Agile Overview

- ✔ Agile Project Management
- ✔ Dividing Production into Small Components
- ✔ Let's Practice
- ✔ Customer's Desired Requirements
- ✔ Building the Right Product

Agile Project Management

Software projects face the risk of failure during the life cycle due to misuse of resources, wrong prioritization and inaccurate understanding of customer demands. This has led companies to experiment with a variety of new methods to produce more productive projects. **Agile is** a new approach to project management methods resulting from these experiments. It is **flexible. Agile does not make decisions for you, instead it gives you a foundation that teams can use to make decisions that result in better software development.** This method is based on an incremental and iterative approach that helps teams deliver a product to their customers faster and more desirable. In this respect, the framework of agile promises **significant advantages over traditional methods**. In recent years, most companies have adopted the agile approach, which they find more successful than traditional methods. In this context, we can say that almost every software developer has used the agile method in some form.

Dividing Product Development Life Cycle into Small Components

Agile provides a light framework for development teams. That helps them focus on fast delivery while maintaining functionality. In Agile, the product development life

cycle is <mark>divided into small components (called iterations),</mark> so the product can be easily and rapidly developed and tested. In this way, <mark>changes can be made without having to wait for the final product.</mark>
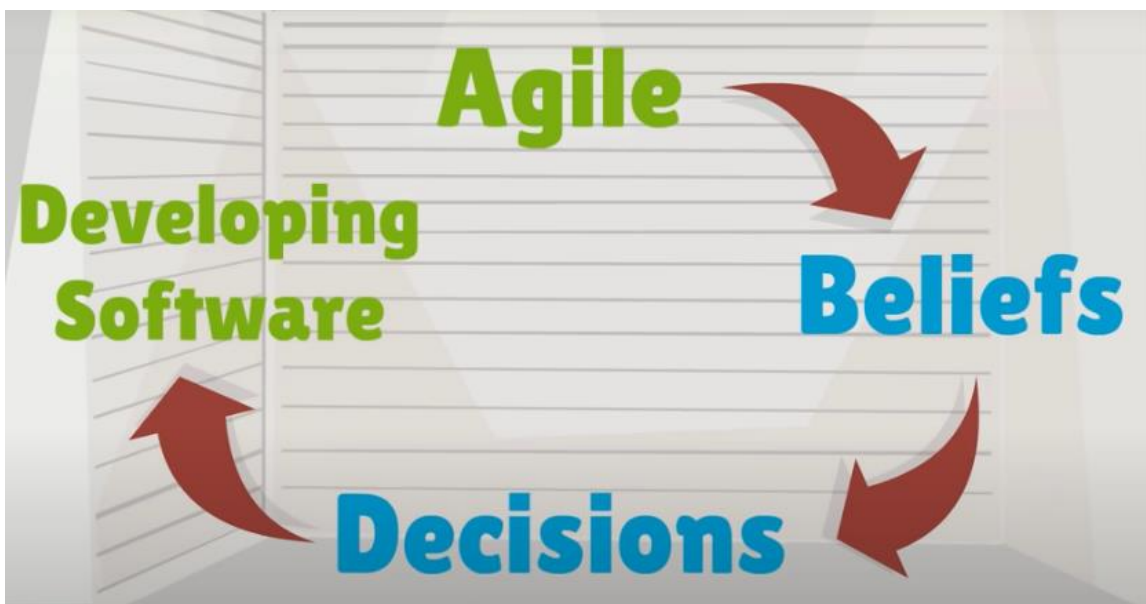

What is Agile?

Select one:

◉ A method for project management ✔ Congrats! You are right.

○ The general name of new projects

Agile is; a set of values and principles

Customer's Desired Requirements

The agile method provides that the product is optimized throughout the development process. <mark>Using **iterative planning** and getting **feedback** ensures that a delivered **product is tailored to the customer's requirements.**</mark> The status of the project is measured and evaluated throughout the process to easily adapt to changing needs. Measurement and evaluation provide accurate and early visibility into the development of each project.

Using [iterative planning ÷] ✔ and getting [feedback ÷] ✔ ensures that a delivered product is tailored to the customer's requirements.

[Check]

Building the Right Product

It can be said that the agile method helps companies build the **right product**. Rather than attempting to sell the product before it is released, the **agile method encourages teams to improve the product during its development.** This helps the company to be in the marketplace as profitable as possible. That retains the vital business value and guarantees the desirable product. This is the reason why the agile method is an appealing option for both partners and developers.

History of Agile

✔ The   Agile   Manifesto
✔ Let's   Practice
✔ Agile   Principles
✔ Let's Practice

The Agile Manifesto

<u>**In 2001**</u>, 17 independent Software Leaders met in America for brainstorming. They aimed to find out how to develop software better by using different knowledge and approaches. After two days of brainstorming, **<u>they released the Agile Manifesto.</u>**

<u>The Agile Manifesto was a powerful statement, carefully crafted using only 68 words.</u> Everyone agreed that the Agile Manifesto was both short and authoritative. **<u>While traditional methods advocated a stable plan and avoided changes, the manifesto focused on</u>** ==**<u>people, communication, the product, and flexibility</u>**==.

The Agile Manifesto basically mentions the following four values:

1. Individuals and interactions over processes and tools:

Valuing people more highly than processes or tools is easy to understand. Because it is the human who responds to business needs and drives the development process.

2. Working software over comprehensive documentation:

Historically, great amounts of time have been spent on documenting the product for development and ultimate delivery. Technical specifications and requirements, interface design documents, test plans, documentation plans, and approvals required for each. The Agile Manifesto values documentation, but it values working software much more.

3. Customer collaboration over contract negotiation:

With traditional development models such as Waterfall, customers negotiate the requirements for the product, usually in great detail, prior to any work starts. This means the customer is involved in the process of development before development began and after it was completed, but not during the process. However, the Agile Manifesto describes a customer who is engaged and collaborates throughout the development process.

4. Responding to change over following a plan:

Traditional software development methods regard change as an expense, so it is to be avoided. With Agile, the shortness of an iteration cycle means priorities can be shifted from iteration to iteration and new features can be inserted into the next iteration. Agile's view is that changes always improve a project and provide additional 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 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.

Kent Beck	James Grenning	Robert C. Martin
Mike Beedle	Jim Highsmith	Steve Mellor
Arie van Bennekum	Andrew Hunt	Ken Schwaber
Alistair Cockburn	Ron Jeffries	Jeff Sutherland
Ward Cunningham	Jon Kern	Dave Thomas
Martin Fowler	Brian Marick	

Everyone agreed that the Agile Manifesto was both short ✓ and authoritative ✓ .

Check

Agile Principles

In the months following the publication of the Agile Manifesto, the original signatories continued to communicate. They augmented the four values of the manifesto with the following **12 principles. 68 Words**. **Values;**
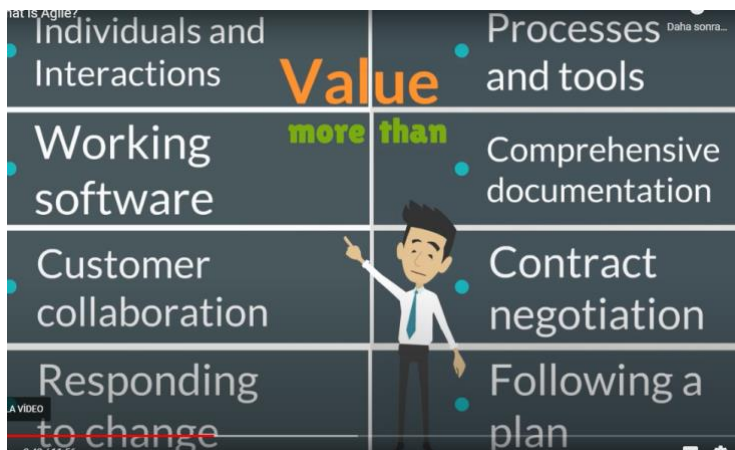
1. Our highest priority is to **satisfy the customer** through early and continuous delivery of valuable software.
2. **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with 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.

So far you have learned about the agile method. In the next lesson, you will watch a comprehensive interactive video about agile.

Q: Do you know about Agile Manifesto & its Principles? Explain in brief.
A: There are four values in the manifesto. Individuals and interactions, working software, customer collaboration and responding to the changes are the values. Stemming from these values there are 12 principles in agile. These principles can be summarized as to satisfy the customer, to welcome changing requirements, good cooperation between business people and developers (working together), face to face conversation, motivated individuals and simplicity.

Agile principles stem from Agile Manifesto.

Select one:
◉ True ✔
○ False

Check

Agile is a new approach to project management and promises significant advantages over traditional methods.

Select one:
◉ True ✔
○ False

Congrats! You are right.

The correct answer is 'True'.

Which of the following statements is incorrect about agile?

Select one:
◉ Changes can only be made when the final product released. ✔   Congrats! You are right.

○ The agile method ensures that the product is optimized throughout the development process.

○ The product can be easily and rapidly developed and tested by dividing it into small components.

○ It can be said that the agile method helps companies build the right product.

Which of the following statements is incorrect about the Agile Manifesto?

Select one:

○ It was a powerful statement, carefully crafted using only 68 words.

○ While traditional methods advocated a stable plan and avoid changes, the manifesto focused on people, communication, the product, and flexibility.

○ It was released in 2001.

◉ The manifesto explained all the agile principles in detail. ✔ Congrats! You are right.

Your answer is correct.

The correct answer is: The manifesto explained all the agile principles in detail.

Which one is not among the 12 Agile Principles?

Select one:

○ Welcome changing requirements, even late in development.

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

◉ Business people and developers must work separately throughout the project. ✔ Congrats! You are right.

○ Build projects around motivated individuals.

"The most efficient and effective method of conveying information to and within a development team is face to face conversation." This principle is one of the 12 Agile Principles.

Select one:

◉ True ✔

○ False

There are several different methodologies used to implement agile. In the following lessons, we will examine in detail the two most common agile methodologies: **Scrum** and **Kanban**. Now we are starting with an interactive video about Scrum.

Scrum Overview

✔ Scrum Framework and Sprint Concept
✔ Let's Practice

Scrum Framework and Sprint Concept

Scrum is the most common methodology to implement the Agile. It is an iterative development model used in complex software development processes. In scrum, larger projects are divided into smaller parts that can be managed with **sprints** . Sprints are the periods from one to four weeks. It can be even a few days when needed. Steady sprint length reduces variability; a scrum team can safely predict what they can do on each sprint based on what they have done in previous sprints. The implementation of sprints allows scrum teams to make arrangements for instant improvement, rather than at the end of the project. At the end of each sprint, something remarkable is revealed. For gaining feedback from users or investors, the product produced during each iteration should be demonstrated. The scrum framework defines specific roles, artifacts, and activities for projects. The following figure shows all of these components of the scrum framework that we will discuss later one by one. |
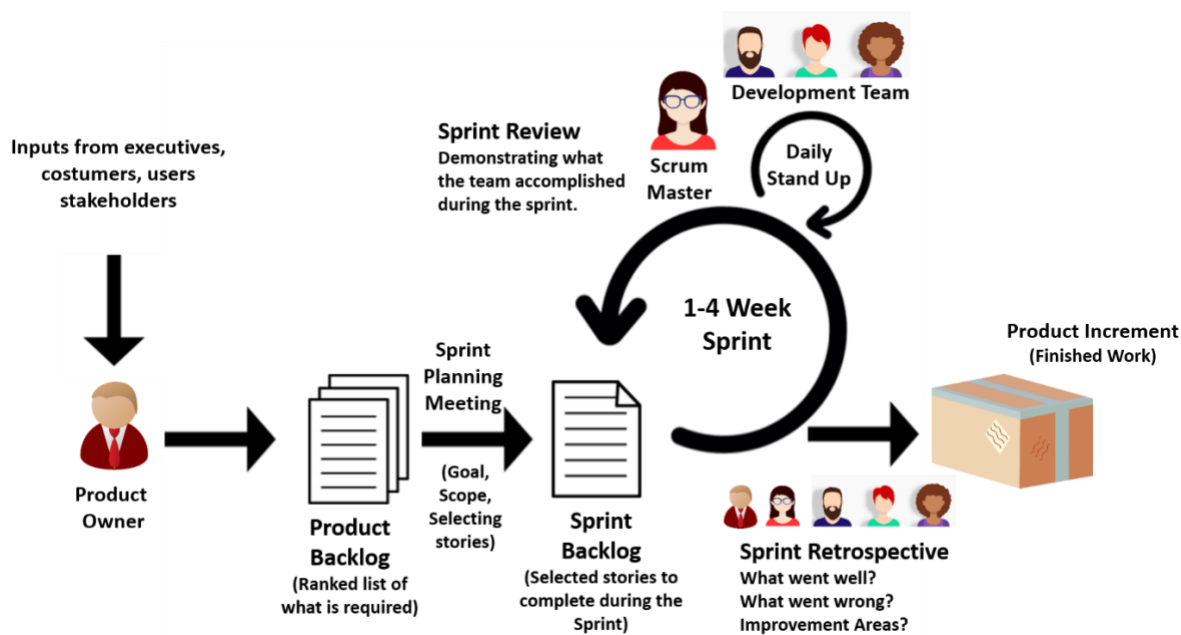
💡Tips:

- Sprint is also called iteration.

Q: What is the duration of a scrum sprint?
A: It depends on the number of people in the development team and the size of the project. In general, a scrum sprint is completed in 1-4 weeks.

It is estimated that the entire project will take 6 months. You prefer 2 weeks for each sprint. This means that your team will have [12 ⬍] ✔ sprints during the project.

[Check]

Scrum Roles

There are three main roles in scrum projects. These are the **Product Owner**, **Scrum Master**, and **Development Team**.

Product Owner (PO) is the business representative in the team and speaks for the needs of the project for maximizing the value delivered in each sprint. The product owner represents stakeholders and is the voice of the customer. Therefore, the product owner works together with stakeholders and prioritizes the product requirements.

Scrum Master coaches the team, protects the team from organizational distraction, clears any obstacles encountered and helps team members focus on what they do. Scrum Master ensures that scrum is understood well by the team members and it is working properly. Scrum Master constantly improves the team's environment. While the product owner has a directing role, Scrum Master has an enabling role in a scrum team.

A **Development team** usually consists of 3-9 people and performs daily tasks. The team is project-oriented and dedicated to the success of the project. Each team member is very talented that is, the team members are skilled in certain subjects. Each member can do more than one job on the project. Discipline and integrity are the key terms for a successful team.

Product Owner

Scrum Master

Development Team

Q: What is the role of the Scrum Master?
A: Scrum Master coaches the team, protects the team from organizational distraction, clears any obstacles encountered and helps team members focus on what they do. Scrum Master ensures that scrum is understood well by the team members and it is working properly. Scrum Master constantly improves the team's environment. While

the product owner has a directing role, Scrum Master has an enabling role in a scrum team.

Product Owner (PO) ⬍ ✔ is the business representative in the team.

Scrum Master ⬍ ✔ coaches the team.

Development team ⬍ ✔ usually consists of 3-9 people and performs daily tasks.

Check

There are several different methodologies used to implement agile. The two most common agile methodologies are Scrum and Kanban.

Select one:
- ⃝ True
- ⬛ False ✘

Not correct, keep trying.
The correct answer is 'True'.

Sprints ⬍ ✔ are the periods from one to four weeks.

Your answer is correct.
The correct answer is:
[Sprints] are the periods from one to four weeks.

The product owner ⬍ ✔ represents stakeholders and is the voice of the customer. He/she is the business representative in the team and speaks for the needs of the project.

Your answer is correct.
The correct answer is:
The [product owner] represents stakeholders and is the voice of the customer. He/she is the business representative in the team and speaks for the needs of the project.

The scrum master ⬍ ✔ coaches the team, protects the team from organizational distraction, clears any obstacles encountered and helps team members focus on what they do.

Your answer is correct.
The correct answer is:
The [scrum master] coaches the team, protects the team from organizational distraction, clears any obstacles encountered and helps team members focus on what they do.

A development team ⬍ ✔ usually consists of 3-9 people and performs daily tasks.

Epic, User Story and Task

Epic, User Story and Task Concepts

The three basic terms used in scrum projects are epic, user story and task. In order to fully comprehend a scrum project, it is very important to understand what these concepts are. The hierarchy between these concepts is explained as follows
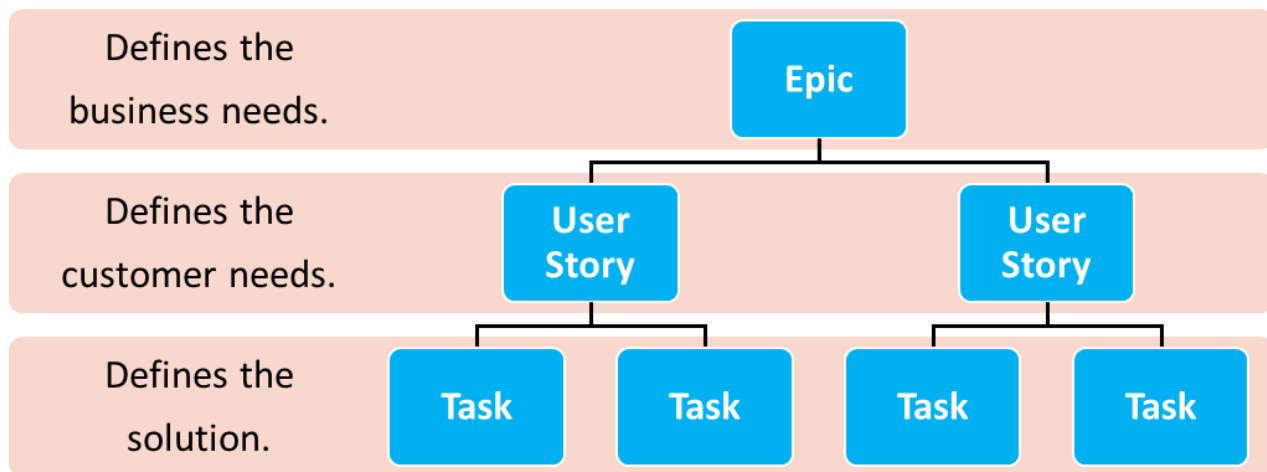
Epic

An epic refers to a set of jobs that cannot be easily achieved in a single sprint. It usually takes months to perform an epic. Normally, it refers to a series of requirements that have not yet been split into user stories. We can also consider the epic as one of the major goals for your agile team to work on, yet not simplified and divided into various tasks.

Epics are generally large-scaled and do not contain details. They must be divided into multiple user stories before being worked on. Therefore, they are located at the top of the hierarchy. An epic could be a feature of the product, customer demand or business requirement.

Examples of Epics:

- As a bank, we want a facial recognition system in our branches.
- As the marketing department, we want a mobile application and a website to reach more customers.

User Story

At the hierarchy, the user story is between the epic and the task. It describes a software feature from the customer's perspective and includes the **type of user**, **what they want**, and **why they want it**. Therefore, it answers the 'who', 'what' and 'why' in a simple language. The product owner has the responsibility of user stories.

Leaving out the technical aspect, it should describe the behavior from a user's perspective.

- Template of a User Story:
  As a < type of user >, I want < some goal > so that < some reason>

Examples of User Stories:

- As a registered user, I want to add items to the cart so that I can purchase multiple items at once.
- As a student, I want to apply for the exam online so that I can save time.

Task

- **Tasks are detailed pieces of work that are necessary to realize a user story.** In other words, they define the solutions for customer needs. The time for tasks can range from a couple of hours to several hours and assigned to a team member. Tasks are displayed on a scrum board for easy tracking, as shown in the figure below.
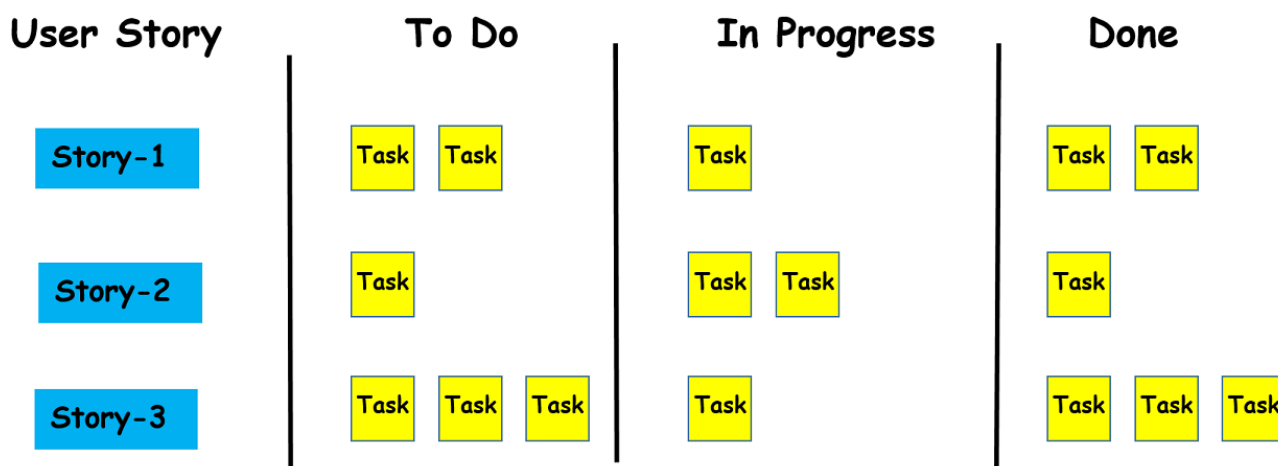
It usually takes months to perform a/an [epic ⬍] ✔ .

[user story ⬍] ✔ describes a software feature from the customer's perspective and includes the type of user, what they want, and why they want it.

[task ⬍] ✔ is a detailed piece of work that is necessary to realize a user story.

Check

Which of the following is a description of the epic?

Select one:

⦿ It refers to a series of requirements that have not yet been ✔ Congrats! You split into user stories and a set of jobs that cannot be easily are right. achieved in a single sprint.

○ It describes a software feature from the customer's perspective and includes the type of user, what they want, and why they want it.

○ It is a detailed piece of work that is necessary to realize a user story.

Your answer is correct.

The correct answer is: It refers to a series of requirements that have not yet been split into user stories and a set of jobs that cannot be easily achieved in a single sprint.

"As a student, I want to apply for the exam online so that I can save time. " How do you categorize this statement?

Select one:
○ A task

⦿ A user story ✔ Congrats! You are right.

○ An epic

Your answer is correct.

The correct answer is: A user story

[Tasks ⬍] ✔ are detailed pieces of work that are necessary to realize a user story.
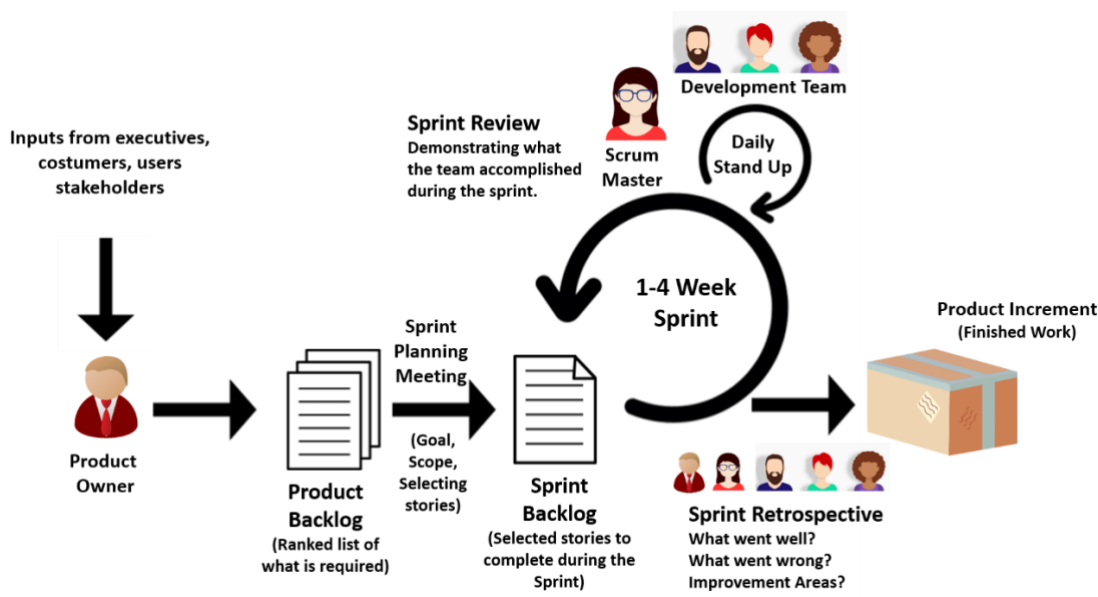
Scrum Artifacts

✔ Introduction
✔ Product   Backlog
✔ Sprint   Backlog
✔ Product   Increment
✔ Let's Practice

Introduction

In scrum, artifacts serve to capture the common understanding of the team. The Scrum framework defines three major artifacts. These concepts are **product backlog**, **sprint backlog**, and **product increment**.

Product Backlog

The product backlog refers to the **list of everything that needs to be done to complete the project**. Beside all user stories, it also includes technical tasks. The product backlog is the responsibility of the product owner. The product owner fulfills this responsibility by creating the product backlog, **prioritizing** the requirements in the product backlog list and constantly updating this list. The product owner updates the product backlog because once a story is completed, it should be removed from the list. Sometimes, however, new stories are added, as the project grows.

Sprint Backlog

The sprint backlog can be defined as a subset of the product backlog. The sprint backlog is generated from the product backlog during the sprint planning meeting at the beginning of each sprint. The user stories selected from the product backlog, which will be completed during the sprint constitute the sprint backlog.

The sprint backlog is **not a flexible list** like a product backlog. That means the sprint backlog is unchanged during the sprint period. Once agreed upon in the sprint planning meeting, the stories, and steps to complete them remain stable during the sprint length. If there are stories left still unfinished by the end of the sprint, they will be added back to the product backlog and addressed during the next sprint.

Product Increment

The Product Increment is the sum of all the product backlog items finished during the sprint. In other words, by the end of each sprint, the development team creates a new software that gets built into the main product and this new software is called product increment. The product increment aims to invest in **small amounts** in the new features of the main product. This helps to shorten the time before receiving feedback.

As the name implies, product increment continues to increase within the subsequent sprints. That means each product increment includes all the previous sprint increment values as it is cumulative. It should be a **working product** at the end of each sprint, which means that the product should be ready for shipping. But that doesn't mean it can be released in the market. It should go through a detailed testing phase and be of high quality before releasing it in the market.

Q: Explain   the   term   'increment'   in   Scrum.
A: The Product Increment is the sum of all the product backlog items finished during the sprint. In other words, by the end of each sprint, the development team creates a new software that gets built into the main product and this new software is called product increment. The product increment aims to invest in small amounts in the new features of the main product. This helps to shorten the time before receiving feedback. As the name implies, product increment continues to increase within the subsequent sprints. That means each product increment includes all the previous sprint increment values as it is cumulative.

The product backlog ✔ refers to the list of everything that needs to be done to complete the project.

The user stories selected from the product backlog, which will be completed during the sprint constitute the

sprint backlog ✔ .

The product increment ✔ is the sum of all the product backlog items finished during the sprint.

Check

"It refers to the list of everything that needs to be done to complete the project. Beside all user stories, it also includes technical tasks." What is described in this statement?

Select one:

○ Sprint Backlog

○ Product Increment

◉ Product Backlog ✔ Congrats! You are right.

Your answer is correct.

The correct answer is: Product Backlog

The user stories selected from the product backlog, which will be completed during the sprint constitute the [sprint backlog ▼] ✔ .

The sprint backlog is a flexible list like a product backlog.

Select one:

◉ True ✖

○ False

Not correct, keep trying.

The correct answer is 'False'.

By the end of each sprint, the development team creates a new software that gets built into the main product and this new software is called [product increment ▼] ✔ .
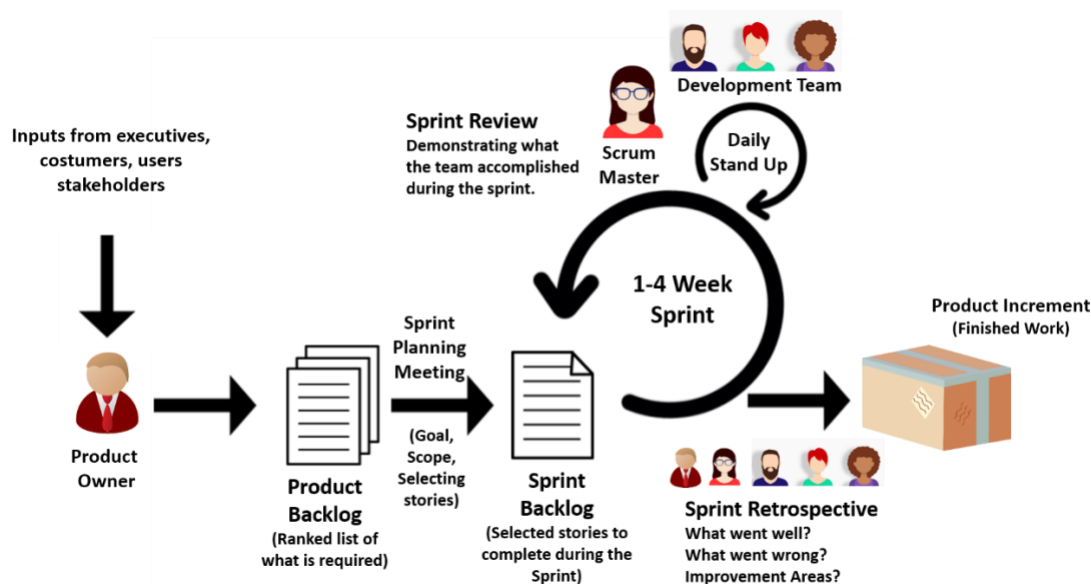
Scrum Ceremonies

✔ List of Ceremonies in Scrum
✔ Sprint Planning Meeting
✔ Grooming Meeting
✔ Daily Stand Up Meeting
✔ Sprint Review Meeting

List of Ceremonies in Scrum

In the scrum process, a series of meetings called ceremonies are held regularly. These ceremonies aim to minimize the need for meetings that are not defined in the scrum and to ensure regularity. These ceremonies are:

1. Sprint Planning Meeting,
2. Grooming Meeting,
3. Daily Stand Up Meeting or Daily Scrum,
4. Sprint Review Meeting,
5. Sprint Retrospective Meeting.

Q: What are different ceremonies and their importance in Scrum?
A: In the scrum process, a series of meetings called ceremonies are held regularly. These ceremonies aim to minimize the need for meetings that are not defined in the scrum and to ensure regularity. These ceremonies are: 1. Sprint Planning Meeting, 2. Grooming Meeting, 3. Daily Stand Up Meeting or Daily Scrum, 4. Sprint Review Meeting, 5. Sprint Retrospective Meeting.

Sprint Planning Meeting

This activity takes place at the start of each sprint and all the scrum roles take part in this meeting. Normally, it lasts for one or two hours. In sprint planning meetings, the scrum team decides the scope and the goals of the sprint.

In this respect, the product owner presents to the team the prioritized list of the user stories from the product backlog. The team members discuss the stories and predict how much work the team can perform in the coming sprint. Then they select some of

the stories to complete during the sprint. These selected stories constitute the sprint backlog.

Grooming Meeting

The backlog grooming meeting is held to **review the backlog** and to ensure the backlog contains the appropriate items. The product owner, scrum master and some or all of the development team participate in the meeting.

Reviewing the backlog items involves; rewriting some items to be more expressive, splitting big ones into smaller items, deleting old or no more need items. That helps the team keep the product backlog tidy and getting backlog items ready for upcoming sprints. At the end of the grooming meeting, the team has a fresh prioritized product backlog.

Daily Stand Up Meeting

- The daily stand up meeting is an internal meeting for the development team. The scrum master ensures that the team has the meeting, but the development team itself is responsible for conducting the daily stand up meeting.

- Regardless of the length of the sprint, the maximum time allocated for this event is 15 minutes. The members of the development team give three statements about;

-
  - What they completed yesterday,
  - What they will focus on today,
  - What are the things impeding them?

  The scrum master deals with the removal of blocking issues. Some blocking issues may also need to be removed by the product owner.

Sprint Review Meeting

- Sprint review meeting takes place after each sprint. The participants of this meeting are typically the product owner, the development team, the scrum master, customers and developers from other projects. In this meeting, the development team demonstrates to the whole organization **what they**

accomplished during the sprint and **receives feedback**. It is important to receive feedback because that helps the product owner to update the product backlog and consider the scope of the next sprint.
- The sprint review meeting is usually held informally, typically with rules that prohibit the use of PowerPoint slides and not allowing more than a couple of hours of preparation time for the meeting.

Sprint Retrospective Meeting

Like sprint review meetings this meeting is also held at the end of each sprint. The attendees of this meeting are the development team, the scrum master and the product owner. In this meeting, all the participants discuss:

- What went well in the previous sprint?
- What didn't work well?
- What are the improvement areas to increase team performance?

A two-hour retrospective meeting is enough for a two-week sprint. The aim of the retrospectives is not to listen to complaints but to find **effective solutions to problems** and to develop action plans.

Q: What is the purpose of a retrospective?
A: Like sprint review meetings this meeting is also held at the end of each sprint. The attendees of this meeting are the development team, the scrum master and the product owner. In this meeting, all the participants discuss:
- What went well in the previous sprint?
- What didn't work well?
- What are the improvement areas to increase team performance?

The | Sprint Planning Meeting ⇕ | ✔ takes place at the start of each sprint and all the scrum roles take part in this meeting.

The | Grooming Meeting ⇕ | ✔ is held to review the backlog

The maximum time allocated for the | Daily Stand Up Meeting ⇕ | ✔ is 15 minutes.

In | Sprint Review Meeting ⇕ | ✔ , the development team demonstrates to the whole organization what they accomplished during the sprint and receives feedback.

Like sprint review meetings, | Sprint Retrospective Meeting ⇕ | ✔ is also held at the end of each sprint.

Check

This meeting takes place at the start of each sprint and the stories to be completed during the sprint are selected at this meeting. In scrum process this meeting is called:

Select one:

○ Grooming Meeting

○ Daily Stand Up Meeting

○ Sprint Review Meeting

⦿ Sprint Planning Meeting ✔ Congrats! You are right.

Your answer is correct.

The correct answer is: Sprint Planning Meeting

Which meeting is held to review the backlog and to ensure the backlog contains the appropriate items?

Select one:

○ Daily Stand Up Meeting

○ Sprint Review Meeting

○ Sprint Planning Meeting

⦿ Grooming Meeting ✔ Congrats! You are right.

Your answer is correct.

The correct answer is: Grooming Meeting

What is the maximum time allocated for the Daily Stand Up Meeting?

Select one:

○ 2 hours

⦿ 15 minutes ✔ Congrats! You are right.

○ 5 minutes

○ 1 hour

In which meeting the members of the development team give three statements about:

- What they completed yesterday,
- What they will focus on today,
- What are the things impeding them?

Select one:

- ○ Sprint Review Meeting
- ◉ Daily Stand Up Meeting   ✔ Congrats! You are right.
- ○ Sprint Planning Meeting
- ○ Grooming Meeting

Your answer is correct.

The correct answer is: Daily Stand Up Meeting

In which meeting, the development team demonstrates to the whole organization what they accomplished during the sprint and receives feedback?

Select one:

- ○ Daily Stand Up Meeting
- ◉ Sprint Review Meeting   ✔ Congrats! You are right.
- ○ Sprint Planning Meeting
- ○ Grooming Meeting

Other Artifacts in Scrum

- ✔ Burndown   Chart
- ✔ Timeboxing
- ✔ Story   Point
- ✔ Let's   Practice
- ✔ Velocity
- ✔ Let's Practice

Burndown Chart

In addition to the before-mentioned main artifacts, scrum projects also include some other artifacts, such as a burndown chart, timeboxing, story point or velocity.
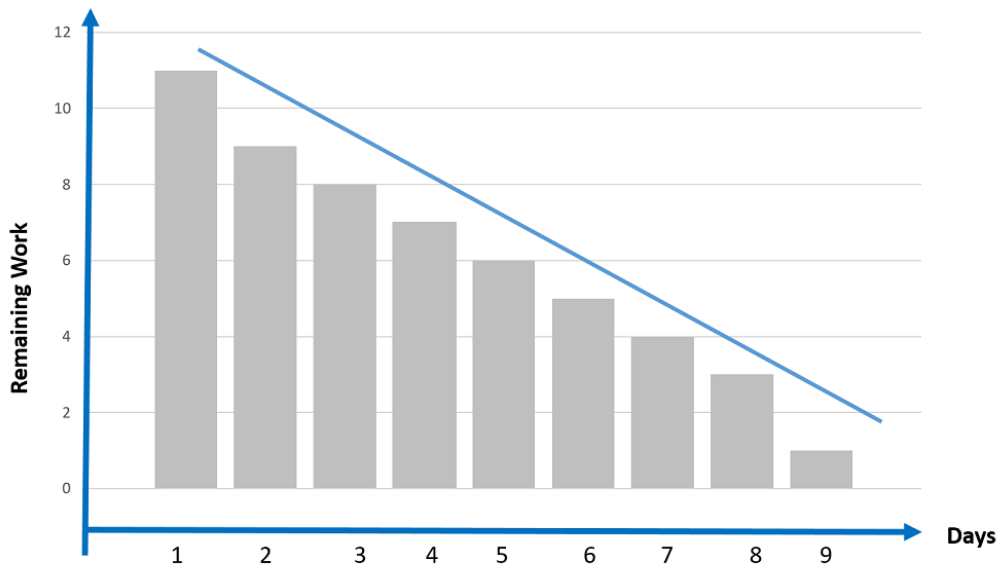
A ***burndown*** chart is a graphical demonstration of work left to do versus time. In the chart, the vertical axis usually represents the remaining work while the horizontal axis represents the time or days. It is useful for forecasting when all of the work will be completed. A simple example of a burndown chart is given above.

Q: What is the use of burn-down charts?
A: A burn-down chart demonstrates the amount of work remained to complete a project. So, the burn-down chart is used to trace the progress of a project.

Timeboxing

A timebox is a period of time in which a team works to achieve a goal. Instead of waiting until the goal is reached, the timeboxing approach stops when the time limit is reached. The ***timeboxing*** aims **to define and limit the amount of time dedicated to a certain event**. Scrum framework uses timeboxing as a tool for all of the scrum activities for concretely defining ambiguous tasks.

Story Point

Story Points are decided upon and used by individual scrum teams. A Story Point is a relative unit of measure to provide relative predictions of effort for completing tasks or user stories.

A Story Point provides an easier estimation to the team. Rather than assessing a product backlog item and estimating it in hours, teams consider only how much effort this item will require, relative to other product backlog items.
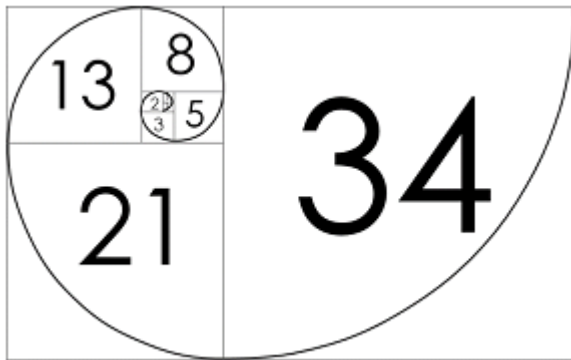
In other words, a story point is a numeric value that indicates the difficulty level of the user story. Before the development team makes an estimation, story points are assigned to each user story using the **Fibonacci numbers** (1, 2, 3, 5, 8, 13, 21, 34...). A story that is assigned 2 story points should be twice as difficult as a story that is assigned 1 story point.

Q: Why aren't user stories simply estimated in man-hours?
A: Estimation of user stories on the basis of man-hours is possible but not preferred. Because in that case, you won't be able to concentrate on the quality product to be delivered to the customer. In addition to that, you will concentrate on the cost and budget of the management while using man-hours. Rather than man-hours, story points are used, as it provides a complete idea about both the complexity of work and required efforts.

A story that is assigned 8 story points should be four times as difficult as a story that is assigned 2 story points.

Select one:
◉ True ✔
○ False

Check

Velocity

Velocity is an indication of the average amount of items from the product backlog turned into a product increment during each sprint. In other words, it is a measure of the amount of work the development team can handle during a single sprint. In scrum, velocity is the key metric.

At the end of each sprint, velocity is calculated by summing up the story points for completed user stories. Points from not completed or partially completed user stories should not be considered in calculating velocity. After calculating the velocity at the end of the first sprint, the team can make a new estimation of how long the project will take to complete.
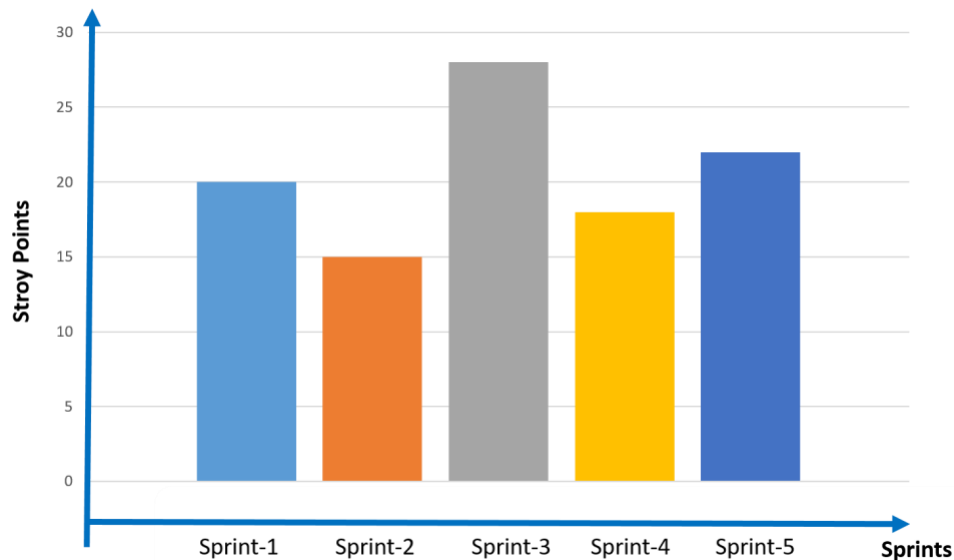
Suppose the total value of story points for the remaining user stories is 80, and the total value of story points for the completed user stories in the first sprint is 20. That means the team needs 4 more sprints to complete the whole project.

Suppose the total value of story points for the remaining user stories is 200, and the total value of story points for the completed user stories in the first sprint is 25. That means the team needs 7 more sprints to complete the whole project.

Select one:
○ True
◉ False ✔

Check

The timeboxing aims to define and limit the amount of time dedicated to a certain event.

Select one:
◉ True ✔
○ False

Top Methodologies Used to Implement Agile

As you recall, Scrum and Kanban are the two most common agile methodologies to implement Agile. So far you have learned something about Scrum. And now you will learn something about Kanban.