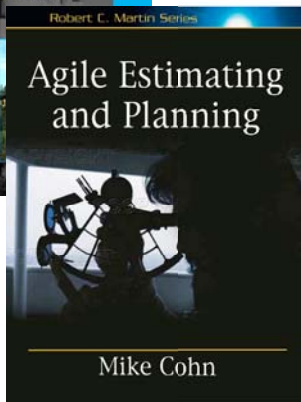


# Planning and Tracking on Agile Projects



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## Mike Cohn - background



Consultant, author,  
and speaker

- Founding member and director of Agile Alliance, Scrum Alliance, and Agile Project Leadership Network
- Founder of Mountain Goat Software



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# Imagine...

- That you're fed up with software development as a career
- And you decide to go into the landscaping business
- Your first job is moving this pile of rock from the front of my house to the back



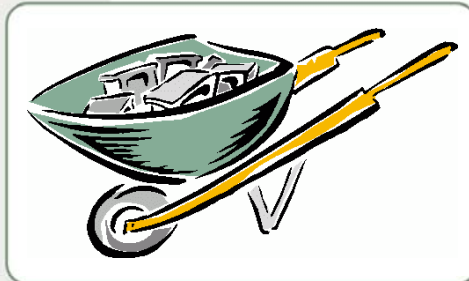
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# How might you estimate this?

- One way:
  - Look at the pile of rock and estimate how many wheelbarrow loads it represents
- After an hour, see how many wheelbarrow loads you've moved then extrapolate the total duration



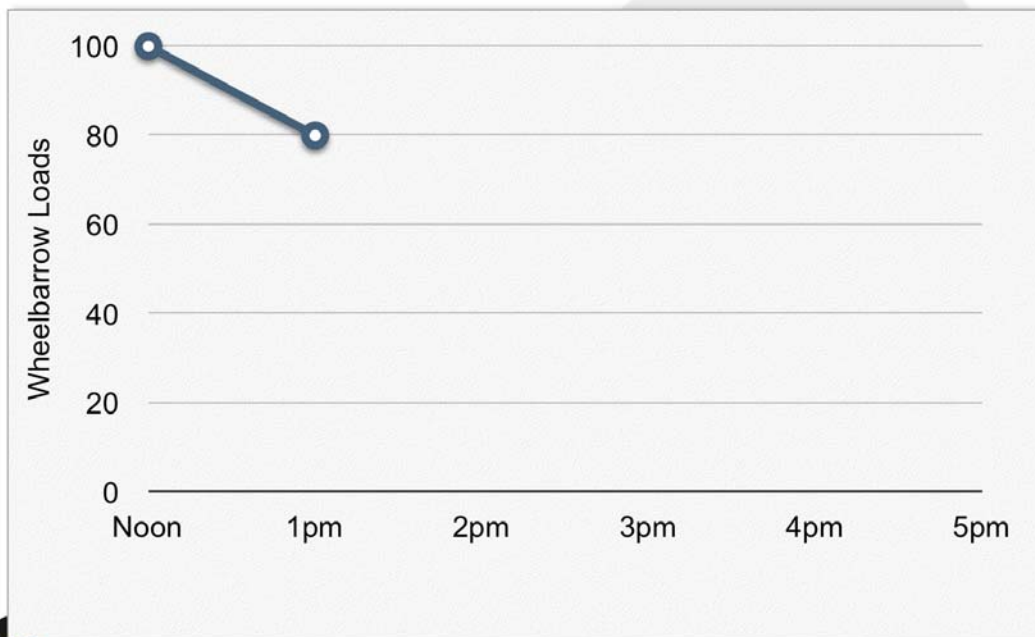
- I think that's 100 wheelbarrow loads
- After an hour I've moved 20 loads
- So, I'll be done in a total of 5 hours

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# My landscaping

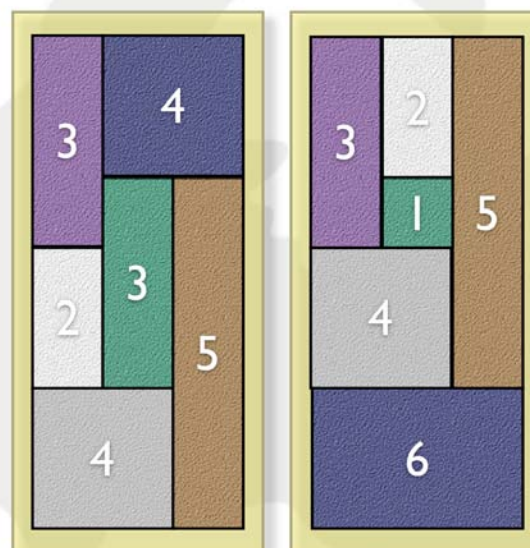


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# Release, iteration, & velocity

- A release comprises multiple iterations
- Each iteration can be thought of as a same-sized box
- Stories are put into each box until it's full
- The size of the box is the planned velocity



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# The planning onion



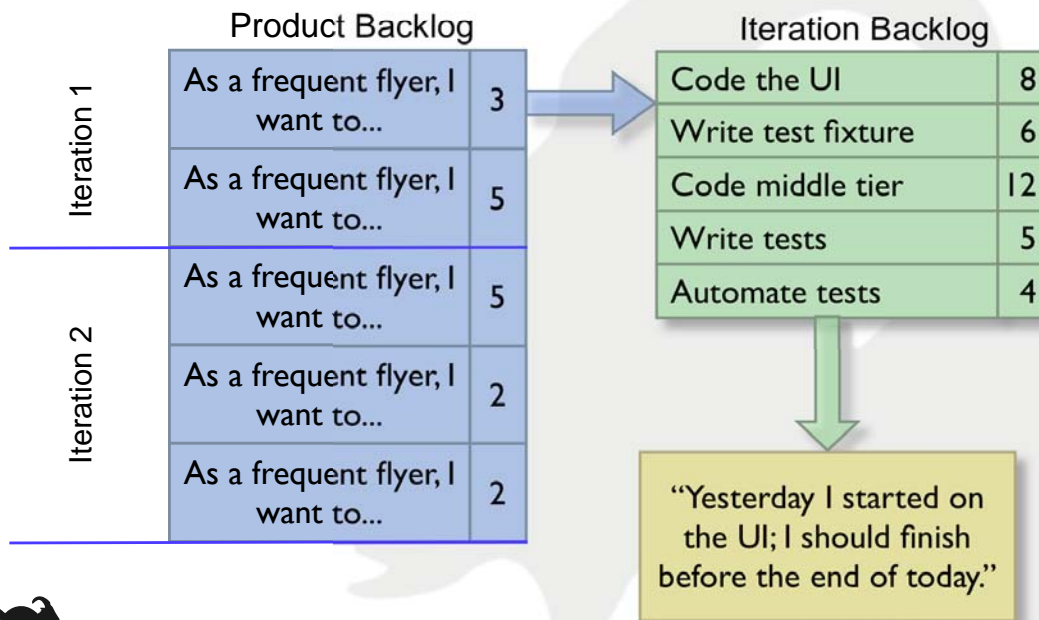
- Agile teams plan at the innermost three levels.
- Others (on the team in the company) plan at the outer levels.



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# Relating the different planning levels

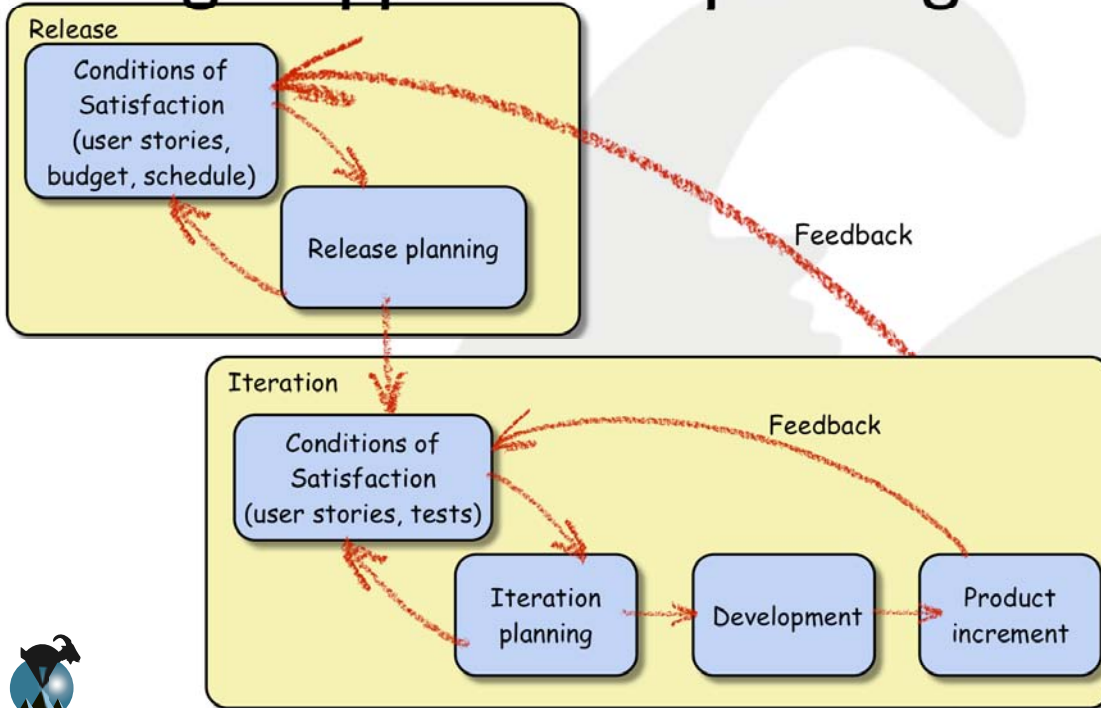


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# An agile approach to planning



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## Agenda



- Estimating
- Release planning
- Burndown charts
- Task boards



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# Story points

- The most common way for agile teams to estimate these days is in “Story Points”
- Based on a combination of the size and complexity of the work
- Unitless but numerically relevant estimates
- A 10-point story is expected to take twice as long as a 5-point story



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## Consider these two piles of work



- What story point numbers might we put on these?



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# Dog points



Assign "dog points" to the following breeds

Labrador retriever  
Dachshund  
Great Dane  
Terrier  
German Shepherd  
Poodle  
St. Bernard  
Bulldog



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## Two key advantages

- Estimating in story points
  1. Forces the use of relative estimating
    - Studies have shown we're better at this
  2. Focuses us on estimating the size, not the duration
    - We derive duration empirically by seeing how much we complete per iteration
  3. Puts estimates in units that we can add together



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# Planning poker for estimating

- An iterative approach to estimating
- Steps
  - Each estimator is given a deck of cards, each card has a valid estimate written on it
  - Customer/Product owner reads a story and it's discussed briefly
  - Each estimator selects a card that's his or her estimate
  - Cards are turned over so all can see them
  - Discuss differences (especially outliers)
  - Re-estimate until estimates converge



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## Planning poker - an example



Estimator	Round 1	Round 2
Susan	3	5
Vadim	8	5
Ann	2	5
Chris	5	8



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# Why planning poker works

- Emphasizes relative estimating
- Focuses most estimates within an approximate one order of magnitude
- Everyone's opinion is heard
- Estimators are required to justify estimates
- Estimates are constrained to a set of values
- It's quick and fun



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# Agenda



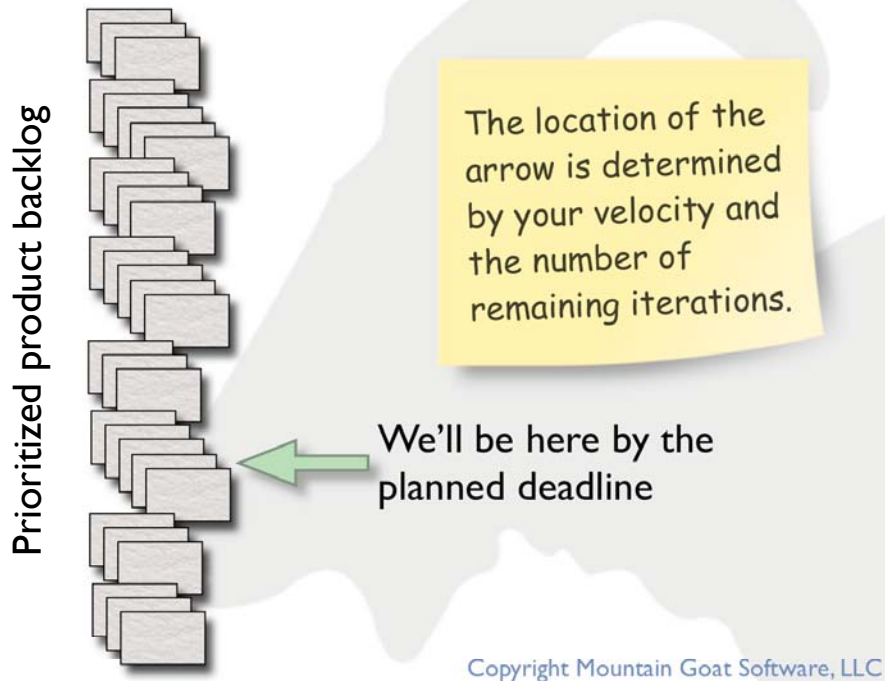
- Estimating
- Release planning
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# An agile release plan



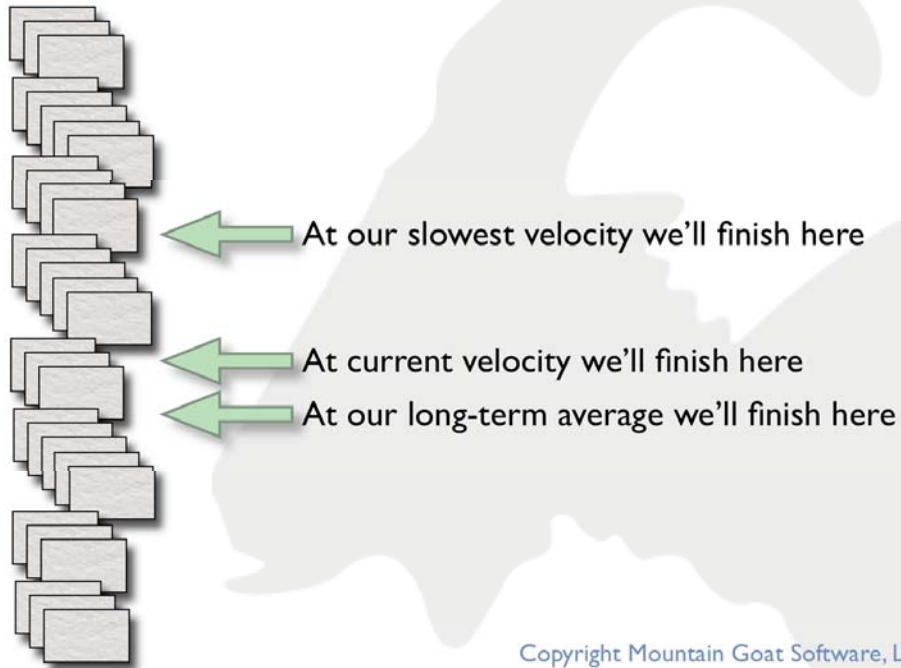
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# Look at velocity in a few ways



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# Extrapolate from velocity



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## Agenda



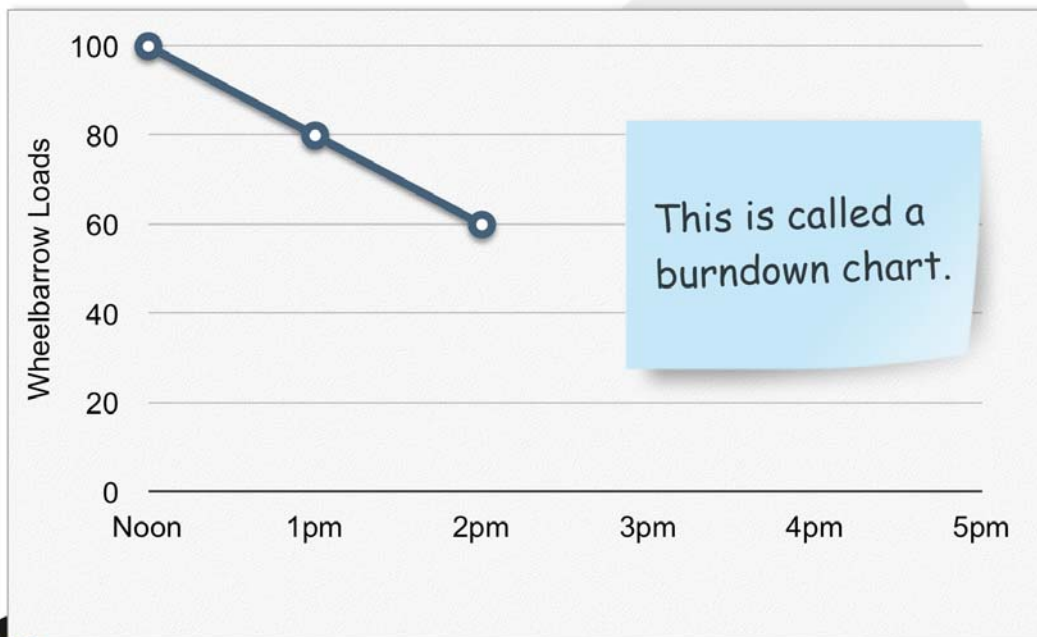
- Estimating
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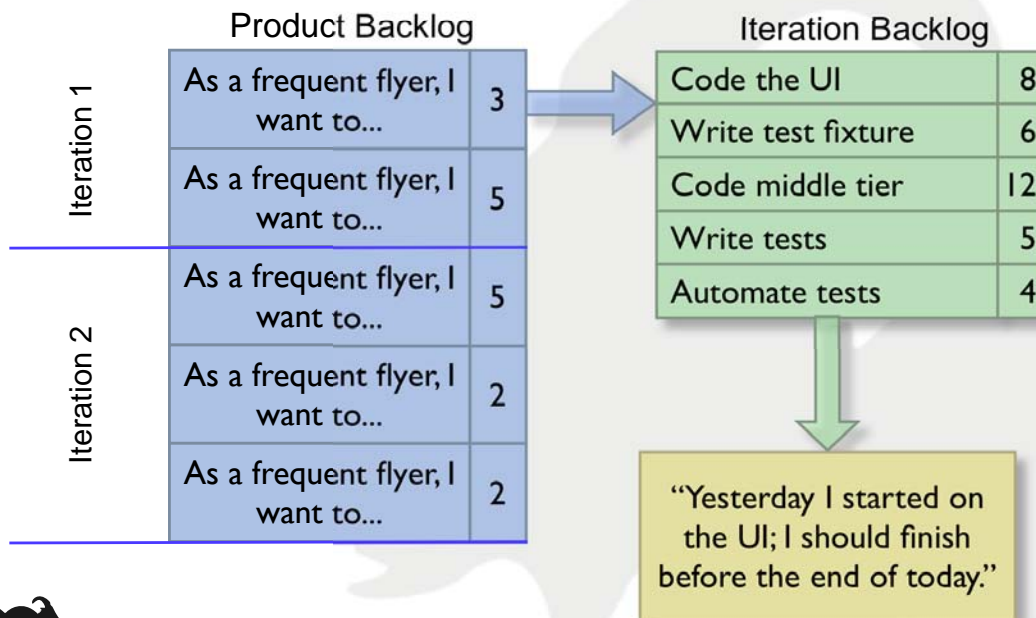
# How's my landscaping coming?



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# Remember the different levels?

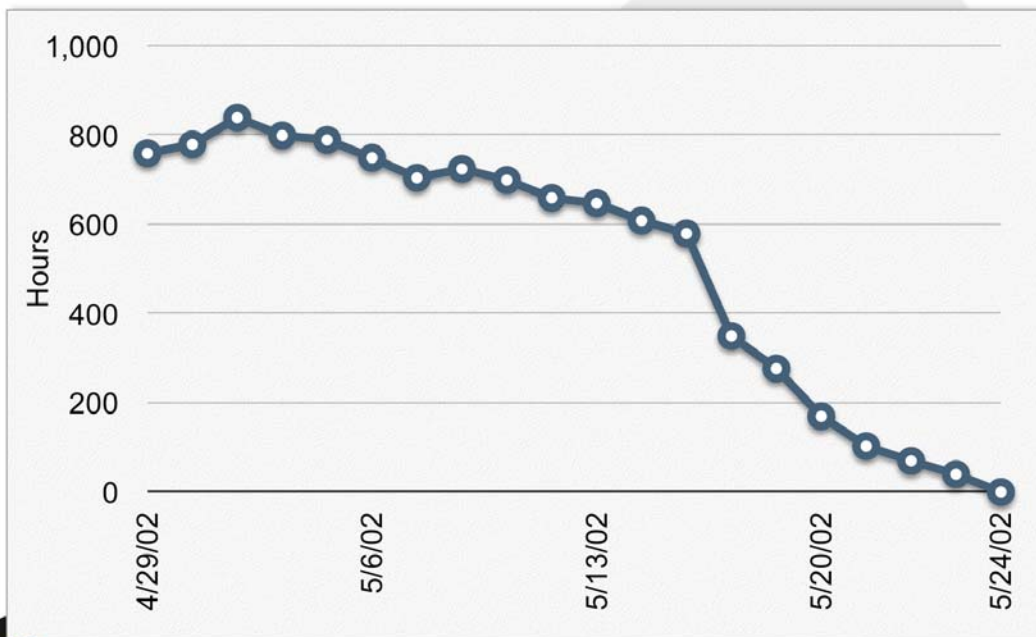


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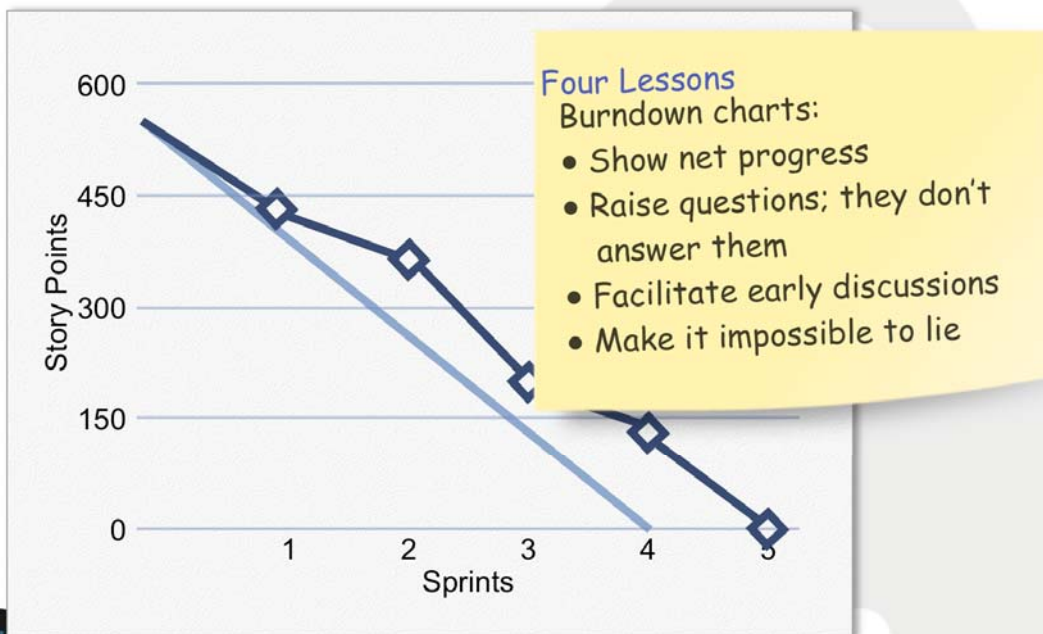
# An iteration burndown chart



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# When will this project be released?



## Four Lessons

Burndown charts:

- Show net progress
- Raise questions; they don't answer them
- Facilitate early discussions
- Make it impossible to lie

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# Agenda



- Estimating
- Release planning
- Burndown charts
- Task boards



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# Task boards

Story	To Do	In Process	To Verify	Done	
As a user, I... 8 points	Code the... 9 Code the... 2 Test the... 8	Test the... 8 Code the... 8 Test the... 4	Code the... DC 4 Test the... SC 8	Test the... SC 6	Code the... D Test the... SC 8 Test the... SC Test the... SC Test the... SC 6
As a user, I... 5 points	Code the... 8 Code the... 4	Test the... 8 Code the... 6	Code the... DC 8		Test the... SC Test the... SC Test the... SC 6



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# A sample task board



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# A cork task board



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# A hanging tack board



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# Velcro in a team room

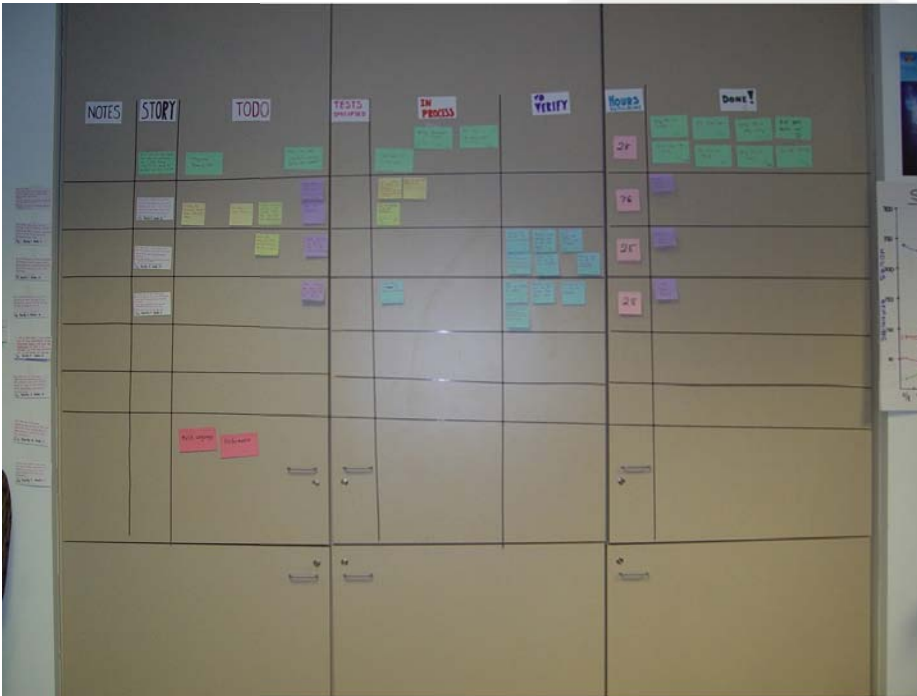


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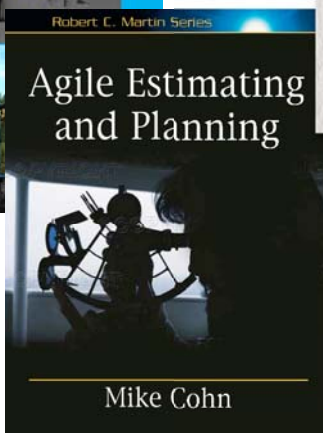
# Repurposing the cabinets



, LLC

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