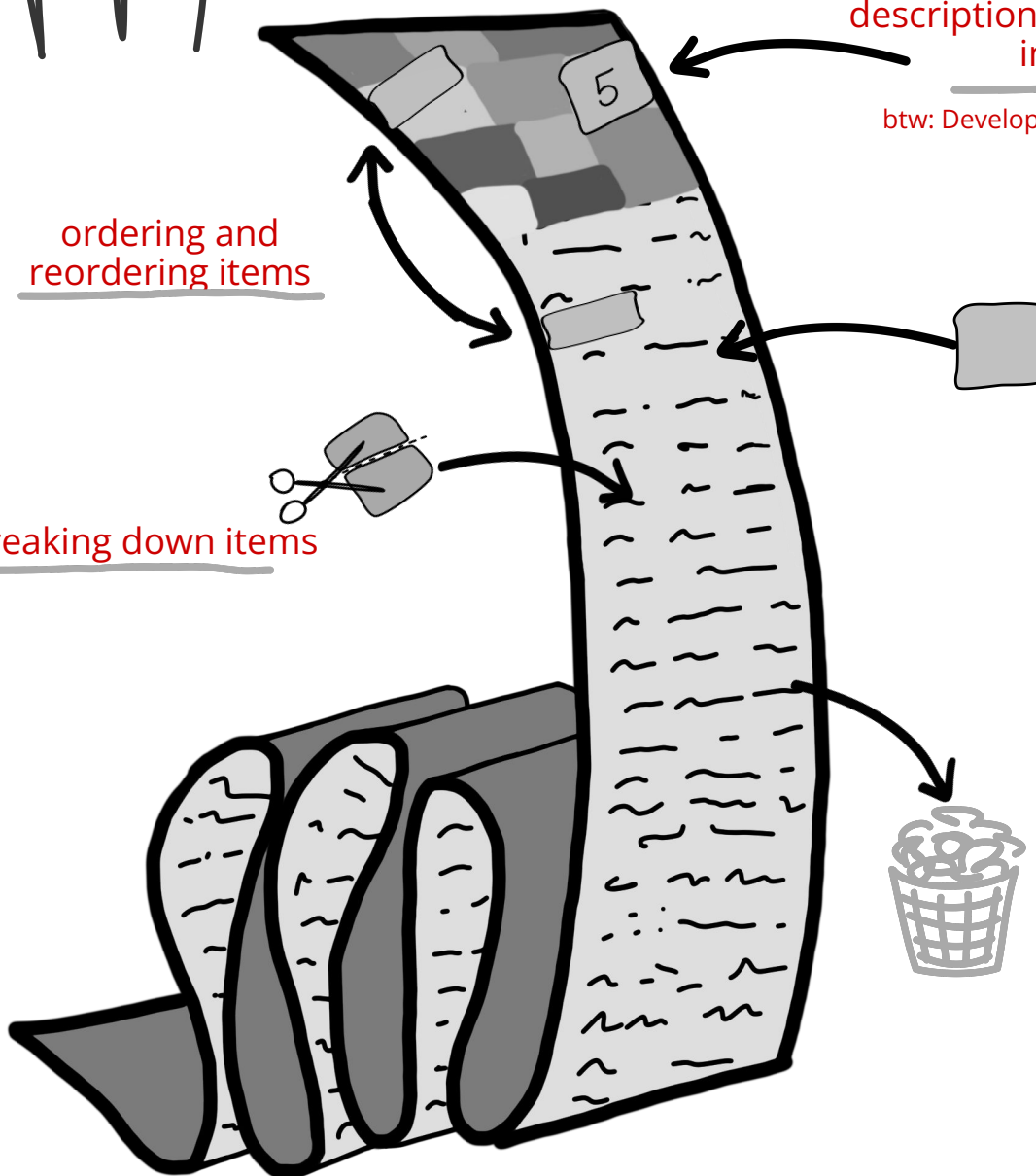
btw: Developers are responsible for sizing!

ordering and
reordering items

adding items

breaking down items

deleting items



Why would a Scrum Team dedicate time for Product Backlog refinement?

- 1) Refinement increases understanding and confidence.
Developers get familiar with the next items and can comment on them at an early stage and the Product Owner gets the Developers' feedback and has time to clarify questions.
- 2) Refinement increases the chance of a successful Sprint Planning.

Scrum Events & Activity Quiz

What are the correct answers?

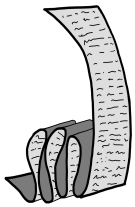
Check your Events & Activity knowledge!		Sprint	Sprint Planning	Daily Scrum	Sprint Review	Sprint Retrospective	Refinement
1	plan ways to increase quality and effectiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2	4-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	container for the other events	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	timebox: 15 minutes	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	strategic work to prepare for future sprint(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6	3 topics: why? what? how?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	by the Developers, for the Developers	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	fixed length of up to one month	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	during the ... the Sprint Backlog is created	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	the act of breaking down and further defining Product Backlog items into smaller more precise items is called ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11	inspect the outcome of the Sprint and determine future adaptations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	concludes the Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
13	8-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	one immediately after the other, no gap in between	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	ongoing activity to add details, such as a description, order, and size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
16	inspect progress toward the Sprint Goal and adapt the Sprint Backlog	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	3-hour-timebox for 1-month-Sprint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
18	the ... is a working session for the Scrum Team and stakeholders to discuss progress toward the Product Goal and adjust the Product Backlog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scrum Artifacts

Name the artifacts and their commitments.

For each artifacts write their purpose and 3 attributes.

For commitments answer questions.



PRODUCT BACKLOG

purpose: single source of work undertaken by the Scrum Team

dynamic, emergent,
ordered list

PRODUCT GOAL



How does it differ from a Product Vision?

Scrum Guide: "Product Goal is the long- term objective for the Scrum Team. They must fulfill (or abandon) one objective before taking on the next."

This means that there can be a sequence of Product Goals for a given product. A vision is typically more loosely described than a goal.



SPRINT BACKLOG

purpose: plan for the Sprint by and for the Developers

enough detail to inspect progress,
highly visible,
real time/updated picture

SPRINT GOAL



Why does it not change during a Sprint?

= single objective of the Sprint.
scope/work of Sprint can change (Dev&PO).
if Sprint Goal is obsolete:
cancel Sprint (only PO).



INCREMENT

purpose: concrete step toward Product Goal, additive to all prior Increments

thoroughly verified,
valuable,
usable

DEFINITION OF DONE



How does it evolve over time?

e.g. as continuous improvement,
action item from retrospective,
after specific findings,
adjustments to organizational standards, ... anytime suitable

Deep dive: Increment and Definition of Done

some answers are examples

Discuss and
generate ideas!

SOLUTION

Explain one way to create a Definition of Done!

- ❑ Use the organizational standard for the as a starting point
- ❑ Copy the DoD from another product or team
- ❑ Create a DoD in a facilitated session
- ❑ DoD is a living document and should be updated when appropriate.

What are advantages of a strong Definition of Done?

- ❑ Higher quality
- ❑ Product meets quality requirements for the product
- ❑ Better alignment what needs to be fulfilled
- ❑ Better understanding what was accomplished as part of the Increment

How does the Definition of Done evolve over time?

- ❑ Update the DoD when something is wrong or missing
- ❑ Check the DoD on a regular basis, e.g. in the retrospective
- ❑ Changing the DoD should always involve the entire Scrum Team.

Why do multiple teams who work on the same product share their Definition of Done?

- ❑ Consistent quality throughout the product
- ❑ Quality of a Product Backlog item does not depend on which team implemented it.
- ❑ Clarity on quality when multiple teams collaborate

How could multiple increments be created during one Sprint?

- ❑ Increments can be created throughout the Sprint.
- ❑ Each increment needs to fulfill the DoD.
- ❑ Whenever a Product Backlog item meets the DoD, it could lead to an Increment.

Scrum Artifacts Quiz

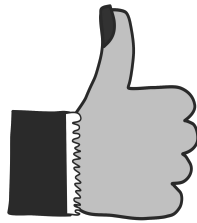
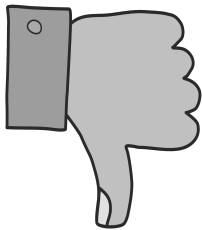
Which answer fits best?

3 for each Artifact and Commitment.

	What is it?	Product Goal	Product Backlog	Sprint Goal	Sprint Backlog	Definition Of Done	Increment
1	... is a concrete stepping stone toward the Product Goal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	During the Sprint work Developers keep the ... in mind.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	... is an emergent, ordered list.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	... is in the Product Backlog.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Refinement is the act of breaking down and further defining ... items into smaller more precise items.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	... is updated throughout the Sprint as more is learned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	If multiple Scrum Teams work together on a product, they must mutually define and comply with the same ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
8	... describes a future state of the product.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	In order to provide value, the ... must be usable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10	... provides flexibility in terms of the exact work needed to succeed in the Sprint.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	... is a formal description of the quality required for the product.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
12	Multiple ... may be created within a Sprint.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13	Developers are responsible for the sizing of the items in the ...	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	... is a highly visible, real-time picture of the work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	... is the single objective for the Sprint.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	... creates transparency by providing everyone a shared understanding of what work was completed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
17	... can serve as a target for the Scrum Team to plan against.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	... contains an actionable plan for delivering the Increment (how).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

How are these techniques of team decision making called?

Team Decision Making



Roman Voting

Everybody signals thumb-up, thumb-down or neutral position.

Consensus: all thumbs up
(hard to reach!)

Consent: no thumbs down
(easier for teams)



Confidence Vote

5 means: totally confident

0 means: the opposite

(make clear for yourself and for others: are we fine with a majority of votes of 3-5 or would we replan if only 1 person indicates a low confidence 0-2?)



Dot-Voting

Start with the alternative that got most votes (=dots)
(this applies majority vote)

What other strategies of team decision making do you know?

Decision strategies

Democratic
(majority vote)

Autocratic
Consensus
Consent

Autocratic Decisions by Product Owner

Planning Poker / Magic Estimation

Other strategies: expert decision,
consultative individual decision, random decision,
intentionally no decision, last-responsible-moment,

...

Distinguish these 4 stances of a Scrum Master's daily work.

Working modes "stances"

What do they have in common?

Teaching

typically
1:n

Teaching means
**to instruct or train someone
or give someone knowledge
of something**
(Cambridge Dictionary).

We know teaching from school
and university and again learn
through teaching when we
attend 2-day Scrum Master
classes, for example.

content

Facilitating

Facilitation means the
**process of making
something possible or easier**
(Cambridge Dictionary).

This means to support a group
of people in achieving their
desired goals completely
independently within a change
process, workshop, or meeting.

Facilitation is completely open
and never seeks to influence,
instruct, push, or judge.

content
-neutral

Mentoring

Mentoring means the
**the activity of supporting
and advising someone with
less experience to help them
develop in their work**
(Cambridge Dictionary).

Examples:
Organizations train people
through 1-on-1 mentoring.
Mentoring programs are a way
to increase the company's
competitive advantage.

typically
1:1

(Professional) Coaching

The International Coaching
Federation (ICF) defines
coaching as
**partnering with clients in a
thought-provoking and
creative process that
inspires them to maximize
their personal and
professional potential.**

The process of coaching often
unlocks previously untapped
sources of imagination,
productivity and leadership.

Scrum-but...

Collect ideas what might happen if Scrum is not lived and applied in full!

Scrum is a minimal framework and works best if applied and lived holistically. Analyze what might be missing if it is only partially implemented:

If the Scrum Master is missing...

- ☐ Scrum implementation might get sloppy
- ☐ Continuous improvement might slack
- ☐ All might have problems understanding and using Scrum
- ☐ No driver for Agile-Lean mindset in organization
- ☐ No coach for Scrum Team, PO, and Organization

If the Scrum Team has no Sprint Backlog...

- ☐ Missing Sprint Goal
- ☐ Missing clarity on scope of the Sprint
- ☐ Missing alignment and focus in Sprint
- ☐ Missing commitment

If ...

If ...

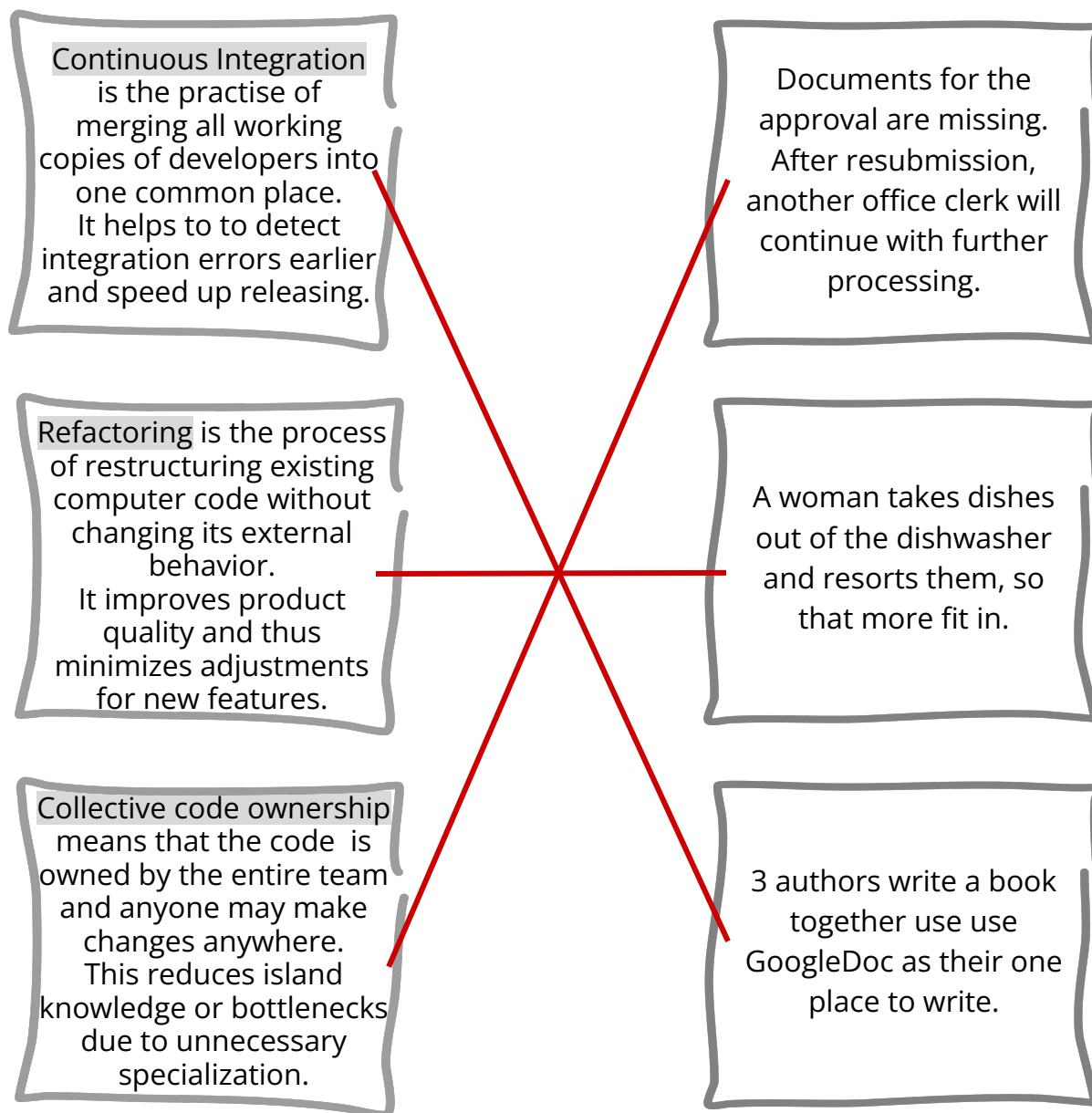
Identify 3 possible effects if the Scrum Team **skips the Retrospective**:

- 1)
 - "Quality and effectiveness" would not be increased
 - "Assumptions that lead them astray" might not be identified or challenged
- 2)
 - "Helpful improvements" would not be planned
- 3)
 - Quality of Scrum implementation might decay: if we could skip this Event, let's skip more and other Events
 - Harder to instill the quality of the Scrum implementation

Development Practices

Below you find 3 Agile development practices (blue boxes) and 3 non-software situations (green).

How could they match?



book recommendation

James Shore

The Art of Agile Development

<https://www.jamesshore.com>

