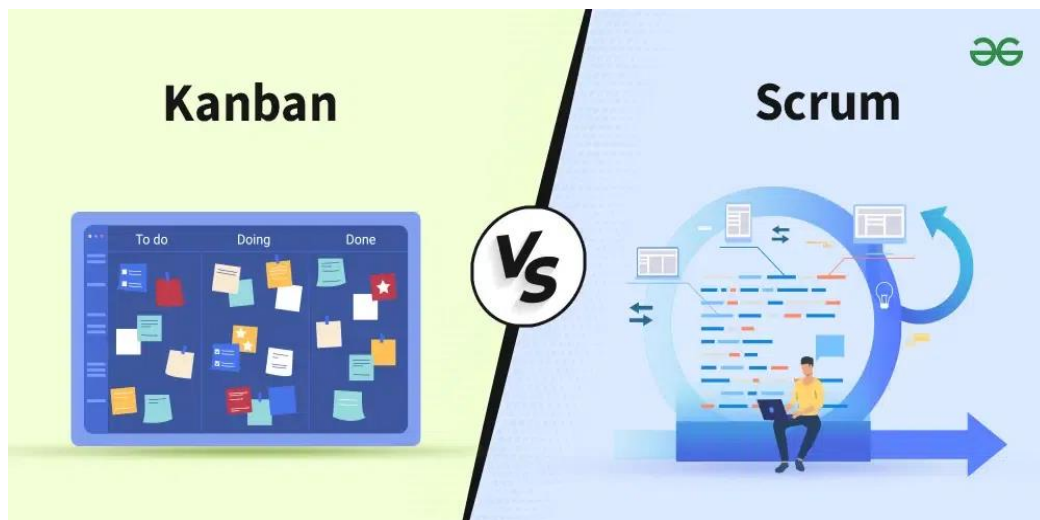
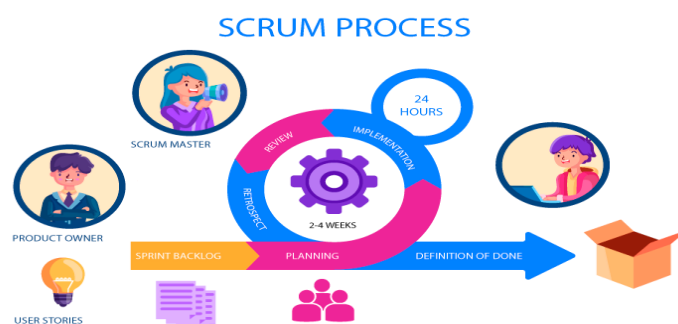


Assignment: Difference between scrum vs Kanban

Scrum and Kanban are both popular Agile frameworks used in software development and other industries to manage and optimize work processes. While they share some similarities, they differ significantly in terms of principles, practices, and application. Here is a comparison of Scrum vs Kanban:



Scrum:



1. Principles:

- **Iterative Development:** Divides work into time-boxed iterations called sprints (usually 2-4 weeks).
- **Roles:** Defined roles including Scrum Master (facilitator), Product Owner (representing stakeholders), and Development Team.

- **Artifacts:** Uses artifacts such as Product Backlog (list of features), Sprint Backlog (tasks for the sprint), and Burndown Chart (visualizes progress).

2. Practices:

- **Sprint Planning:** Plan the work to be completed during the sprint.
- **Daily Stand-ups:** Daily meetings for the team to synchronize activities and plan for the day.
- **Sprint Review:** Demonstrate completed work to stakeholders.
- **Sprint Retrospective:** Reflect on ways to improve processes and teamwork.

3. Workflow:

- **Fixed Iterations:** Work is planned in sprints with a defined start and end date.
- **Prioritization:** Product backlog items are prioritized based on value and urgency.

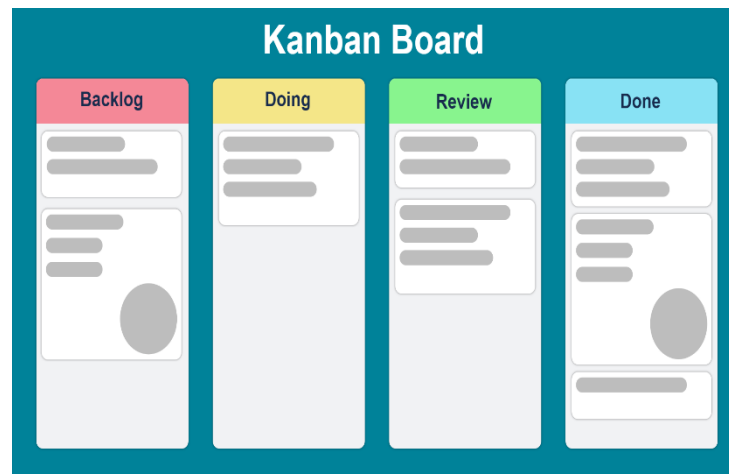
4. Focus:

- **Predictability:** Provides a structured framework with predictable delivery dates and scope.
- **Change Management:** Changes to sprint scope are minimized to maintain focus and predictability.

5. Suitability:

- **Complex Projects:** Well-suited for complex projects with evolving requirements.
- **Team Collaboration:** Promotes collaboration and cross-functional teamwork.

Kanban:



1. Principles:

- **Continuous Delivery:** Focuses on continuous flow of work, minimizing bottlenecks and lead time.
- **Visual Management:** Uses Kanban boards to visualize work items and workflow stages (To Do, In Progress, Done).
- **Limit Work in Progress (WIP):** Sets WIP limits to optimize flow and avoid multitasking.

2. Practices:

- **Visual Board:** Visualizes workflow stages and work items using cards on a board.
- **Pull System:** Work is pulled from one stage to the next based on capacity and readiness.
- **Cycle Time Tracking:** Measures cycle time (time taken to complete a task) to improve efficiency.

3. Workflow:

- **Continuous Flow:** Work progresses continuously without fixed time-boxes (like sprints in Scrum).
- **Adaptability:** Flexible to changes in priorities and workload.

4. Focus:

- **Flexibility:** Adapts to changing priorities and requirements seamlessly.
- **Efficiency:** Focuses on reducing lead time and optimizing workflow.

5. Suitability:

- **Support and Maintenance:** Ideal for support and maintenance tasks where priorities change frequently.

- **Process Improvement:** Emphasizes continuous improvement and efficiency gains.

Key Differences:

- **Time-boxed vs Continuous:** Scrum uses fixed-length sprints, while Kanban emphasizes continuous flow with no predefined iterations.
- **Roles and Artifacts:** Scrum has specific roles (Scrum Master, Product Owner) and artifacts (Product Backlog, Burndown Chart), whereas Kanban is more flexible with roles and focuses on visual management.
- **Predictability vs Flexibility:** Scrum provides predictability with fixed iterations and scope, while Kanban offers flexibility to adapt to changing priorities and workload.
- **Change Management:** Scrum limits changes during sprints to maintain focus, while Kanban handles changes more dynamically.

In summary, Scrum is structured, time-boxed, and focused on predictability and teamwork, making it suitable for complex projects. Kanban, on the other hand, emphasizes flexibility, continuous improvement, and efficiency, making it ideal for teams focused on workflow optimization and managing fluctuating priorities. Choosing between Scrum and Kanban depends on project needs, team dynamics, and organizational goals.