**Scrum Roles and Ceremonies**

**Role Assignments**

**Product Owner**

**Responsibilities:**

* Defines the product vision and roadmap.
* Manages the product backlog by prioritizing items based on business value and stakeholder feedback.
* Acts as the main liaison between stakeholders and the development team.
* Ensures the team understands the items in the backlog to the required level of detail.

**Scrum Master**

**Responsibilities:**

* Facilitates Scrum ceremonies and ensures the team adheres to Scrum practices.
* Removes impediments that hinder the team's progress.
* Coaches the team in self-management and cross-functionality.
* Acts as a servant leader, supporting the team and fostering a collaborative environment.

**Development Team**

**Responsibilities:**

* Delivers potentially shippable product increments at the end of each sprint.
* Self-organizes to manage work and collaborate effectively.
* Participates in all Scrum ceremonies.
* Contributes to refining and estimating backlog items.

**Ceremonies**

**Sprint Planning**

**Who Attends:**

* Product Owner
* Scrum Master
* Development Team

**When:**

* At the beginning of each sprint.

**Duration:**

* Typically 2 hours for a 2-week sprint (maximum of 8 hours for a 1-month sprint).

**Purpose:**

* Define the sprint goal and the work to be completed during the sprint.
* The development team selects items from the product backlog to work on during the sprint.
* Create a plan for delivering the selected backlog items.

**Daily Stand-up**

**Who Attends:**

* Development Team
* Scrum Master (optional)
* Product Owner (optional)

**When:**

* Every day during the sprint.

**Duration:**

* 15 minutes.

**Purpose:**

* Synchronize the team's work and plan for the next 24 hours.
* Team members answer three questions:
  1. What did I do yesterday?
  2. What will I do today?
  3. Are there any impediments in my way?

**Sprint Review**

**Who Attends:**

* Product Owner
* Scrum Master
* Development Team
* Stakeholders

**When:**

* At the end of each sprint.

**Duration:**

* Typically 1 hour for a 2-week sprint (maximum of 4 hours for a 1-month sprint).

**Purpose:**

* Demonstrate the work completed during the sprint to stakeholders.
* Gather feedback from stakeholders.
* Discuss what was accomplished and what is still pending.
* Adjust the product backlog if necessary based on feedback.

**Sprint Retrospective**

**Who Attends:**

* Product Owner
* Scrum Master
* Development Team

**When:**

* After the Sprint Review and before the next Sprint Planning.

**Duration:**

* Typically 1 hour for a 2-week sprint (maximum of 3 hours for a 1-month sprint).

**Purpose:**

* Reflect on the past sprint to improve the process and teamwork.
* Discuss what went well, what could be improved, and actionable steps for improvement.
* Foster a culture of continuous improvement and transparency.