Task 3: Role Assignment and Ceremonies in Scrum

# Role Assignments

Certainly, here's how the roles would be assigned and their responsibilities defined for developing an Interplanetary Video-Conferencing application using the Scrum framework:

## Product Owner

* Role Description: The Product Owner represents the interests of stakeholders and customers. They ensure that the Interplanetary Video-Conferencing application meets user needs and business objectives.
* Role Responsibilities: Participate in sprint reviews to assess whether delivered work meets stakeholder needs and goals. Maintain the product backlog, ensuring that items are well-defined, properly prioritized, and aligned with the product vision.

## Scrum Master

* Role Description: The Scrum Master is a facilitator and coach who ensures that the Scrum team adheres to the framework and works efficiently.
* Role Responsibilities: Coach the team on Scrum practices and principles, helping them understand and apply the framework effectively.

## Development Team

* Role Description: The Development Team comprises professionals who design, develop, test, and deliver the Interplanetary Video-Conferencing application incrementally.
* Role Responsibilities: Collaboratively develop and test features and functionalities, ensuring their alignment with stakeholder requirements.

# Ceremonies

Describe who needs to attend, when does the event happen, is it a recurring event, how long does it take and what is the purpose.

## Sprint Planning

* Participants: Product Owner, Scrum Master, Development Team
* At what time: At the beginning of each sprint
* Frequency: Recurring event, once per sprint (e.g., every two weeks)
* How Long: Typically, 2 to 4 hours, depending on the length of the sprint and complexity of the work
* Purpose: The purpose of the Sprint Planning ceremony is to collaboratively plan the upcoming sprint's work and set the sprint goal. The Product Owner presents the prioritized items from the product backlog, providing context and clarifications. The Development Team discusses the items, asks questions, and estimates the effort required. Together, they agree on the sprint goal and select backlog items to include in the sprint. The outcome is a sprint backlog containing user stories, tasks, and estimated effort for each selected item, which serves as a guide for the team's work during the sprint.

## Daily stand-up

* Participants: Product Owner, Scrum Master, Development Team
* At what time: Same time every day (e.g., in the morning)
* Frequency: Daily, throughout the sprint
* How Long: Typically 15 minutes
* Purpose: The purpose of the Daily Stand-up (Daily Scrum) is to provide a quick update on progress, address any obstacles, and synchronize the team's activities. Each team member answers three questions: What did I do yesterday? What will I do today? Are there any obstacles blocking my progress? This ceremony fosters communication, helps identify and resolve issues, and ensures the team stays aligned toward the sprint goal.

## Sprint Review

* Participants: Product Owner, Scrum Master, Development Team, Stakeholders (e.g., space agencies, astronauts)
* At what time: At the end of each sprint
* Frequency: Recurring event, once per sprint (e.g., every two weeks)
* How Long: Typically 1 to 2 hours, depending on the amount of work to be reviewed
* Purpose: The purpose of the Sprint Review is to demonstrate the work completed during the sprint to stakeholders and gather their feedback. The Development Team presents the features and functionalities developed, showing how they align with the sprint goal and acceptance criteria. This ceremony promotes transparency and collaboration, allowing stakeholders to provide input and guide the product's direction.

## Sprint Retrospective

* Participants: Product Owner, Scrum Master, Development Team
* At what time: At the end of each sprint, after the Sprint Review
* Frequency: Recurring event, once per sprint (e.g., every two weeks)
* How Long: Typically 1 to 2 hours
* Purpose: The purpose of the Sprint Retrospective is to reflect on the previous sprint's process and outcomes, identify what went well and areas for improvement, and plan actions to enhance future sprints. The team discusses what practices should be continued, what practices need to change, and any experiments to try in the next sprint. This ceremony supports continuous improvement and fosters a learning culture within the team.