Assignment - Agile Methodology [Major] by Deepak

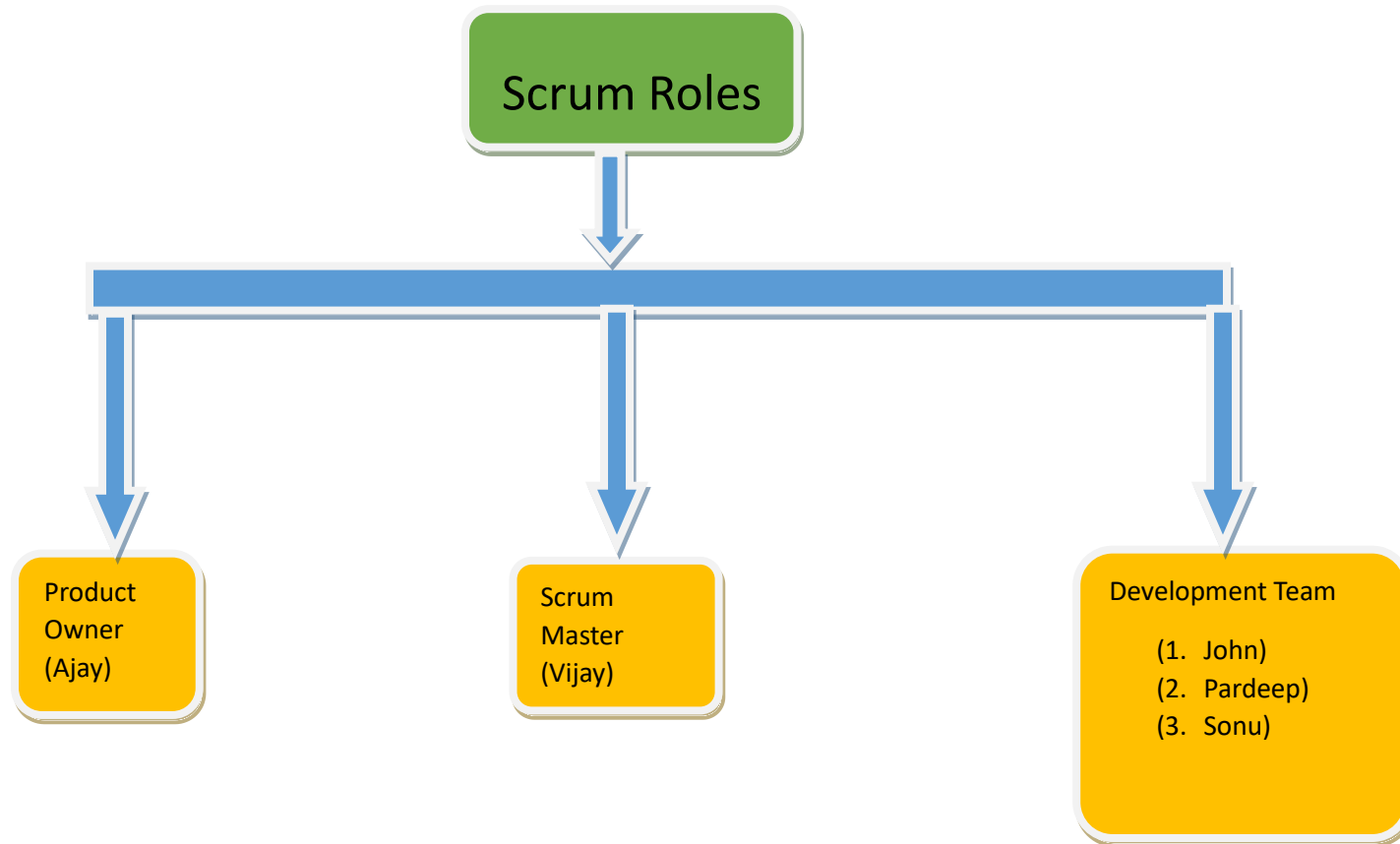**Task Name:** Implement User Authentication

Description: Develop the user authentication functionality to allow users to securely sign up, log in, and manage their accounts.

User Story: As a user, I want to be able to create an account, log in with my credentials, and update my account settings to ensure the security of my information.

Scrum Roles:

1. Product Owner (PO): Ajay

2. Scrum Master: Vijay

3. Development Team: John (Backend Developer), Pardeep (Frontend Developer), Sonu (QA Engineer)

Sprint Duration: 2 weeks (10 working days)

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                        │   Scrum Roles   │
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| Product Owner (Ajay) | Scrum Master (Vijay) | Development Team

(1. John)
(2. Pardeep)
(3. Sonu) |

Scrum Framework: User Authentication Feature

Sprint Activities:

Day 1: Sprint Planning

- Ajay (PO) presents the User Authentication user story.

- The Development Team estimates the user story's effort at 5 story points.

- The team decides to include the User Authentication user story in the sprint.

Days 2-9: Daily Scrum, Development and Testing

- Each morning, the Development Team holds a Daily Scrum meeting to share progress:

 - John: "Yesterday, I set up the user model and registration API. Today, I'll work on email confirmation."

 - Pardeep: "I finished designing the registration form UI. Today, I'll work on the login form."

 - Sonu: "I completed testing for the registration API. Today, I'll focus on testing the login functionality."

Day 10: Sprint Review

- The Development Team completes the User Authentication feature.

- They present the functionality to Ajay (PO) and Vijay (Scrum Master).

- Ajay provides feedback on the UI and user flows, suggesting some adjustments.

- The team discusses possible improvements and decides to make the suggested changes.

Day 10: Sprint Retrospective

- In the Retrospective, the team discusses what went well and what could be improved during the sprint:

- What went well: Effective collaboration among team members, efficient code integration.

 - What could be improved: More detailed testing scenarios, better synchronization between backend and frontend development.

Days 10-11: Sprint Review and Backlog Refinement

- Ajay (PO) and the Development Team discuss feedback from the Review.

- They refine the backlog based on the suggestions, adding tasks for UI adjustments and additional testing scenarios.

- Ajay reprioritizes the backlog based on stakeholder feedback and the team's suggestions.

This example illustrates how the Scrum framework works for the User Authentication feature. The Development Team collaborates, iterates, and adapts throughout the sprint. The Daily Scrums facilitate communication and coordination, and the sprint ends with a Review and Retrospective to gather feedback and improve the process. The Backlog Refinement ensures that the product backlog stays up-to-date and reflects stakeholders' needs and the team's insights.

Scrum framework is given Below