



Technology Start-ups

Lecture 12

Don't Be a Feature Pusher

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CISC 879 : Technology Start-ups

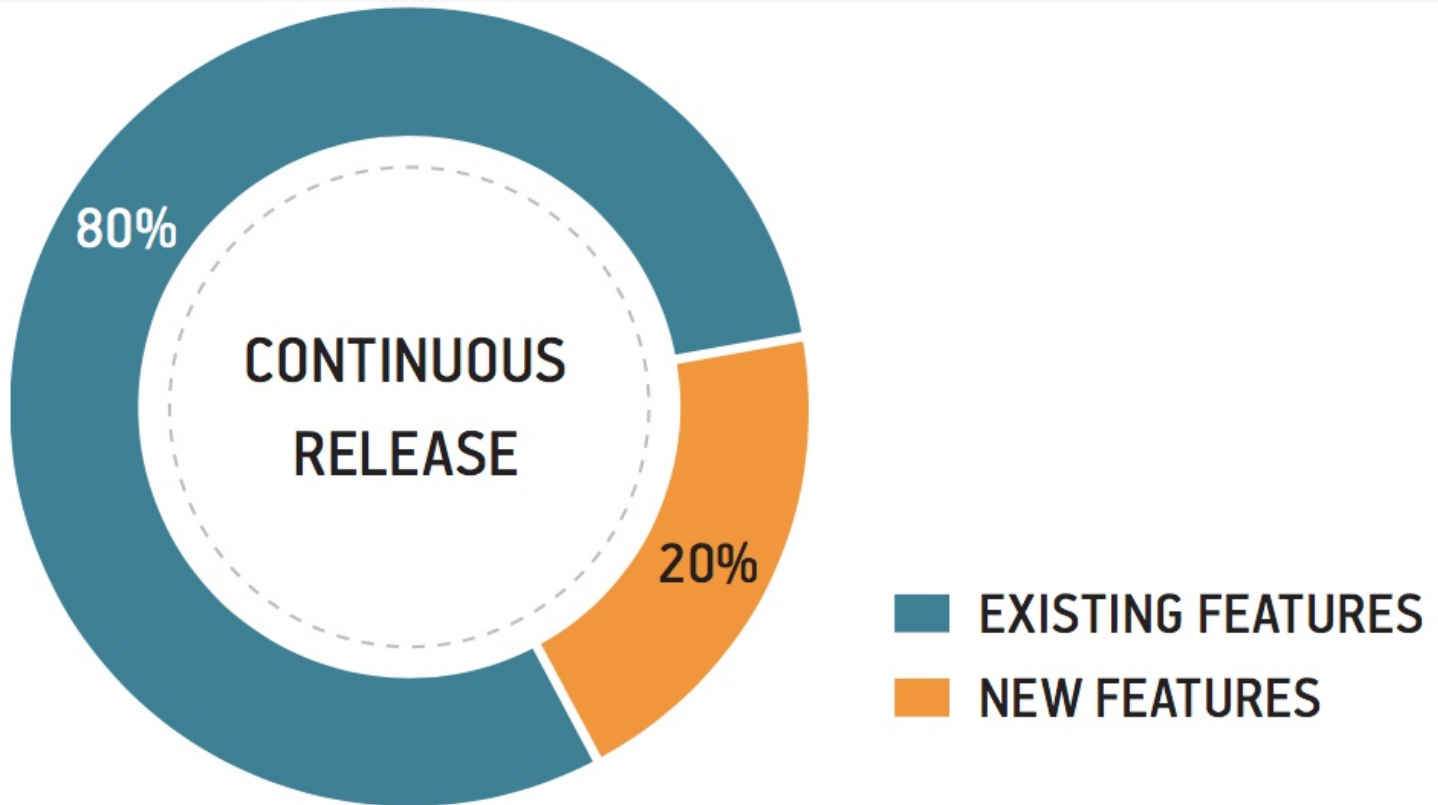


Features must be pulled!

- Most features dilute the UVP
- Don't give up on MVP too early
 - Put down the compiler and understand why customers aren't buying!
- All features have a hidden cost
- Still don't know what customers want



Implement 80/20 Rule

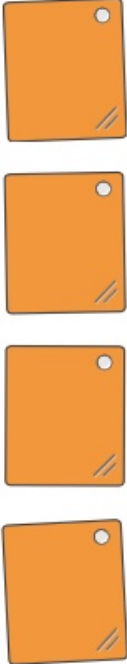

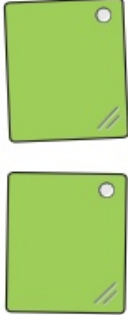


After launch, 80% of time should be spent continuously improving existing features



Your Pipeline

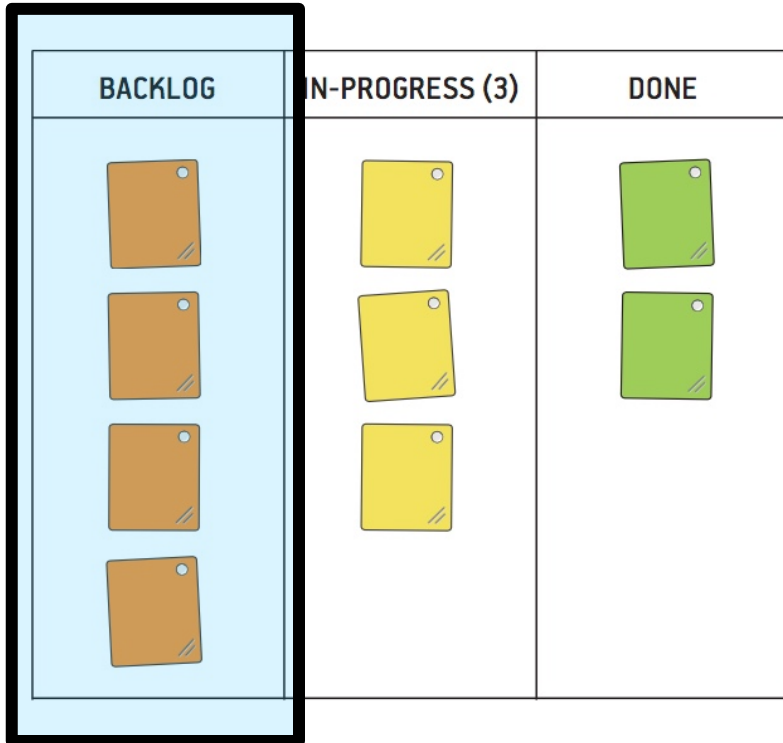
Basic Kanban Board

BACKLOG	IN-PROGRESS (3)	DONE
		



Your Pipeline

Basic Kanban Board

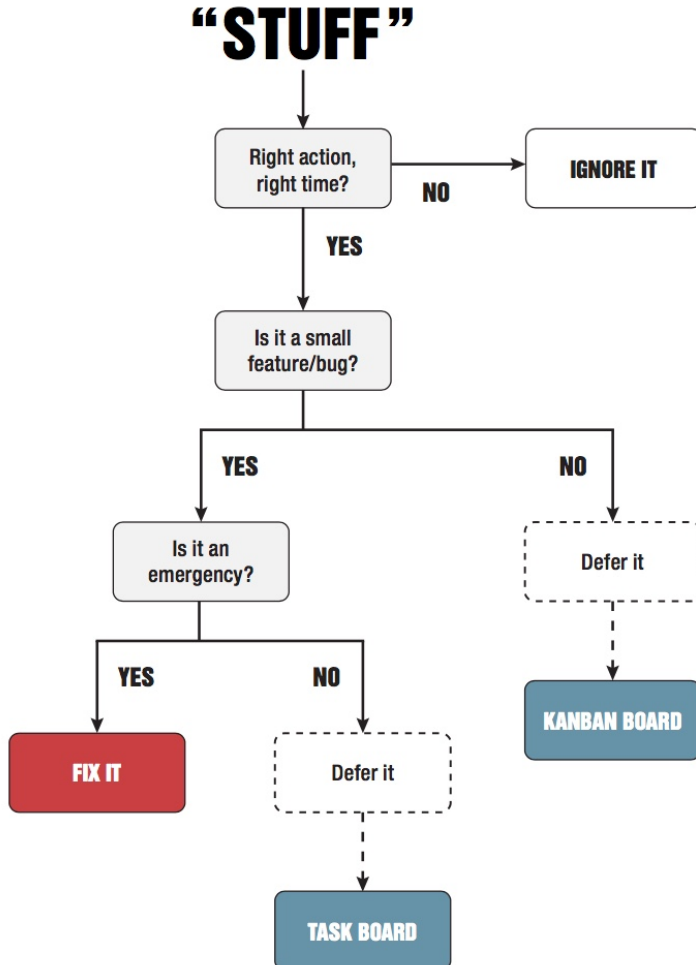


Backlog (aka "TODO")

- Only MMF go here
 - (MMF= minimal marketable features)
- Smaller tasks that makeup MMF go in a lighter-weight task board



What to Put in Backlog?

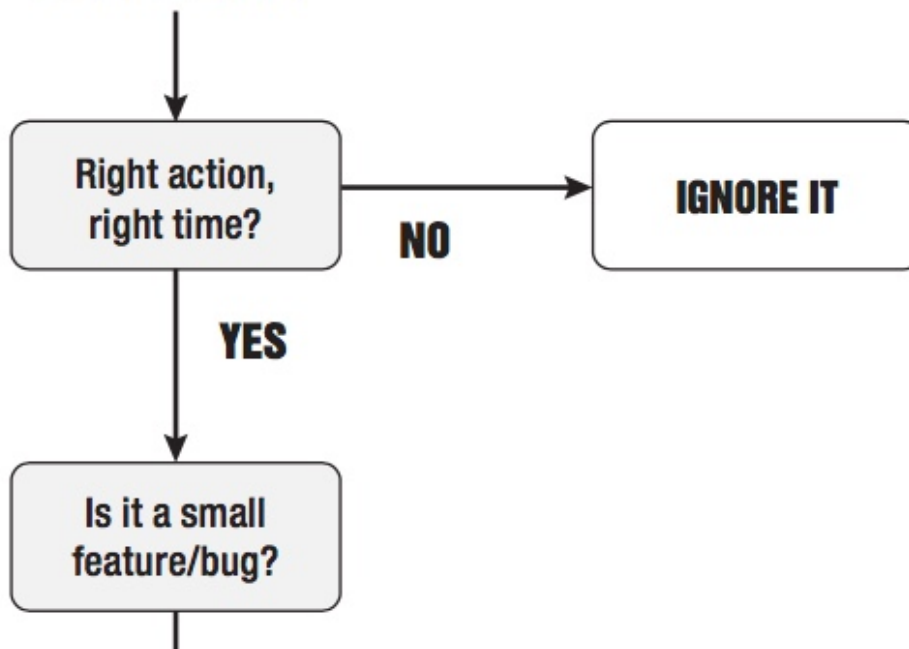


Use this workflow!



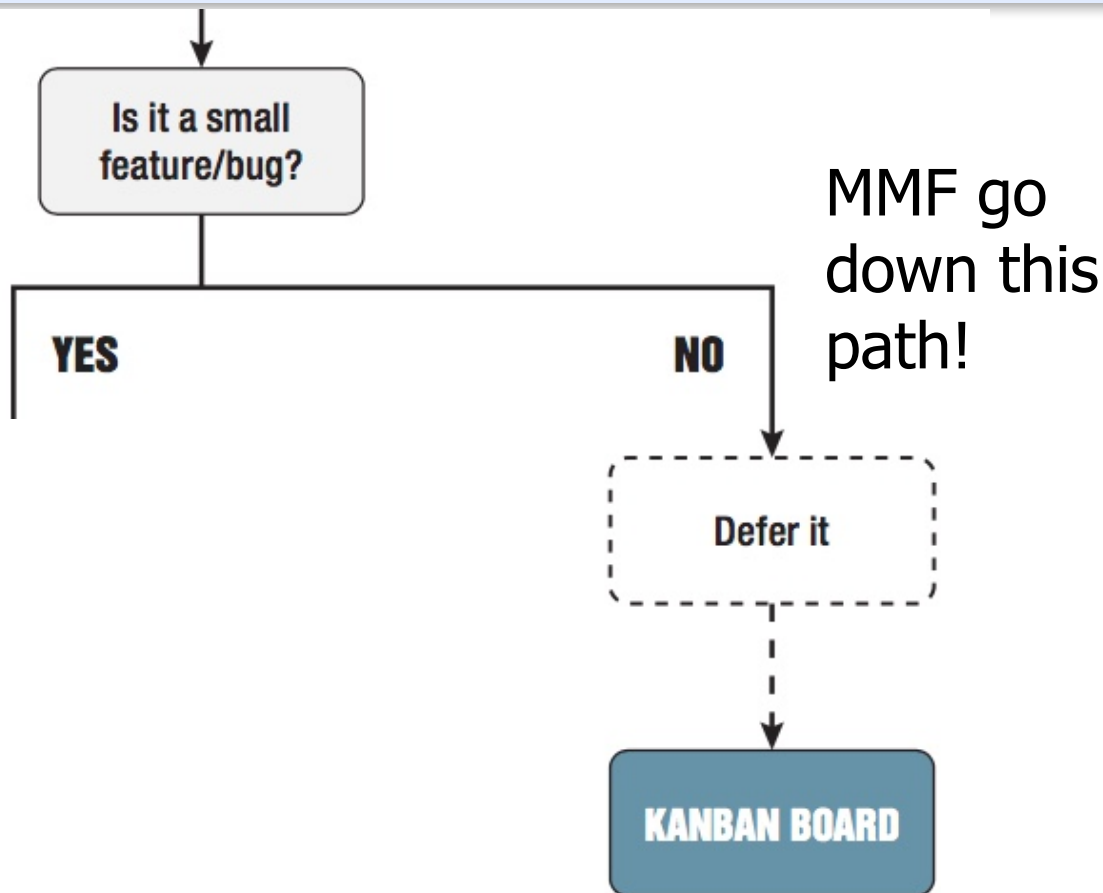
What to Put in Backlog?

“STUFF”



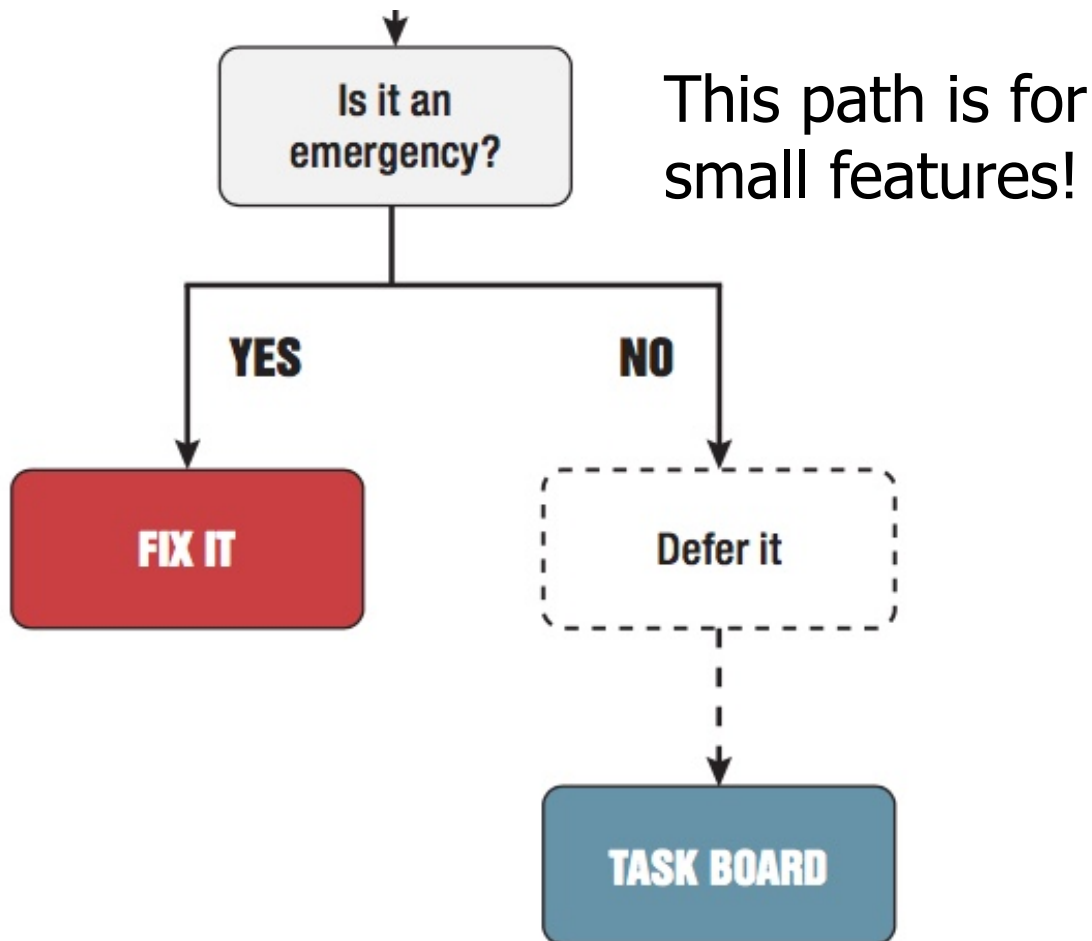


What to Put in Backlog?





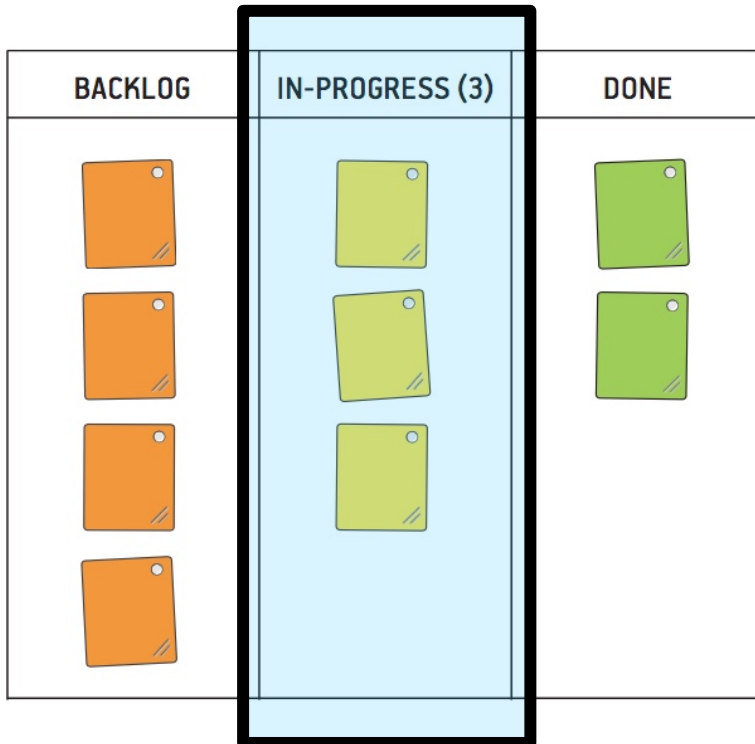
What to Put in Backlog?





Your Pipeline

Basic Kanban Board



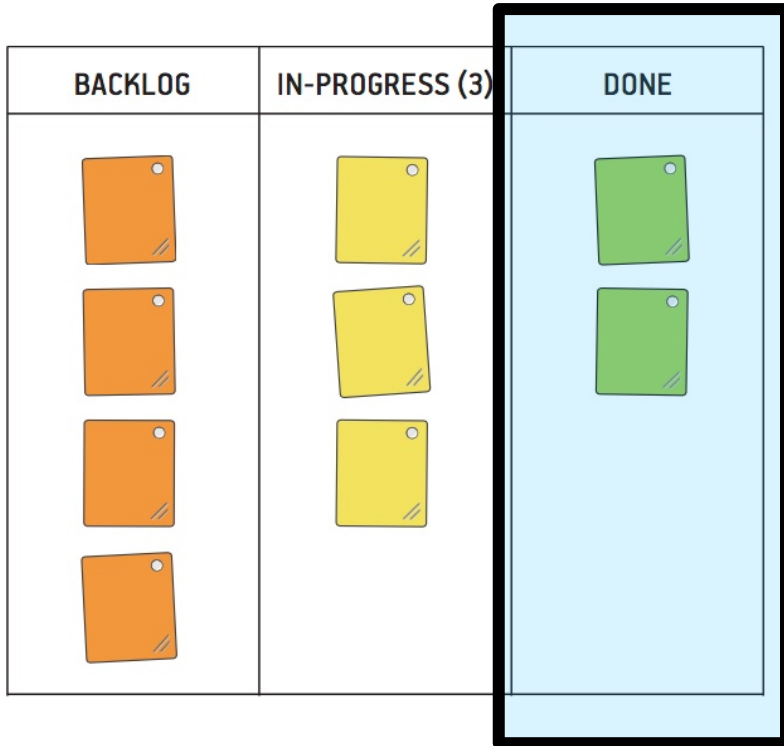
In-Progress (aka "Doing")

- WIP in paranthesis
 - (Work-In-Progress limit)



Your Pipeline

Basic Kanban Board



Done here is arbitrary

- Code complete
- Testing complete

Book recommends this means
“learning validation” complete



Your Pipeline






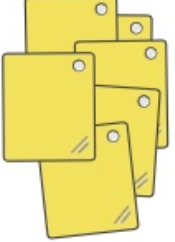
Was this feature any good?

Or, add a new phase in your Kanban board for “validated learning”



Advanced Kanban Board

Goal: Work on MVP version 1.0 (defined in Dev-Doc.pdf)




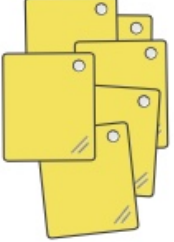
BACKLOG	IN-PROGRESS (3)					DONE	VALIDATED LEARNING
BACKLOG	IN-PROGRESS	DONE	CODE	PARTIAL ROLLOUT	VALIDATE QUALITATIVELY	FULL ROLLOUT	VERIFY QUALITATIVELY
							

Goal: Add a goal on top to get everyone on same page!



Advanced Kanban Board

Goal: Work on MVP version 1.0 (defined in Dev-Doc.pdf)

BACKLOG	IN-PROGRESS (3)					DONE	VALIDATED LEARNING
BACKLOG	IN-PROGRESS	DONE	CODE	PARTIAL ROLLOUT	VALIDATE QUALITATIVELY	FULL ROLLOUT	VERIFY QUALITATIVELY
							

If feature fails validated learning it can be
1) Killed or 2) sent back to previous stage



Advanced Kanban Board

Goal: Work on MVP version 1.0 (defined in Dev-Doc.pdf)

BACKLOG	IN-PROGRESS (3)					DONE	VALIDATED LEARNING
BACKLOG	IN-PROGRESS	DONE	CODE	PARTIAL ROLLOUT	VALIDATE QUALITATIVELY	FULL ROLLOUT	VERIFY QUANTITAVIELY

Qualitative learning quicker than Quantitative learning



Kanban Board Summary

Backlog

- Use feature workflow
- Customer-pulled features
 - Call customers:
 1. try to identify root problem
 2. Try to talk them out of it
- Internally-pulled features
 - Same as above



Kanban Board Summary

Mockup-Demo-Code

- For each feature create a mockup
 - Start with paper sketches, but quickly switch to HTML/CSS
- Conduct interviews with demo
 - Validate feature
 - Move forward after strong signal
- Code



Kanban Board Summary

Validate Qualitatively

Partial rollout

- Release to a small number of customers
- Conduct interviews as before
- Iterate to get strong signal or to correct any issues



Kanban Board Summary












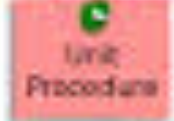




Verify Quantitatively

1. Full rollout
 - Reduce WIP from previous stage
2. Verify
 - Cohort testing

Split-testing if feature did not receive strong signal from qualitative interviews (previous stage)



Scrum Board

Stories	To Do	In Progress	Testing	Done
 <p>Filtration</p>	 <p>Configure Alarming</p>  <p>Design Graphics</p>  <p>Engineer Control Loops</p>  <p>Batching System</p>	 <p>SPCx</p>  <p>EM 3</p>  <p>Unit Procedure</p>	 <p>Test Devices</p>  <p>Confirm I/O</p>  <p>Confirm Hierarchy</p>	 <p>Unit Design Description</p>  <p>Generating Devices</p>
 <p>Blend Control</p>	 <p>Vendor Comms</p>  <p>Network Config</p>  <p>Unit Procedure</p>  <p>Alarming</p>	 <p>EM'S</p>  <p>Design Graphics</p>	 <p>Control Module</p>  <p>Test Procedure</p>	 <p>Unit Design Description</p>



Scrum Board vs Kanban Board

Stories

1. A set of tasks that form a cohesive feature (similar to an MMF)

Sprint

- The amount of time to finish stories
 - 1 to 2 weeks max
 - Main difference to a Kanban board (no sprint)