AHMED SIDKY, PH.D. AGILE PLANNING & ESTIMATING **santeon** group



#### A Quick Introduction

- Co-Author of "Becoming Agile"
- Executive Vice President at Santeon
- Over 10 years of dev and delivery experience
- Co-founder of International Consortium for Agile
- Masters in Requirements Engineering
- Ph.D in Agile Adoption from Virginia Tech
- Agile Educator, Coach and Consultant
- Frequent Presenter at Conferences
- Program Chair of Agile 2009





# 3 Step Learning Progression



Level I: following (shu)

Learn "a technique that works"

(Success = following the technique)



Level 2: breaking away (ha)

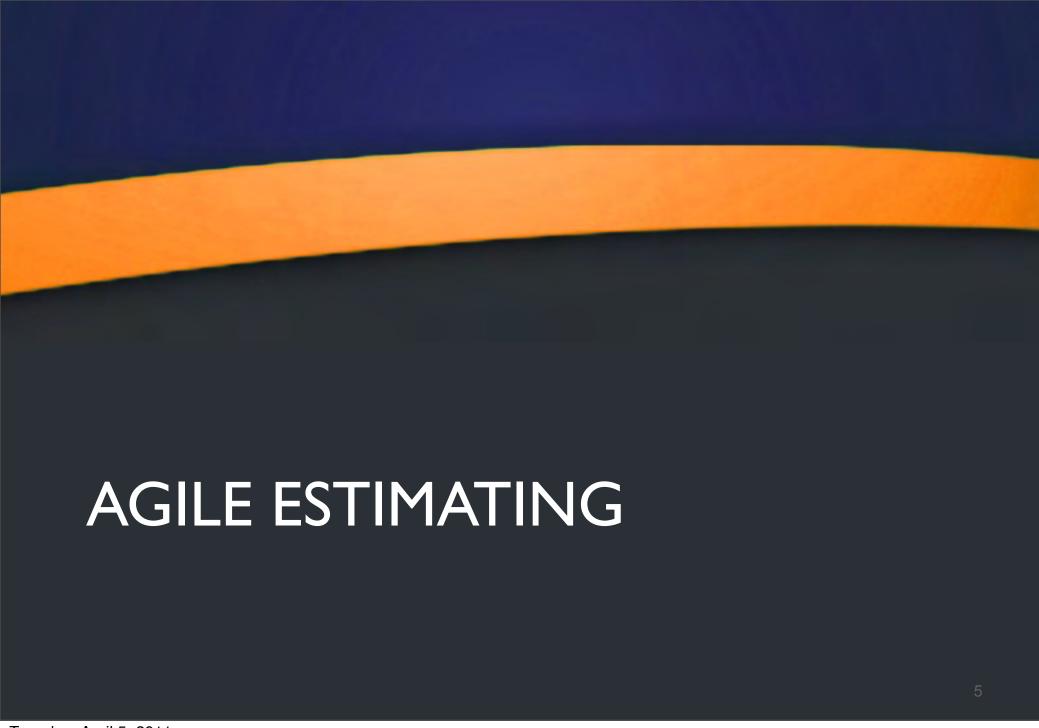
Learn limits of the technique

Learn to shift between techniques

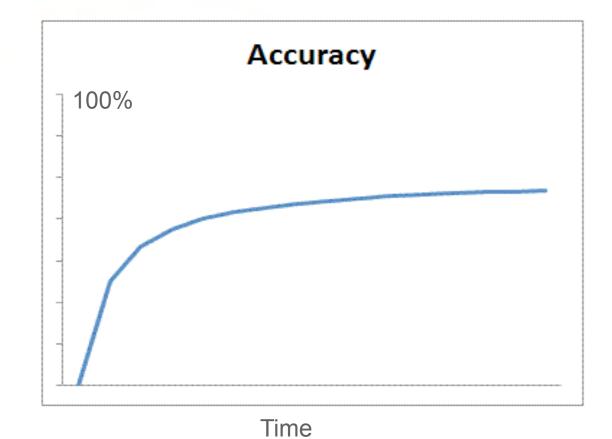


Level 3: fluent ( ri )
Shift techniques at any moment
Possibly unable to describe the shifts





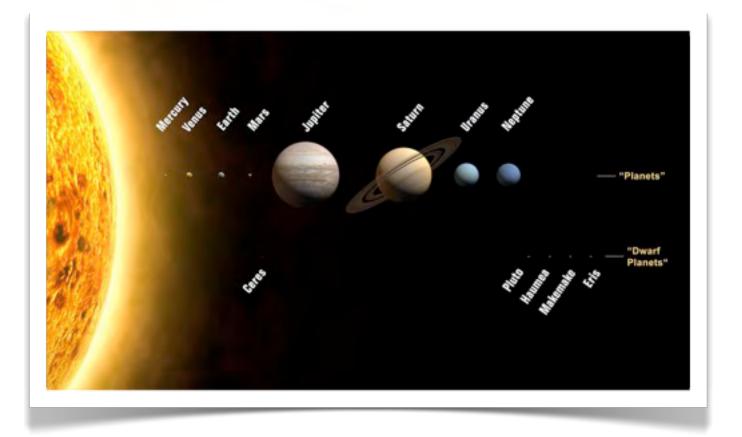
### Agile Estimation - Accuracy





Accuracy

## Agile Estimation - Relative Size





# Agile Estimation - Size vs Time







#### Estimating in Story Points

- The "bigness" of a task
- Influenced by
  - How hard it is
  - How much of it there is
- Relative values are what is important
  - A login screen is a 2
  - A search feature is an 8
- Points are unit-less



#### Fruit Points

- Watermelon
- Strawberry
- Banana
- Pineapple
- Coconut
- Peach

- Orange
- Mango
- Dates
- Kiwi
- Apple



## Using the right units

- Can you distinguish a I-story point from a 2
- Can you distinguish a 17 from an 18
- Use units that make sense, such as
  - -1,2,3,5,8
  - -1,2,4,8
- Include 0 and ½ if you want
- Stay mostly within in a 1-10 range



#### Planning Poker

- An iterative approach to estimating
- Steps
  - Each estimator has a deck of estimation cards
  - Product Owner reads a story and it's discussed briefly
  - Each estimator selects a card for their estimate
  - Cards are turned over at the same time
  - Discuss Differences (especially outliers)
  - Re-Estimate until estimates converge



# Planning Poker - Example



Estimator	Round 1	Round 2
Adam	3	5
Mary	8	5
Ahmed	2	5
Sarah	5	8



#### Moving into an apartment

- King-size Bed
- 2 Couches
- Desk
- Microwave
- 5 Boxes of Books

- Dresser
- 42" LCDTV
- Dining Table (8 Chairs)
- Coffee Table
- 2 Night Stands

?, 1, 2, 3, 5, 8, 13, 20, 50, 100



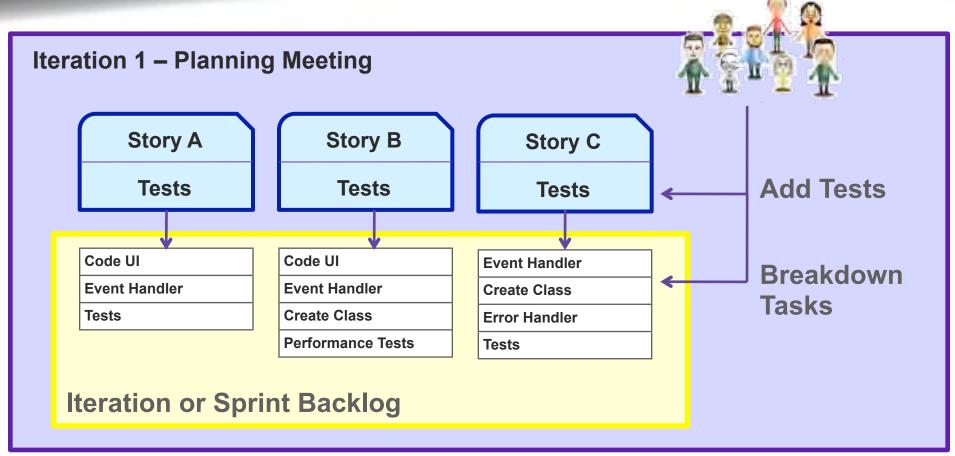
#### Planning Poker

- Emphasizes relative estimating
- Focuses most estimates within an approximate one order of magnitude
- Everyone's opinion is heard
- Estimators are required to justify estimates
- Its quick
- Its Fun ©





### Iteration Planning





#### Story to Tasks

Allow a new customer to enter personal information

Estimate: 5 Pts

#### **Acceptance Criteria**

On back...

- Address validated against reference
- Phone number contains no alpha characters, min. 10 digits
- Name and email address required

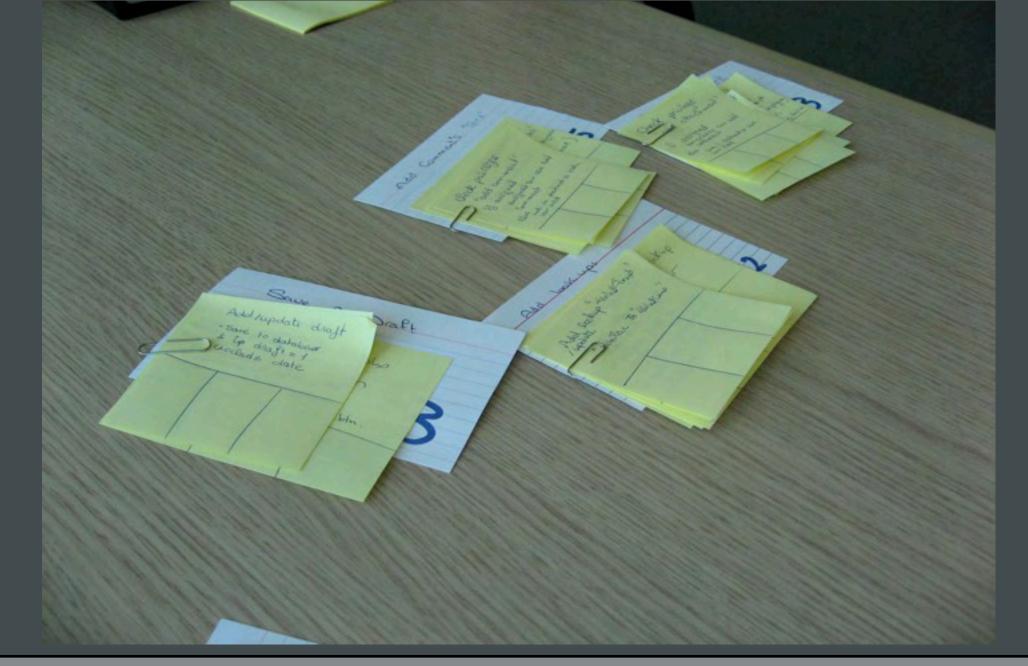
#### Tasks

- Design user interface
- Develop CSS/HTML
- Create database fields
- Develop validation criteria
- Write test cases
- Code test fixtures
- Unit testing
- Acceptance testing
- Usability testing
- Write online help text





Iteration Planning



Stories and Tasks

#### Road-mapping

- Average Velocity for Team
- Total Number of Story points for Project
- Buffer Accordingly (Risks, Decreased Velocity ... etc.)
- Total Story Points as Ranges (depending on risks)
- Identify the number of iterations needed to finish the project
- Firm Deadline Need to increase team capacity?
- Stabilization Iteration ?



### Agile Planning

- Is focused more on planning than the actual plan
- Is multi-leveled (Release and Iteration)
- Encourages change
- Results in plans that are easily changed
- The whole team is involved in planning
- Is spread throughout the project



#### Adopt a different Mindset

#### Plan-Driven / Traditional

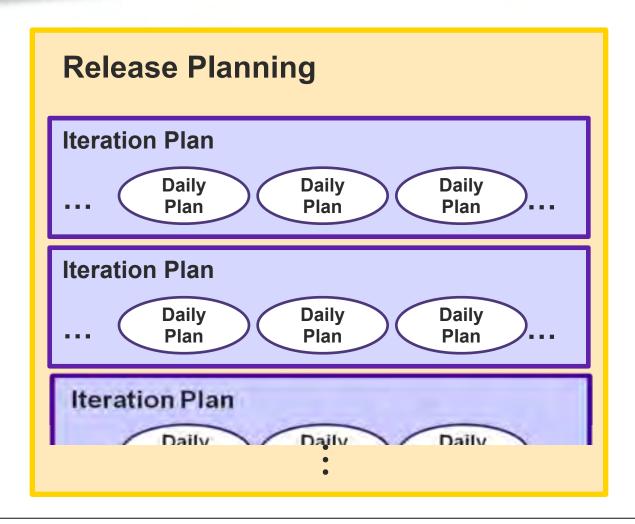
- Things should be stable
- The plan is a predication
- Aim, aim, aim, fire
- Stay the course
- Deliver Planned result
- Be a task master
- Do it right the I<sup>st</sup> time

#### Value-Driven / Agile

- Expect continuous change
- The plan is a guess
- Point, fire, redirect bullet
- Be adaptive and agile
- Deliver desired result
- Be a relationship manager
- Do it right the last time



#### Multi-Level Planning





## Daily Stand Up Meeting

- 3 Questions
- Setup JIT meetings
- Address risks share information
- Update and review burndown chart
- Post items to blocking list / technical debt



#### What's Next ...

#### Learn more about Agile

Upcoming Trainings...

Fundamentals of Agile Certification: April 12-14

Agile and CMMI: April 26 – 28

Facilitation Skills for Agile: May 3 - 5

Fundamentals of Agile Certification: May 10-12

Agile Coaching and Consulting

Agile Readiness Assessments

Simple Version: <u>www.doctoragile.com</u>

Expanded Version: contact us: asidky@santeon.com



A Personal Favor ...:)

I hope you enjoyed the class, ... I would appreciate if you left me a recommendation on LinkedIn

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