

Kanban

Team Teaching Software Engineering Course
Department of Information Technology
State Polytechnic of Malang

Outline

- Overview of Kanban
- Principles in Kanban
- Advantages of Kanban
- Scrum vs Kanban

Objective

- Understand basic concepts in project management using Kanban
- Understand the principles applied in Kanban
- Understand the difference between Scrum and Kanban

Kanban

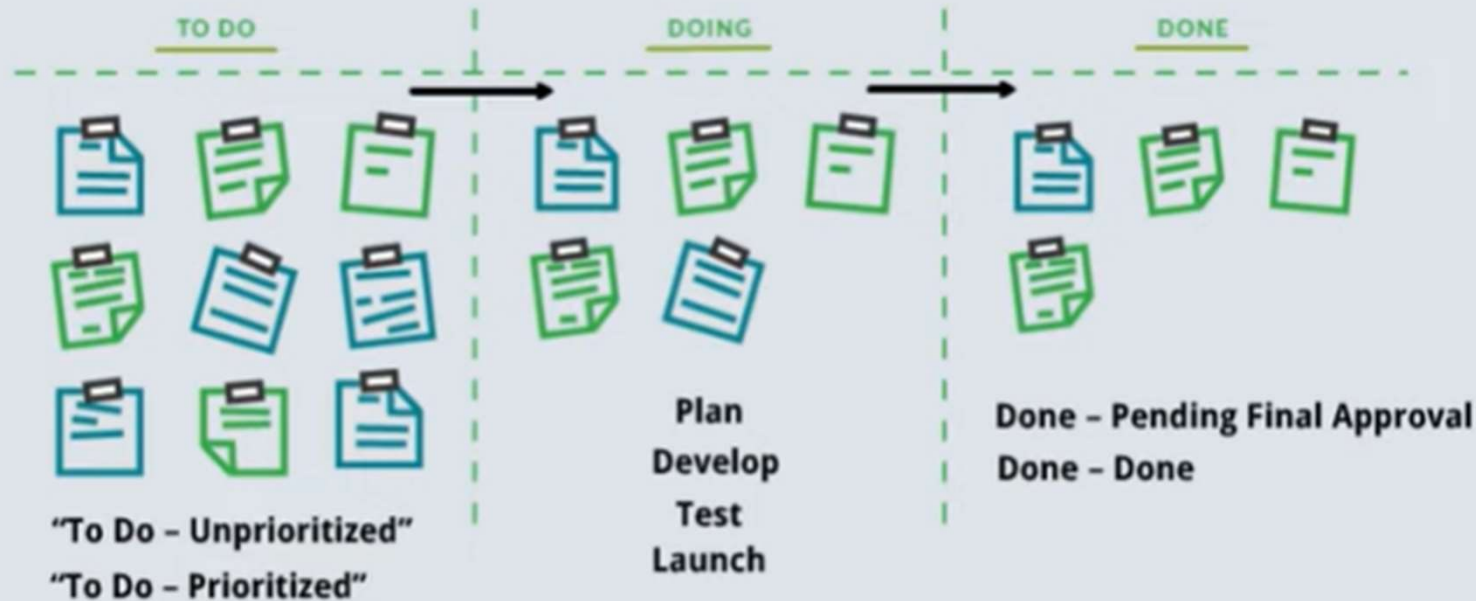
- Workflow management methods to help an organization organize and improve work systems
- Starting from the manufacturing industry (Toyota), currently Kanban is used in the scope of Agile software management
- Kanban (Japan) = Visual board

Kanban

- Production and Transport Instruction Tools
- Tools for visual control
- Tools for Kaizen Process
- As a Change Adjustment

What is a Kanban Board?

KANBAN

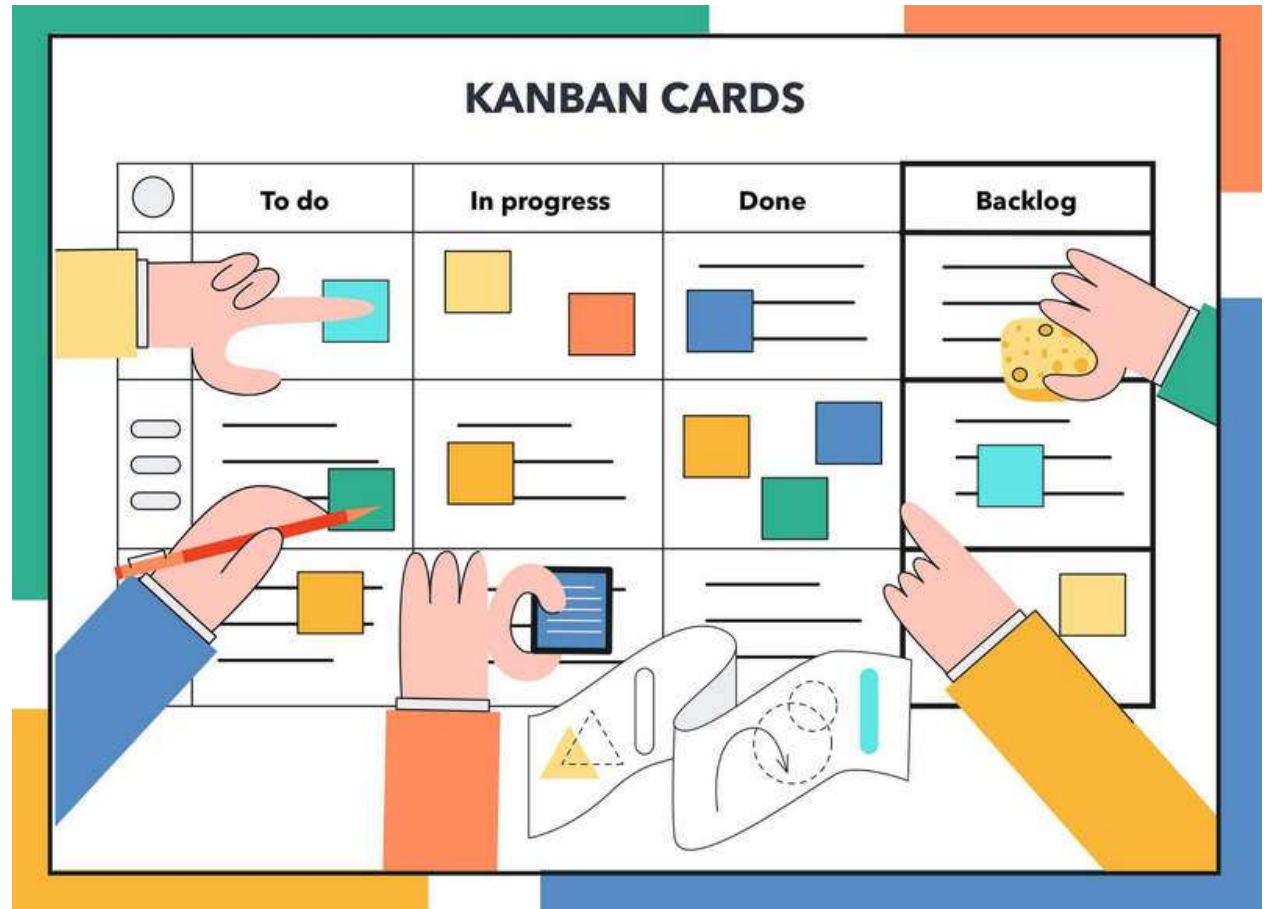


You can design your Kanban board to reflect on each of these steps:

To Do - Unprioritized > To Do - Prioritized > Plan > Develop > Test > Launch > Done - Pending Approval
> Done - Done.

Kanban

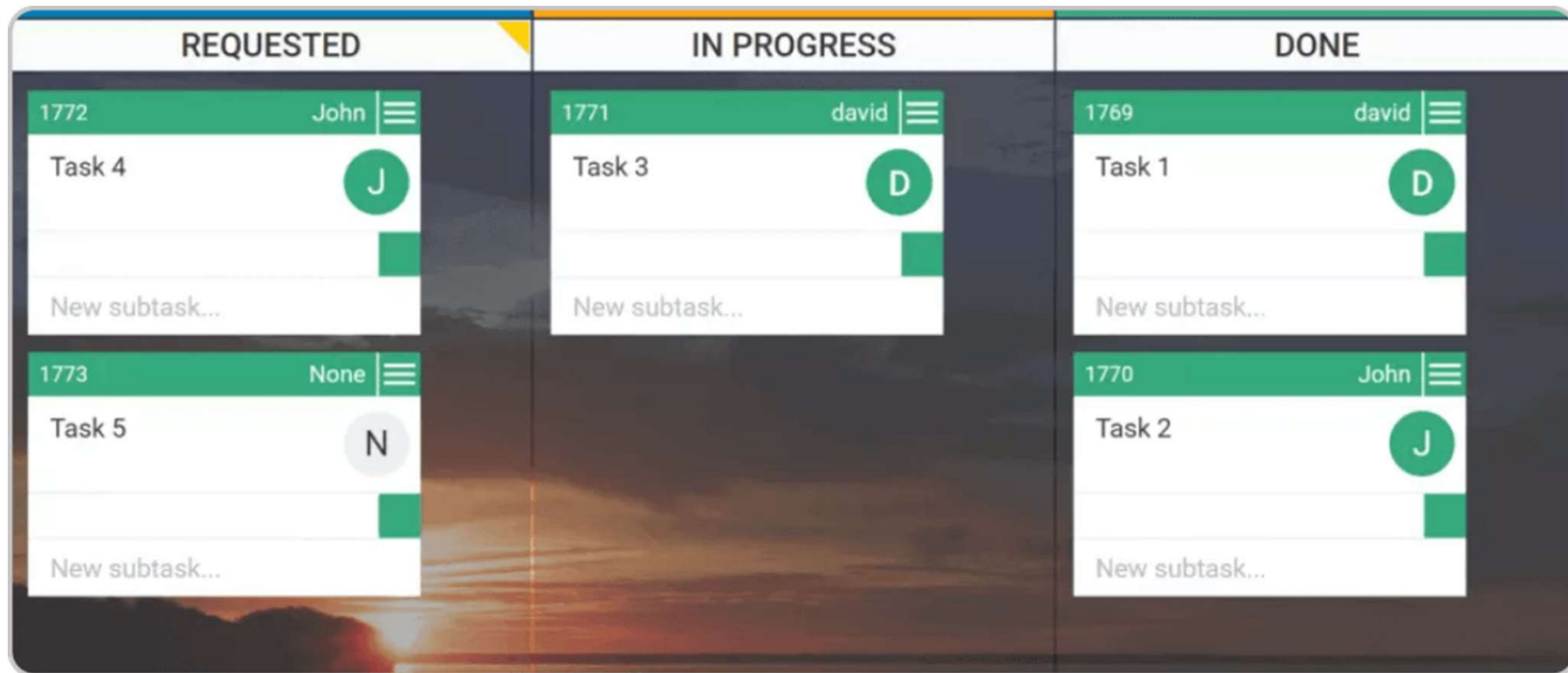
Image source:google.com



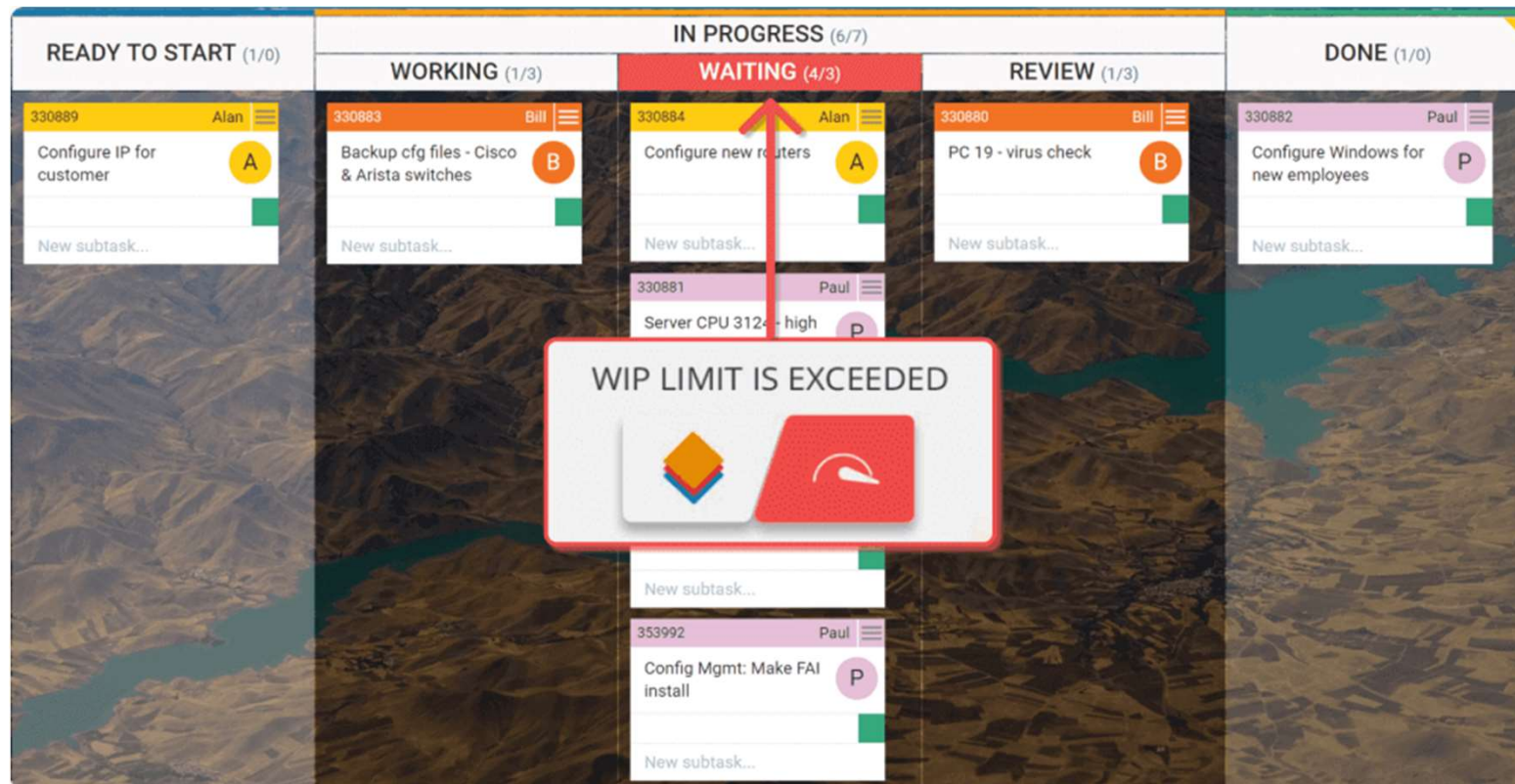
Kanban Principles

- Workflow visualization
- Limit work in progress
- Manage workflows
- Make a policy explicit process (explicit process policies)
- Apply feedback loops
- Improve collaboratively

Visualization workflows



Limit *work in progress*



Manage workflows

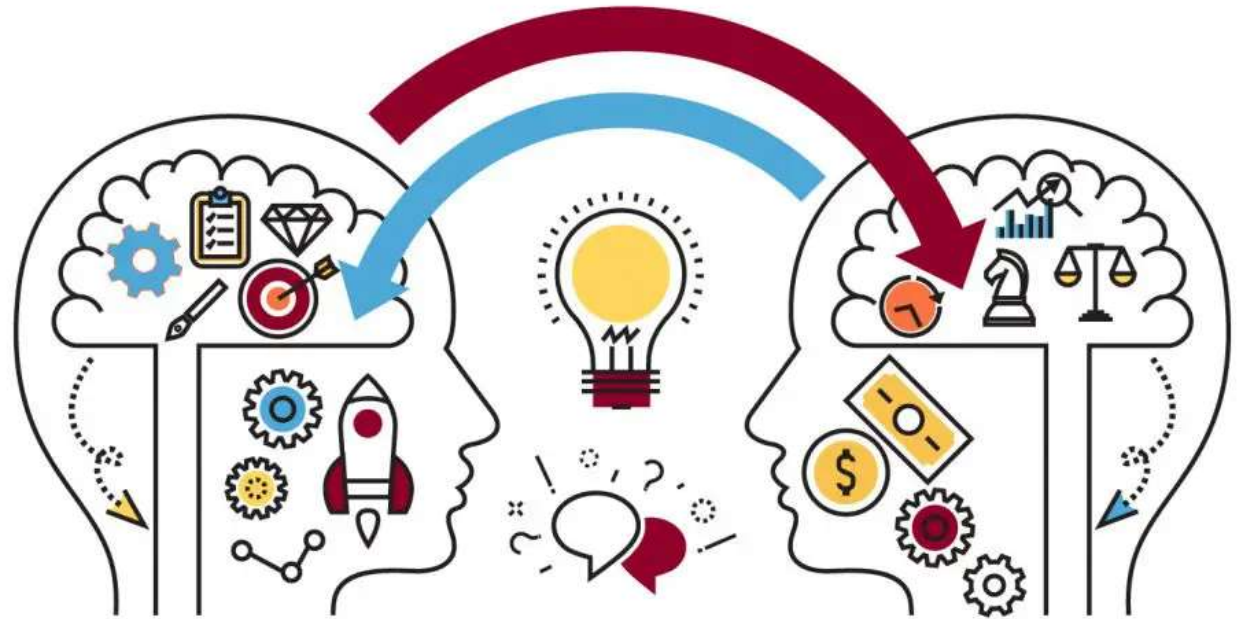


- Focus on managing the work, not the people doing the work

Make a policy explicit process (explicit process policies)



- All processes must be defined, known, and understood



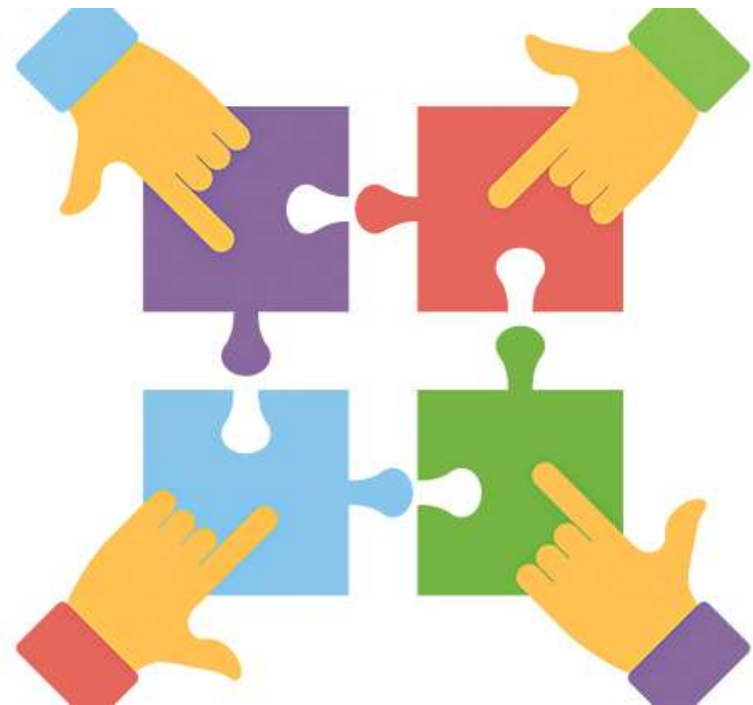
Repetition of feedback loops

- Repeated and periodic reviews and feedback are carried out to deal with potential changes and minimize errors



Improve collaboratively

- If there is a change, then the change is done collaboratively



Advantages and benefits of applying Kanban

- Increased workflow visibility
- Increased delivery speed
- Achievement of objectives in line with their implementation
- Predictability increases
- Better dependency management
- Increased customer satisfaction

Scrum vs Kanban

	Kanban	Scrum
Modifications or alterations	Allows for changes or iterations to an ongoing project. This is so that there is continuous improvement before the project is completed.	It is not recommended or possible for changes to occur during the sprint process.
Productivity measurement	Measure productivity using cycle time or the amount of time it takes to complete a full section of a project from start to finish.	Success or productivity is measured based on sprints. Where each sprint is arranged sequentially and will move to the next sprint if the previous sprint has been successful.
Roles and responsibilities	There are no specific roles predefined for a team. This is because the team is encouraged to collaborate and help if there is a team that is overwhelmed.	Each team member has a predefined role. Just as the product owner defines goals and objectives, the Scrum master determines the schedule and team members carry out their work.
Delivery timelines	Products are delivered continuously according to needs as well as delivery timelines determined by the business.	The outcome of the work is determined by the sprint because the sprint has a specific period of time given to the members to complete their work.

Source

- <https://kanbanize.com/kanban-resources/getting-started/what-is-kanban>
- <https://accurate.id/marketing-management/kanban-is/>
- <https://www.ekrut.com/media/difference-kanban-and-scrum>

Any questions?