Agile Estimating

User Story
"As a buyer, I want to have my shipping information confirmed so I get a chance to correct any errors"
Estimate = 8 Points

Agenda

- 2 levels of estimating precision
- What influences the size of a story?
- Planning releases
- Planning iterations
- Exercises

2 Levels of Estimating Precision

Story Points and Velocity for Planning Releases

PRIORITIZED RELEASE BACKLOG	Size in Story Points
User Story A	8
User Story B	5
User Story C	2
User Story D	20
User Story E	40

Task Hours and Capacity for Planning Iterations

ITERATION BACKLOG	Size in Task Hours
User Story A, Task 1	6
User Story A, Task 2	4
User Story A, Task 3	6
User Story A, Task 4	2

Agile Uses "Points" to Estimate Story Size

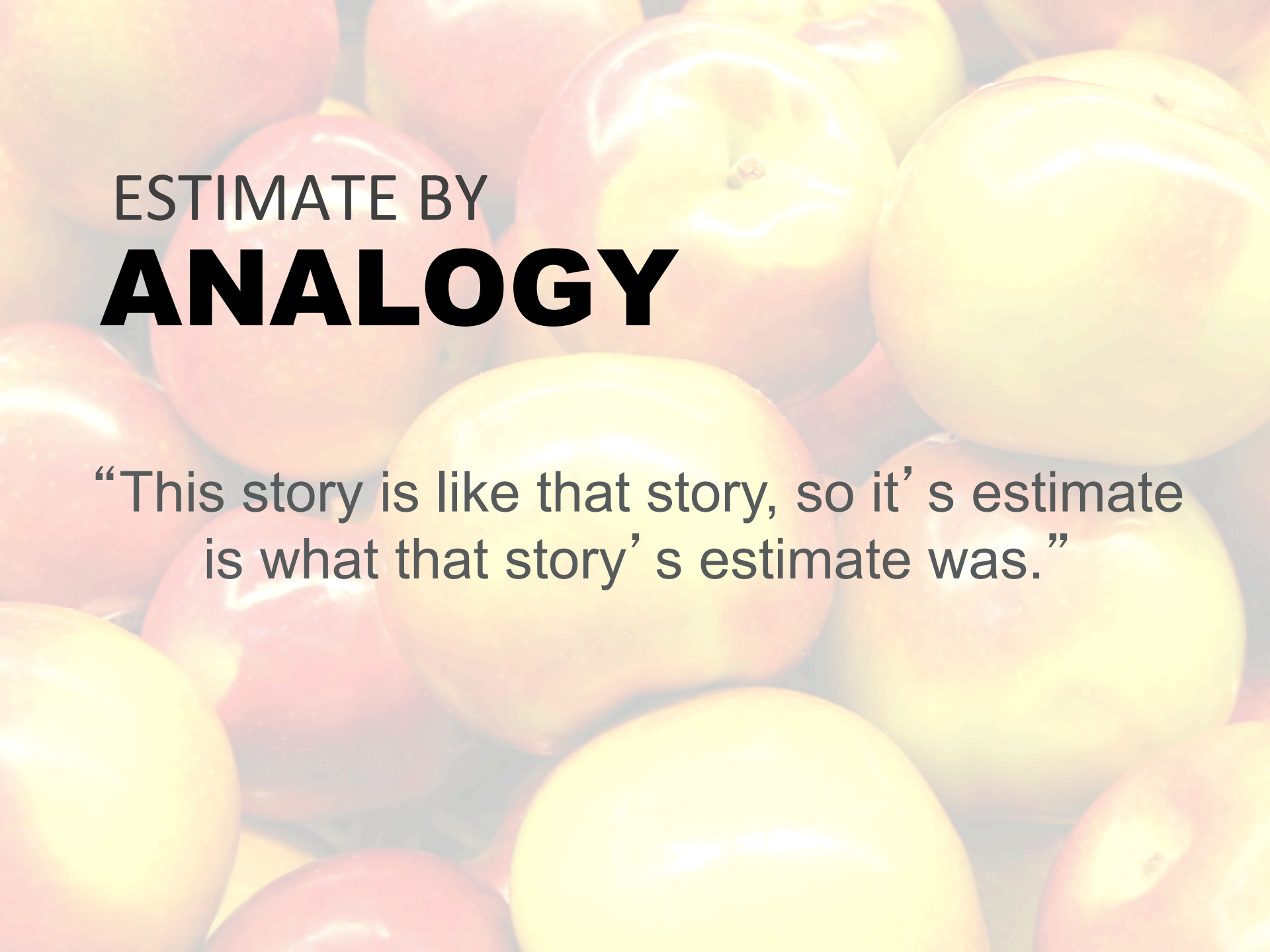
Traditional Size Estimates Are Absolute

<LINES.OF.CODE>
<FUNCTION.POINTS>
<DAYS.HOURS>

Agile Size Estimates Are Relative

Why is a *Relative* Size Measure Better?

- Humans are good at comparing size, not very good at estimating absolute
  - Can you tell the difference between a 1 and a 2?
  - How about between a 33 and a 34?
- Relative Size estimates don't change
- Estimating is faster
- Easier to reach accurate consensus on size
- Basic math still works 3 + 3 = 6

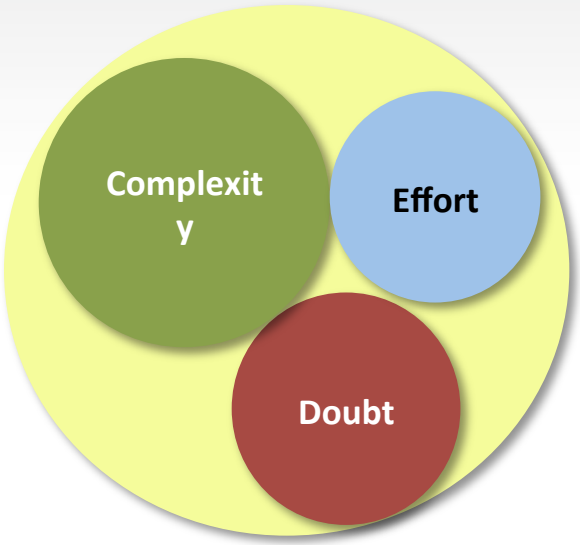


ESTIMATE BY

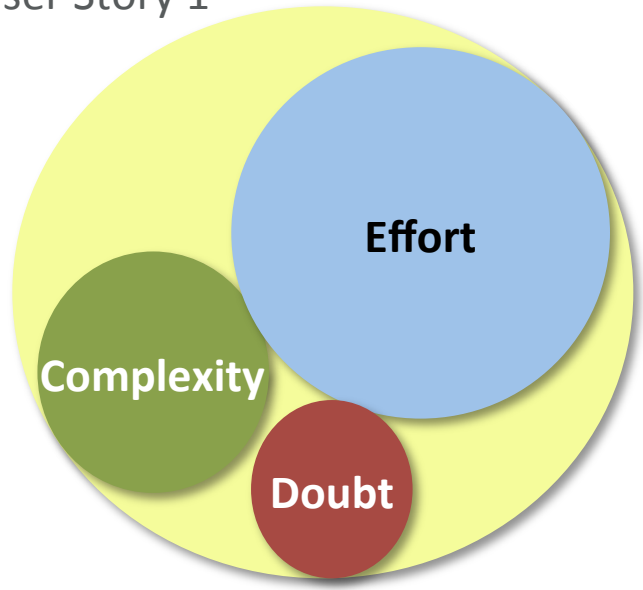
ANALOGY

“This story is like that story, so it’s estimate is what that story’s estimate was.”

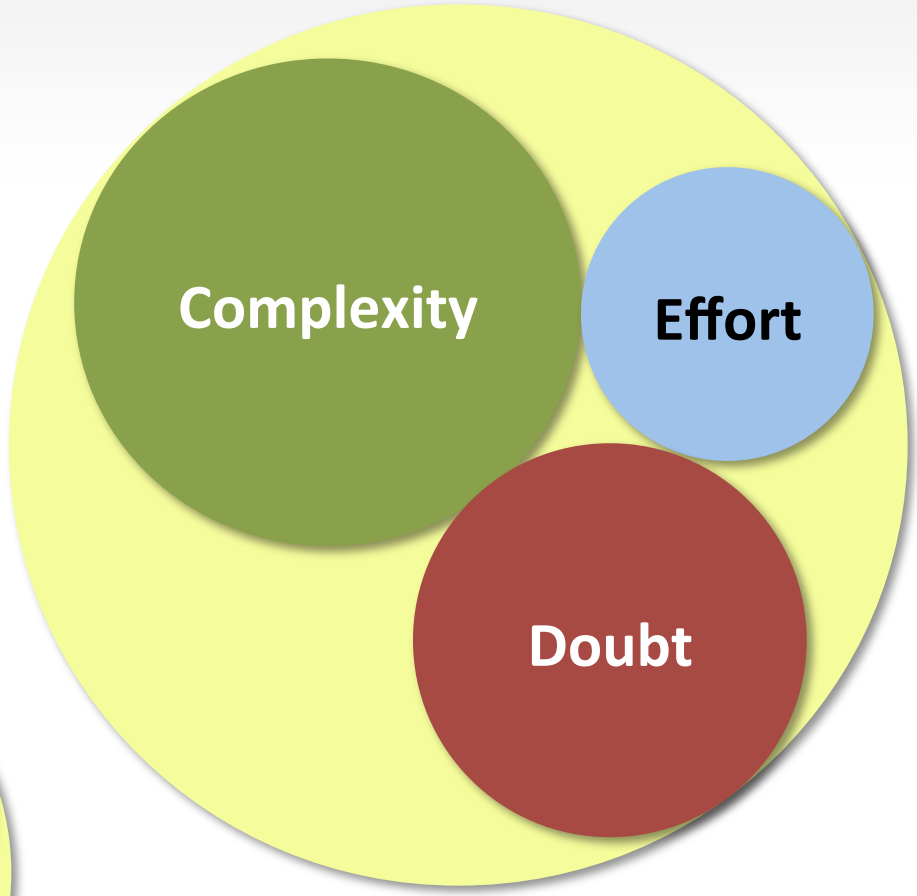
What influences the size of a story?



User Story 1

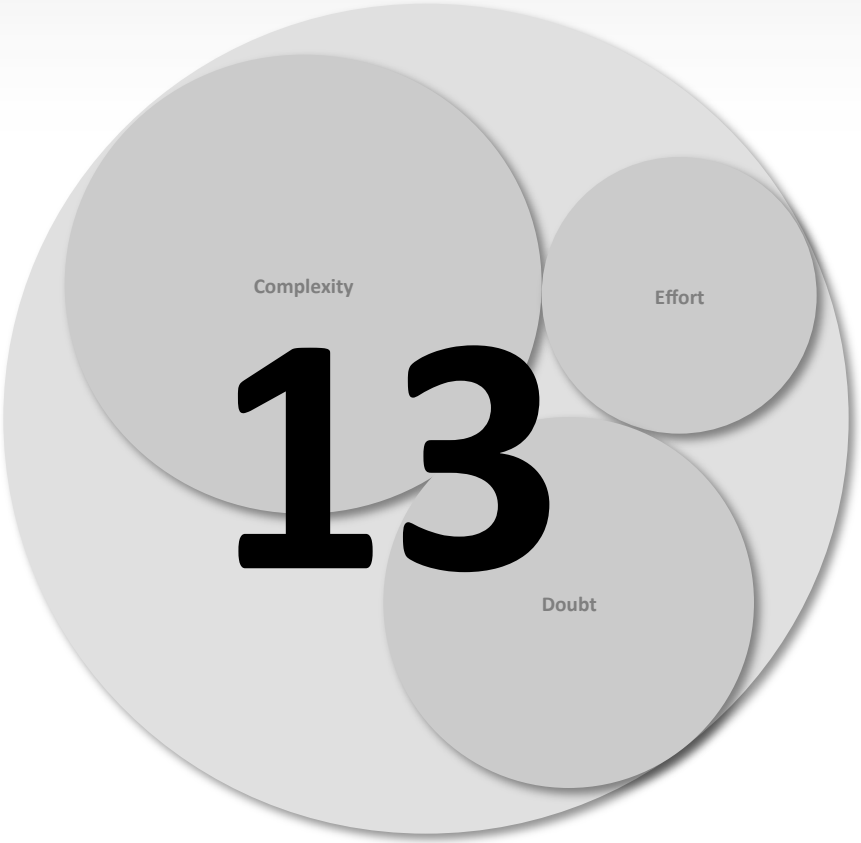


User Story 2



User Story 3

User Story 1



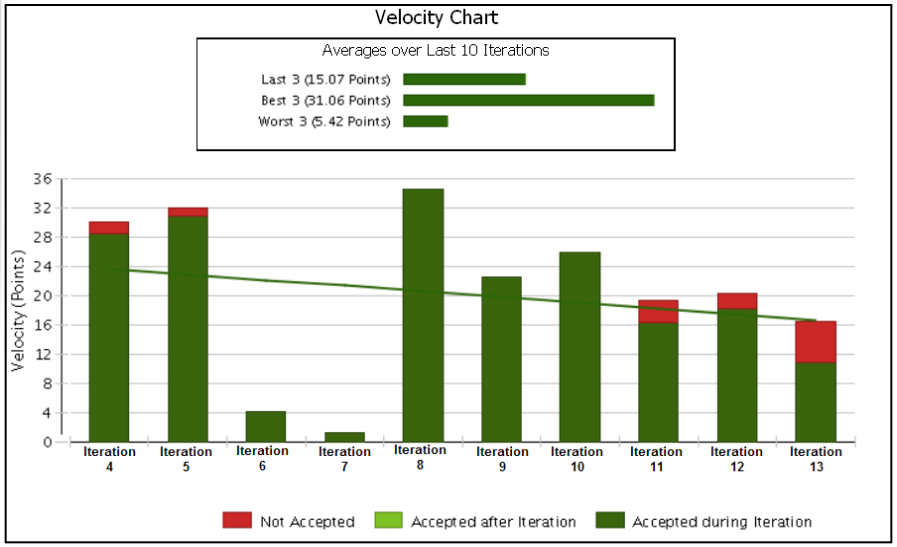
User Story 3

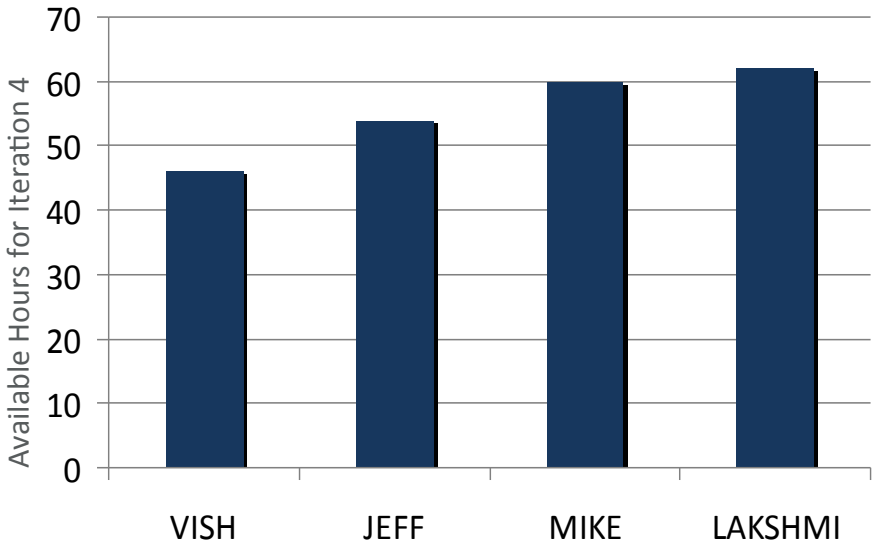
User Story 2

Velocity vs. Capacity

Velocity is the long-term measure of the amount of story points completed per iteration

Capacity is the amount of ideal hours available to work on a story's tasks





Velocity is used to estimate what we can finish by the **release** date

Capacity is used to estimate what we can finish by the **iteration** deadline

What does this look like in release planning?

Story Points and Velocity for Planning Releases	
PRIORITIZED RELEASE BACKLOG	**Size in Story Points**
User Story A	8
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Fixed Date Release Planning

Highest Priority Stories On Top

Will Have

At our Slowest Velocity, We'll Finish Here

Might Have

At our Fastest Velocity, We'll Finish Here

Won't Have

Note: the business knows the most important stories will be delivered to aid planning release activities

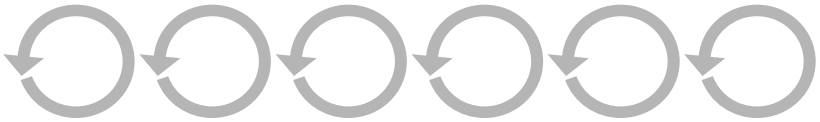
Adapted from Mike Cohn

Or, Fixed Scope Release Planning

Total Story Points Desired	120
Fastest Velocity	24
Slowest Velocity	20

120 points ÷
24 points/iteration =

120 points ÷
20 points/iteration =



Time & Cost Estimate →

Adapted from Mike Cohn

What does this look like in iteration planning?

Task Hours and Capacity for Planning Iterations

ITERATION BACKLOG	Size in Task Hours
User Story A, Task 1	6
User Story A, Task 2	4
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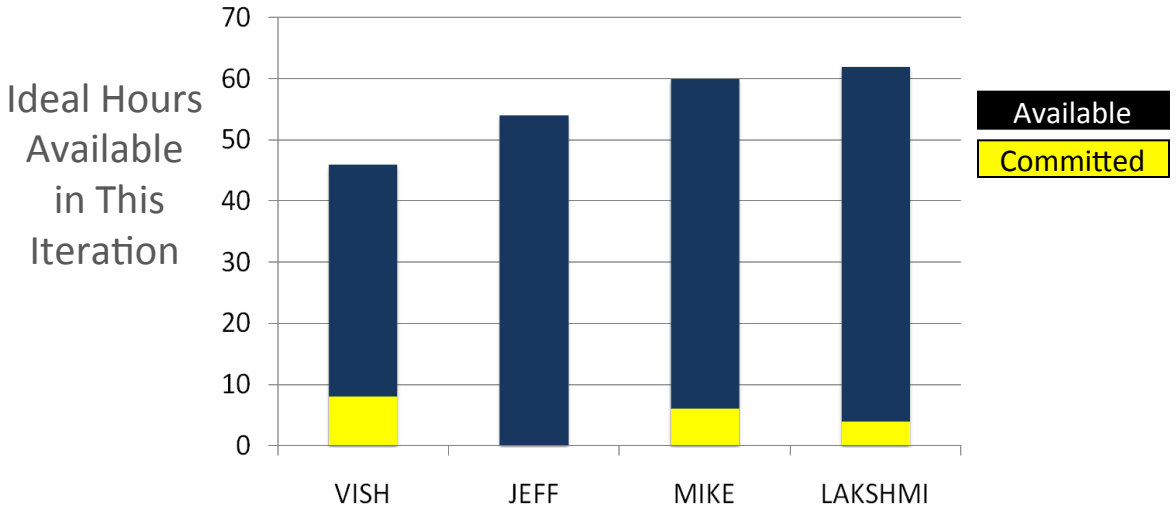
Story One…

Task	Estimate	Owner
Code the UI	6	Mike
Code the middle tier	8	Vish
Create and automate tests	4	Lakshmi

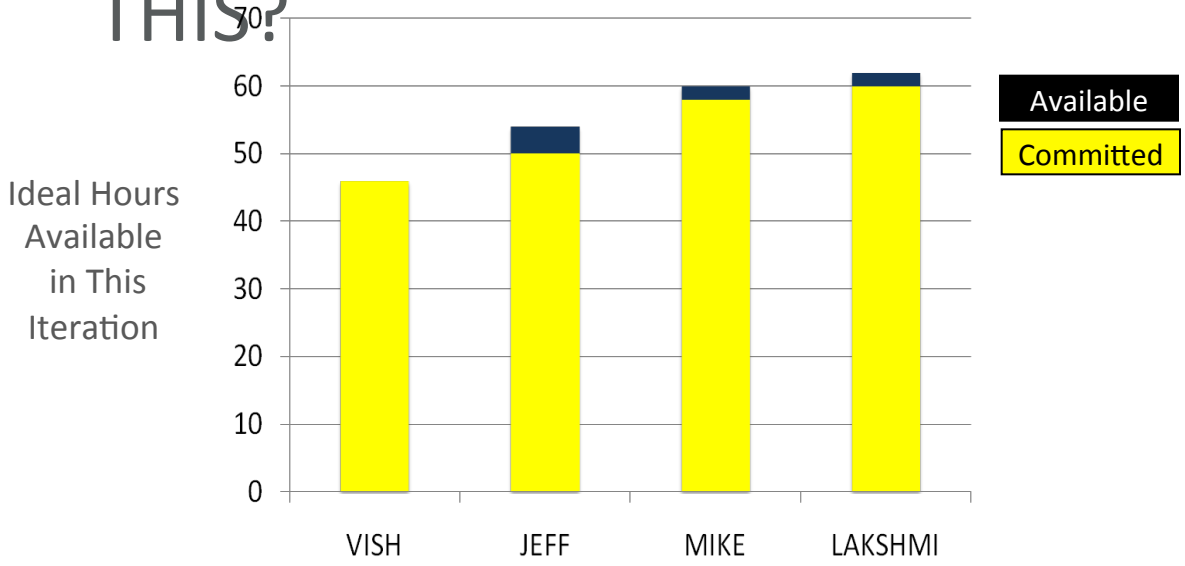
"CAN WE COMMIT TO THIS?"



Story Nine…

Task	Estimate	Owner
Code the UI	8	Jeff
Code the middle tier	6	Mike
Create and automate tests	3	Lakshmi

"CAN WE COMMIT TO THIS?"



Next Steps

- Learn to estimate Duration, Size and Velocity for Good Release & Iteration Planning – Email email info@rallydev.com for the Agile Estimating Exercises Guide
- Check out these other Agile Planning topics:
  - Release Planning
  - Iteration Planning