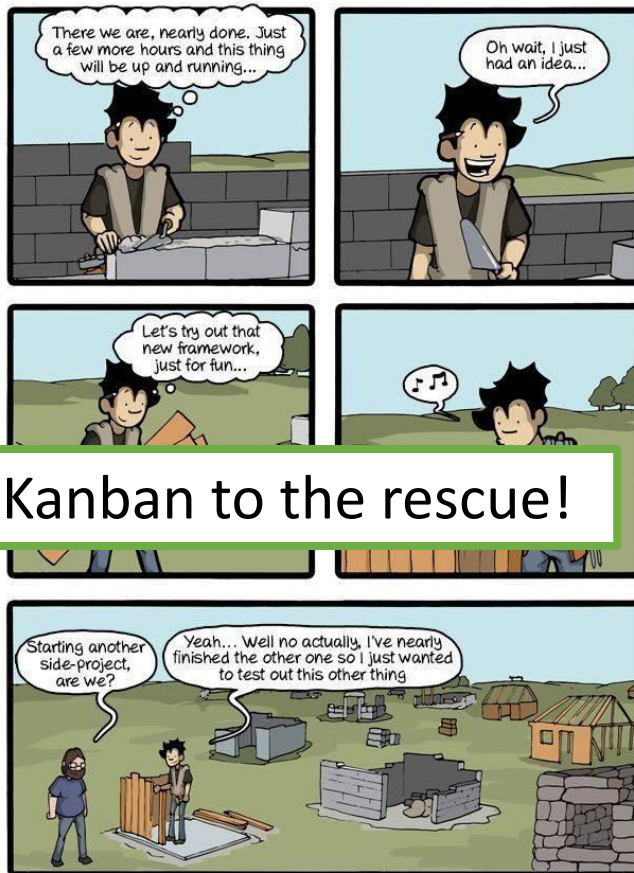


CS3213: Foundations of Software Engineering

Agile Frameworks: Kanban

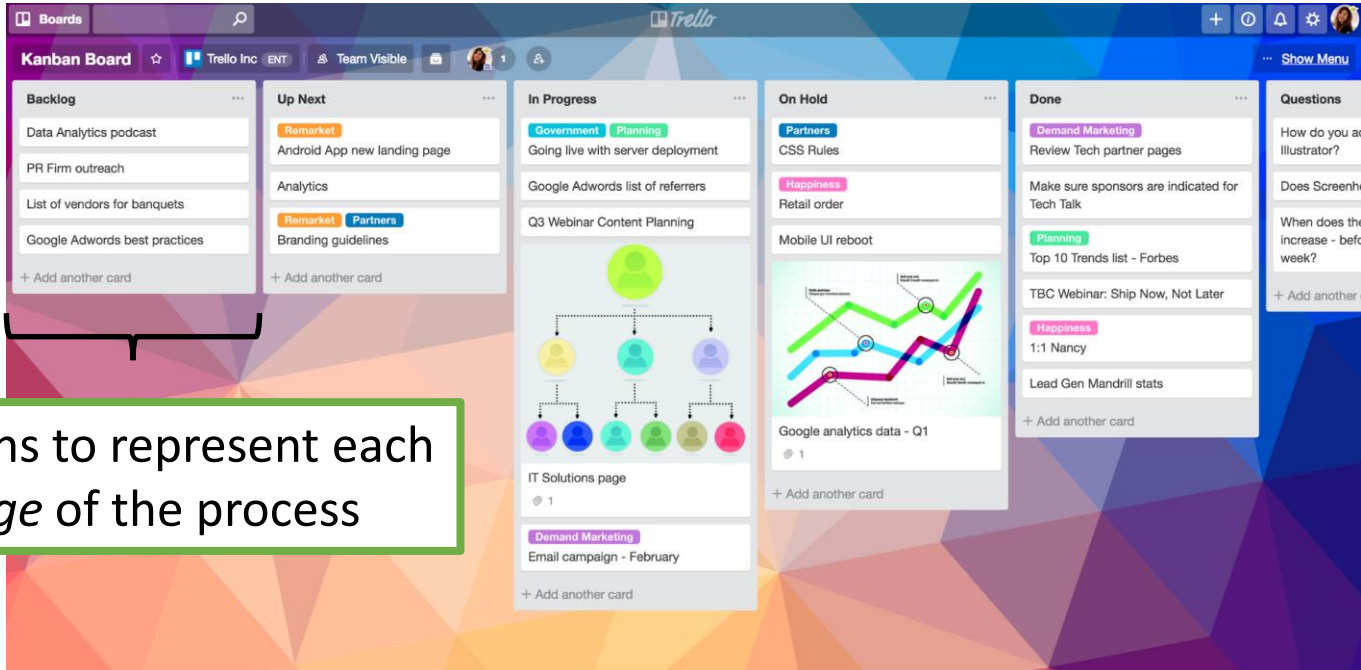
Side-project



Kanban Board



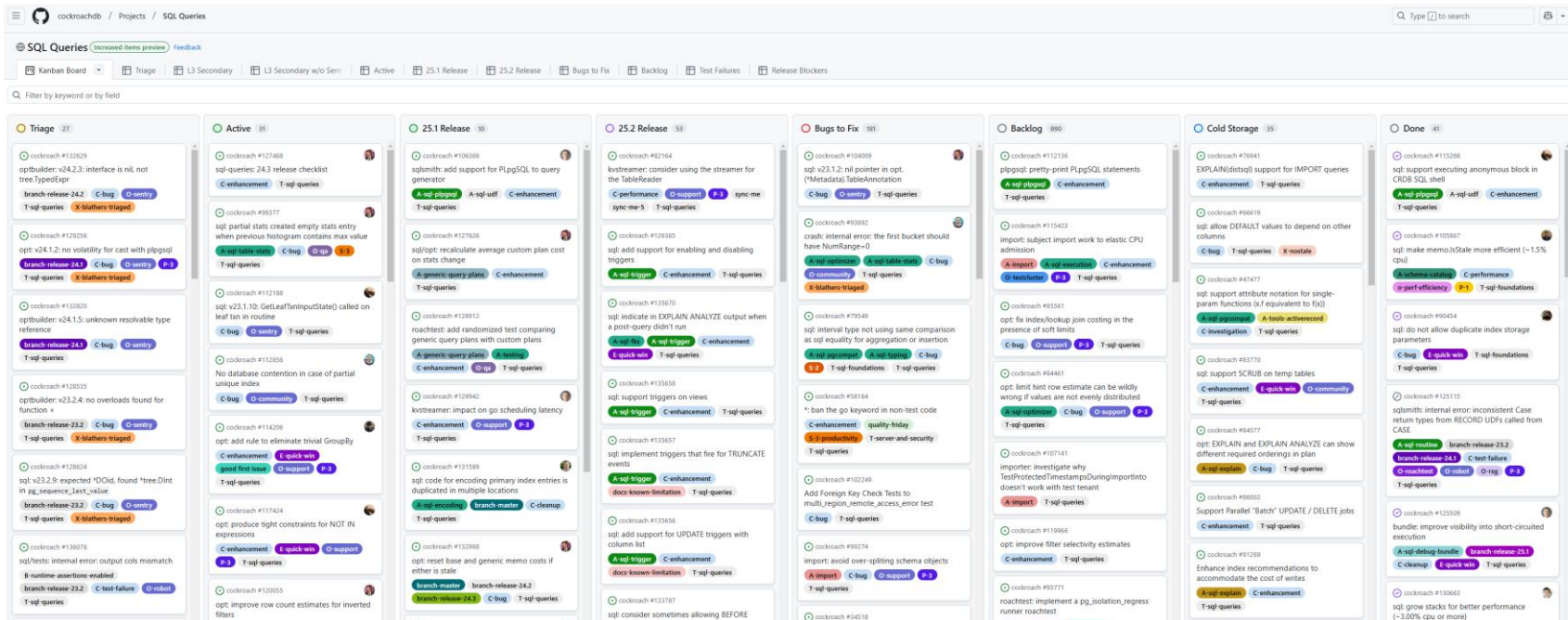
Kanban Board



Kanban Board



Kanban Board



Physical Kanban Board

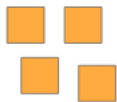





<https://www.atlassian.com/agile/kanban/boards>

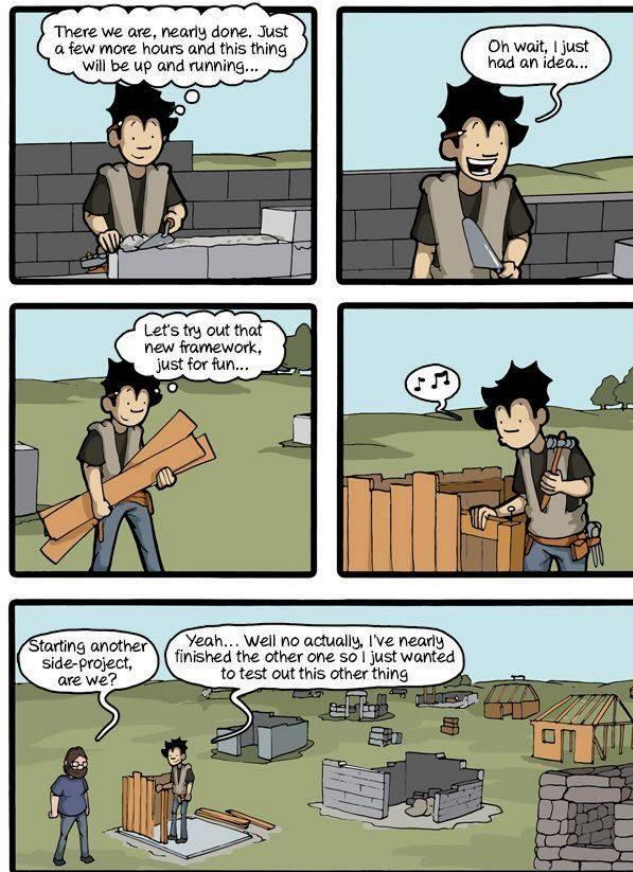
Flow

- **Flow**: movement of potential value through a system
- Kanban optimizes *flow*
- Enforces a *work in progress (WIP) limit*



Backlog	Creating (WIP: 3)	Review (WIP: 2)	Publishing (WIP: 1)	Done
				

Side-project





Definition of Workflow (DoW)

- ***Definition of Workflow (DoW)***: explicit shared understanding of flow, which requires a definition of various concepts
- One or more *defined states (visually represented as stages)* that the work items flow through from started to finished
 - Including policy how work items can flow through each state
- Units of value, which are referred to as *work items (or items)*
- When work items are *started* and *finished* within the workflow
- A definition of how WIP will be controlled from started to finished



Kanban and Scrum

- In Scrum, development is done in Sprints, while in Kanban, there is a constant flow
- Scrum is more prescriptive and provides more structure (e.g., in terms of artifacts, roles, or timeboxing)
- Kanban also works well for small teams (>0 persons)



Summary and Key Points


- Visual system with columns (“state”) and cards (“work item”)
- Key concept of flow: work items “flow” through the different states
- Definition of Workflow defines the flow of the system as well as a work in progress limit (WIP limit)

Kanban: Recommended Talk



Agile Project Management with Kanban | Eric Brechner | Talks at Google

Kanban

 KANBAN GUIDES

English ▾

Kanban Guides

Learn what Kanban is and how to apply it to optimise the flow of value through a process. This is your comprehensive resource for Kanban knowledge and practices. Kanban Guides is the home of the The Kanban Guide, and the Open Guide to Kanban. It is a free, community-driven reference for applying Kanban in knowledge work. The guides define the core practices, and metrics necessary to improve flow, optimise value delivery, and enhance team sustainability. These guides support scalable Kanban adoptions across diverse industries and complement other agile, lean, and flow-based approaches.

The Kanban Guide

Choose [The Kanban Guide](#) if you're new to Kanban or need a stable, minimal reference. It's ideal for Kanban system members who want to start simple and build understanding.

[Read online](#) [View Translations](#) [View History](#)

At a Glance

Purpose:	Minimal, official reference
Ethos:	Focused, stable, canonical
Audience:	Kanban system members wanting a clear baseline
Use Case:	What is Kanban at its core?
Content:	Clear, lightweight, and essential
Update Model:	Periodic, curated

Open Guide to Kanban

Choose the [Open Guide to Kanban](#) if you're working across approaches or want more context and flexibility. It's well-suited to those with Lean, Agile, Scrum, or Product Management experience who want to adapt Kanban to their environment.

[Read online](#) [View Translations](#) [View History](#)

At a Glance

Purpose:	Community-expanded handbook
Ethos:	Inclusive, evolving, collaborative
Audience:	Teams blending Kanban with other approaches
Use Case:	How do we apply Kanban in our context?
Content:	Rich with examples and extensions
Update Model:	Community-driven, iterative