Kanban

Kanban

Kanban – a common technique used in Lean software development

» a super simple, highly effective way of organizing projects visually

kanban

» a set of columns labeled by a particular stage in the development process
» each feature or task is placed under the column which represents its current state

example: cleaning the house with housemate before preparing a dinner party in a few days

- a Kanban with three columns: To Do, Doing, and Done
- tasks writen on sticky notes

Kanban

basic idea of Kanban

put things into categories on a board and move them along the board as things get done.

- a way of tracking what's being done throughout your project.
- a way of making sure that the progress of your project is steady.

- Nothing gets done until it's absolutely needed to get done.
- And nothing is pushed through unless it's considered fully done.

- » deciding as late as possible and eliminating waste
- » a core aspect of just-in-time manufacturing

Just-in-time manufacturing

"Nothing gets done until it's needed."

- car body & wheels problem: each set of wheels is produced just in time for when the car body is ready for them.
- software development: software's features

Quiz

What is the term from the manufacturing industry which inspired the philosophy in Kanban to only do one thing a time when it's needed?

- A. Toyota Manufacturing.
- B. Just In Time Manufacturing.
- C. When Needed Manufacturing.
- D. Lean Manufacturing.

Quiz

What is the term from the manufacturing industry which inspired the philosophy in Kanban to only do one thing a time when it's needed?

- A. Toyota Manufacturing.
- ✓ B. Just In Time Manufacturing.
- C. When Needed Manufacturing.
- D. Lean Manufacturing.

Kanban

Kanban
an easy technique to implement within almost any software development process or methodology.

- the first column, To Do column: backlog
- the other columns: phases (of a certain process in use)
  » Requirement Specification, Architecture Design, Coding, Testing, Customer Review, and then Release.

Kanban manufacturing process & supermarkets

supermarket

- When a customer pulls an item off a shelf in a supermarket, that item is then replenished by the storeroom.
- The supermarket only orders the amount of product which they think they'll need for that shipping period.

software development

- When a feature is completed, it's pushed onto the next phase of development.
- Then, a slot in the current phase is made free, and another feature is pulled into it.
- » nothing gets done too soon or all at once.

Kanban allows development teams to respond to changing client needs with great success.

review

- processes, phases, activities, and tasks, and how they relate to each other.
- lifecycle processes and subprocesses
- software engineering activities
- linear processes, spiral and unified process models
- types of prototyping and continuous delivery.
- methodologies: Extreme programming and Scrum
- variations of agile, Lean software development
- Kanban, to track a team's progress and ensure that everyone is following a just-in-time production strategy