# Chapter 3

Scrum Overview

Scrum is an “empirical process” as opposed to a “defined and predictive process”.

*Empirical process*

Exercise or control the process through frequent adaptations and inspections. Works best in situations with high levels of uncertainty where it is near impossible to clearly define the solution in advance. A trial-and-error approach.

*Defined and predictive process*

Can be thought of as a theoretical approach. “When a well-defined set of inputs is given, it is obvious that the same outcomes will be generated every time the program executes.”

* Three roles
  + **Development Team**
    - Expected to act as one entity, collaboratively and cohesively
    - Teams may consist of people with different specialties
  + **Scrum Master**
    - Ensuring the team follows Scrum theory, practices, and rules
  + **Product Owner**
    - Responsible for “maximizing the value and work of the Development Team”
      * Represents the business sponsor, main decision maker for the project, provides direction for the team, and prioritizes the work to be done.
    - Only person responsible for Product Backlog
* Five events/ceremonies
  + **The Sprint**
    - two to four weeks where the development work is done
    - All increments (tasks) inside of the sprint are broken up so that it can be accomplished inside a single sprint
  + **Sprint Planning**
    - Takes place before each sprint
    - Two major goals
      * For the product owner and team to negotiate what stories will be in the sprint
        + Product owner makes any necessary revisions in the priority
        + Team decides how many stories can be completed in the sprint
      * For the team to define the tasks needed, and how the tasks will be shared among the team
        + Product owner does not typically participate in this part
      * Product backlog should be groomed and prioritized prior to the planning session
  + **Daily Scrum/Daily Standup**
    - A daily check-in
    - Usually everyone stands during these meetings as an incentive to keep the meeting short and focused
  + **Sprint Review**
    - Where the team presents the finished work to the product owner
  + **Sprint Retrospective**
    - Reflection, review, and improve.
* Three artifacts
  + **Product Backlog**
    - Queue of work to be done in the form of “user stories”
      * Describe the user requirement, concisely
      * Briefly define what the user expects to accomplish
    - Also holds any “defects” from the current sprint, if necessary
      * However, an excessive number of “defects” is called a “technical debt”
    - “Backlog Grooming” / “Backlog Refinement”
      * Remove irrelevant user stories
      * Create new ones to meet needs
      * Reassess priority
  + **Sprint Backlog**
  + **Increment**

How is Scrum adaptive?

* Solution adaptation
  + A Scrum project can be started with only a vague idea of requirements and the solution since it allows for more elaborate requirements.
* Process adaptation
  + A Scrum project is broken up into short, fixed length “sprints”. At the end of each sprint the process is analyzed to determine if it needs to be adapted further.

## 2-1 Discussion

For this discussion, use the information in the article “Characteristics of a Great Scrum Team,” which is in the Required Resources section of this module. Select one of the Agile roles: Product Owner, Scrum Master, or Development Team.

Which of the top three traits identified for your role do you think are the most important?

* How does your selected trait help the Scum team achieve its goal?
* Is there another trait that you think is important but is not defined for your selected role? Support your choice with real-world examples and discuss the outcome of the product, either good or bad.

In your responses to your classmates, discuss why you agree with their choices or not. Provide examples to support your claims. You can also help support your classmates’ arguments with additional evidence. Include quotes from your classmates’ original posts in your responses.

I've chosen the role of Scrum Master. According to the text, the top three traits for a great Scrum Master are:

1. Involves the team with setting up the process:
   1. A great Scrum Master ensures the entire team supports the chosen Scrum process and understands the value of every event. They understand the importance of involving the team in the process and ensure that everyone is aligned and committed to the process.
2. Understands team development:
   1. A great Scrum Master is aware of the different phases a team will go through when working as a team. They understand the importance of a stable team composition and can facilitate the team's growth and development.
3. Recognizes and acts on team conflict:
   1. A great Scrum Master recognizes team conflict early on and can apply different activities to resolve it.

One trait that I think is important but not defined for this role is emotional intelligence. In terms of the outcome of the product, a great Scrum Master can help the team to deliver high-quality products that meet the customer's needs and expectations. By involving the team in the process, understanding team development, and recognizing and acting on team conflict, the Scrum Master can help the team to work together effectively and achieve their goals.

Here is an example of how a Scrum Master might use these traits to achieve a positive outcome:

During a recent Sprint, the team encountered difficulties in meeting the Sprint Goal due to a lack of clear direction and conflicting opinions on the best approach to the work. Recognizing this issue, the Scrum Master addressed it during the next Daily Scrum. By engaging the team and understanding their unique perspectives, the Scrum Master facilitated a consensus and redirected the team's efforts towards the Sprint Goal. Consequently, the team successfully delivered a high-quality product that met the customer's needs and expectations, fostering a positive and productive team dynamic.

## 2-2 Module Two Quiz: Team Roles and Responsibilities

As a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will create the user stories before Sprint Planning so that the team knows what the specific requirements are in the form of a story by a user. Select one.

As a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will create and prioritize the Product Backlog before Sprint Planning so that the team knows what work is planned and the priority of the user stories. Select one.

**Product Owner**

As a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will facilitate the Sprint Retrospective at the end of every Sprint so that the entire team can provide feedback and improve for the next Sprint. Select one.

**Scrum Master**

As a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will provide estimates for each user story before Sprint Planning so that the team can jointly estimate and agree upon the size of each user story. Select one.

As a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, I will provide my update at the Daily Scrum meeting every day so that the entire team is aware of what I am working on and if I have any issues. Select one.

**Team Member (developer/tester)**