



1

## What problem do stories address?

- Software requirements is a communication problem
- Those who want the software must communicate with those who will build it

© Copyright Mountain Goat Software

2

# Balance is critical

- If either side dominates, the business loses
- If the business side dominates...
  - ...functionality and dates are mandated with little regard for reality or whether the developers understand the requirements
- If the developers dominate...
  - ...technical jargon replaces the language of the business and developers lose the opportunity to learn from listening



# Resource allocation

- We need a way of working together so that resource allocation becomes a shared problem
- Project fails when the problem of resource allocation falls too far to one side



# Responsibility for resource allocation

## If developers are responsible...

- May trade quality for additional features
- May only partially implement a feature
- May solely make decisions that should involve the business

## If the business is responsible...

- Lengthy upfront requirements negotiation and signoff
- Features are progressively dropped as the deadline nears



5

# Imperfect schedules

- We cannot perfectly predict a software schedule
  - As users see the software, they come up with new ideas
  - Too many intangibles
  - Developers have a notoriously hard time estimating
- If we can't perfectly predict a schedule, we can't perfectly say what will be delivered



6

# So what do we do?

We make decisions based on the information we have

...but do it often

Rather than making one all-encompassing set of decisions

...we spread decision-making across the project

This is where user stories come in



## Agenda

- What stories are
- Writing user stories
- Why user stories



# Three Cs

## Card

- Stories are traditionally written on note cards.
- Cards may be annotated with estimates, notes, etc.

## Conversation

- Details behind the story come out during conversations with product owner

## Confirmation

- Acceptance tests confirm a story was coded correctly



Source: XP Magazine 8/30/01, Ron Jeffries.

© Copyright Mountain Goat Software

9

# Samples from a travel website

As a user, I want to reserve a hotel room.

As a vacation traveler, I want to see photos of the hotels.

As a user, I want to cancel a reservation.

As a frequent flyer, I want to rebook a past trip so that I save time booking trips I take often.



© Copyright Mountain Goat Software

10

# Where are the details?

- As a user, I can cancel a reservation.
  - Does the user get a full or partial refund?
    - Is the refund to her credit card or is it site credit?
  - How far ahead must the reservation be cancelled?
    - Is that the same for all hotels?
    - For all site visitors? Can frequent travelers cancel later?
  - Is a confirmation provided to the user?
    - How?



# Details as conditions of satisfaction

*As a user, I can  
cancel a reservation.*

- The product owner's conditions of satisfaction can be added to a story
- These are essentially tests

- Verify that a premium member can cancel the same day without a fee.
- Verify that a non-premium member is charged 10% for a same-day cancellation.
- Verify that an email confirmation is sent.
- Verify that the hotel is notified of any cancellation.



## Details added in smaller sub-stories

As a user, I can cancel a reservation.

As a premium site member, I can cancel a reservation up to the last minute.

As a non-premium member, I can cancel up to 24 hours in advance.

As a site visitor, I am emailed a confirmation of any cancelled reservation.



© Copyright Mountain Goat Software

13

## Techniques can be combined

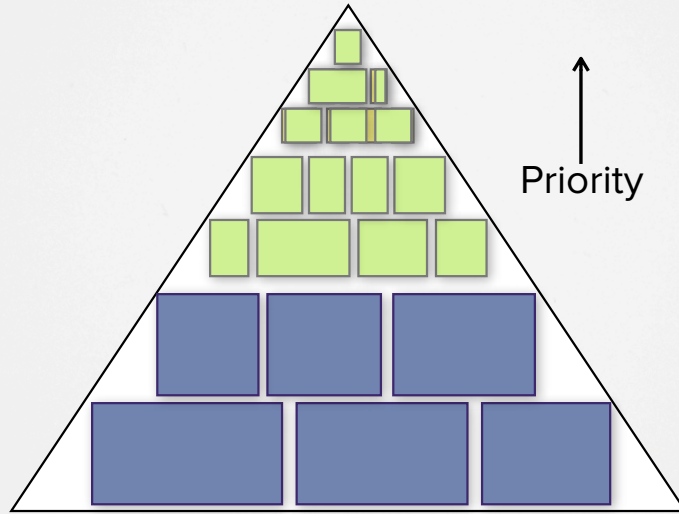
- These approaches are not mutually exclusive
- Write stories at an appropriate level
- By the time it's implemented, each story will have conditions of satisfaction associated with it



© Copyright Mountain Goat Software

14

# The product backlog iceberg



# Some additional useful terms

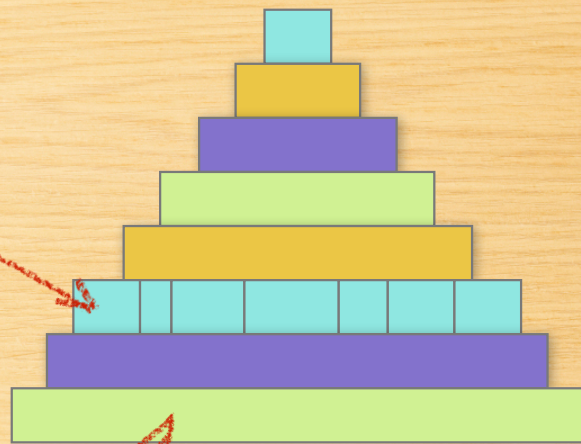
## Theme

A collection of related user stories



## Epic

A large user story





# An example

As a VP Marketing, I want to review the performance of historical promotional campaigns so that I can identify and repeat profitable ones.

Clearly an epic

As a VP Marketing, I want to select the timeframe to use when reviewing the performance of past promotional campaigns, so that ...

Epics???

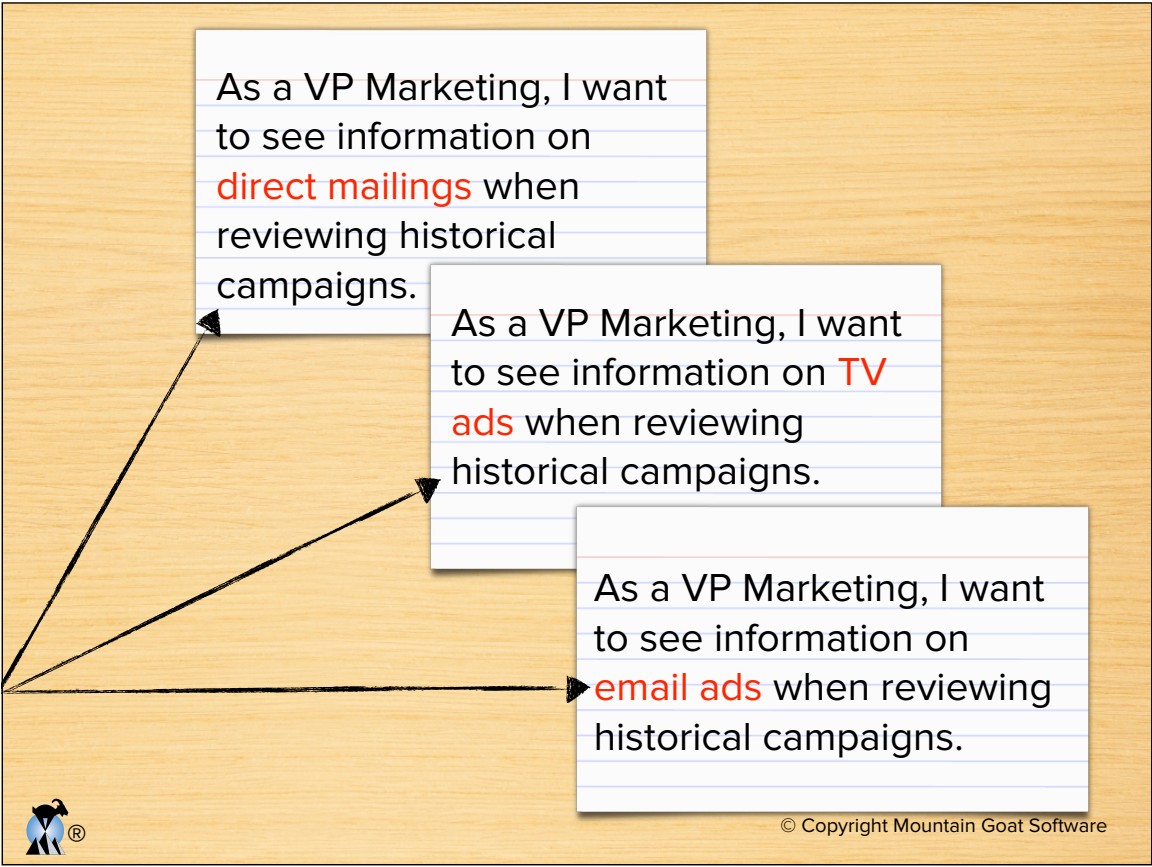
As a VP Marketing, I can select which type of campaigns (direct mail, TV, email, radio, etc.) to include when reviewing the performance of past ...



As a VP Marketing, I want to see information on **direct mailings** when reviewing historical campaigns.

As a VP Marketing, I want to see information on **TV ads** when reviewing historical campaigns.

As a VP Marketing, I want to see information on **email ads** when reviewing historical campaigns.



# Agenda

- What stories are
- Writing user stories
- Why user stories



## Logging in

- See how many user stories you can write about logging in.
- Examples:
  - As a registered user, I am required to log in so that I can access the system.
  - As a forgetful user, I can request a password reminder so that I can log in if I forget mine.

“As a <user role>, I <want/need/can/ etc> <goal> so that <reason>.”

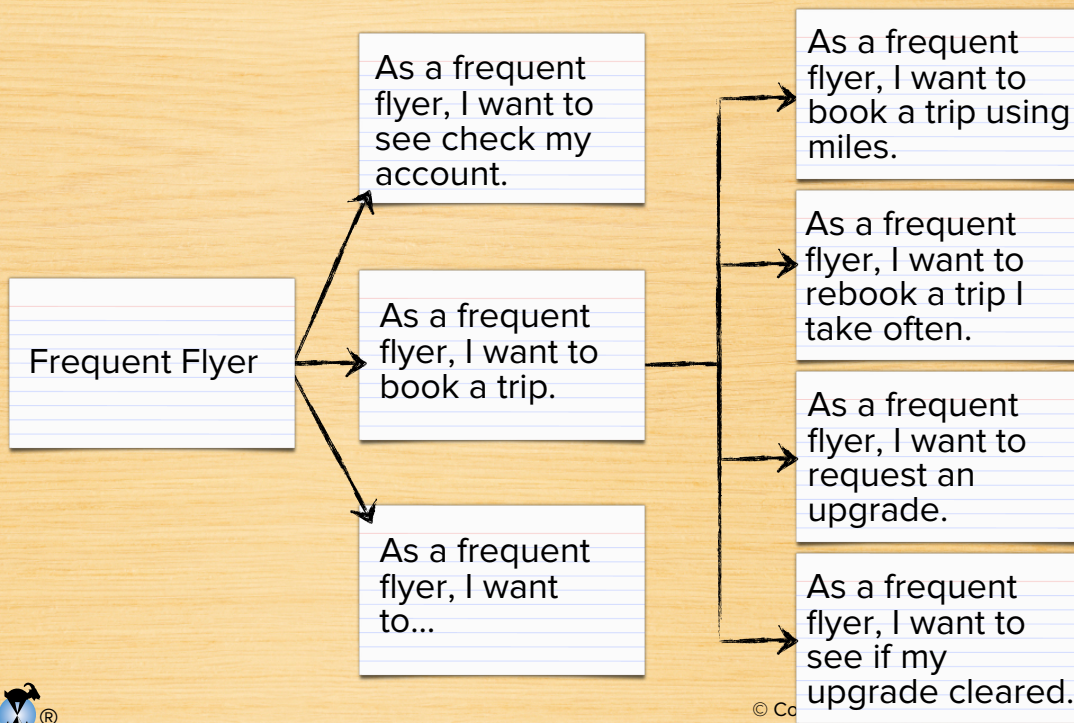


# Story-writing workshops

- Includes whole team plus possibly some external stakeholders
- Typically not done every sprint
- Brainstorm to generate stories
- Goal is to write as many stories as possible
  - Some will be “implementation ready”
  - Others will be epics
- No prioritization at this point



# Start with epics and iterate



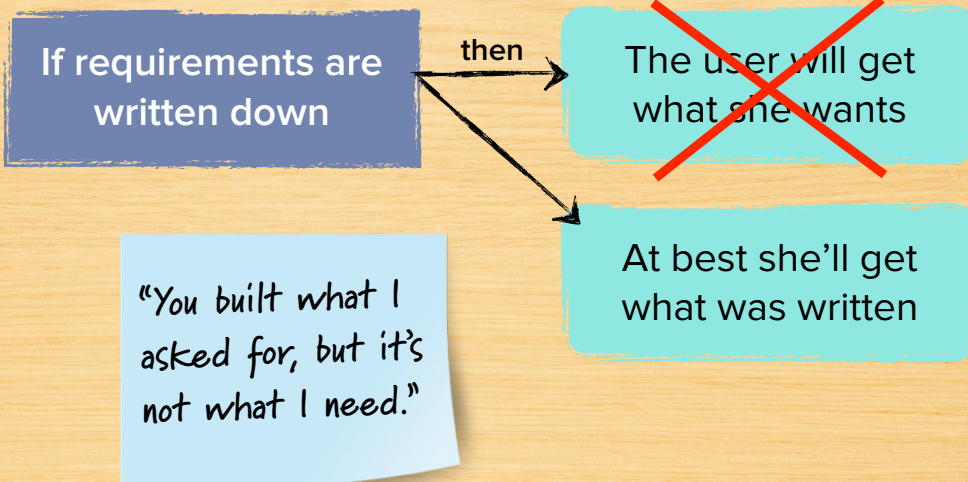
# Agenda

- What stories are
- Writing user stories
- Why user stories



## So why user stories?

- Shift focus from writing to talking



# Words are imprecise

Entrée comes with soup or salad and bread.

## Which is right?

- (Soup or Salad) and Bread
- (Soup) or (Salad and Bread)



# Examples

The user can enter a name. It can be 127 characters.

- Must the user enter a name?
- Can it be other than 127 chars?

The system should prominently display a warning message whenever the user enters invalid data.

- What does should mean?
- What does prominently display mean?
- Is invalid data defined elsewhere?



## Additional reasons

- Stories are understandable
  - Developers and customers understand them
  - People are better able to remember events if they are organized into stories<sup>†</sup>
- Support and encourage iterative development
  - Can easily start with epics and disaggregate closer to development time

<sup>†</sup>Bower, Black, and Turner. 1979.  
*Scripts in Memory for Text.*



© Copyright Mountain Goat Software

27

## Yet more reasons

- Stories are the right size for planning
- Stories support opportunistic development
  - We design solutions by moving opportunistically between top-down and bottom-up approaches<sup>†</sup>
- Stories support participatory design

<sup>†</sup>Guindon. 1990. *Designing the Design Process.*



© Copyright Mountain Goat Software

28

# What if we had stories instead?



# Most importantly...

**Don't forget the purpose**

The story text we write on cards is less important than the conversations we have.



# FrontRowAgile.com

Sign In | Create Account **CART**

Front Row Agile Courses Instructors FAQ

## Get the best seat in the class

Front Row Agile teaches people all over the world about their part of their job on how to do it better to help them succeed.

- LEARN**  
with agile training videos
- PROGRESS**  
through online quizzes
- EARN**  
certificates, PDUs and SEUs

**GET STARTED TODAY!** >

### Take a look at some courses

- AGILE ESTIMATING & PLANNING**  
with Mike Cohn
- The Scrum Field Guide**  
with Mitch Lacey
- SCRUM REPAIR GUIDE**  
with Mike Cohn

Online video training

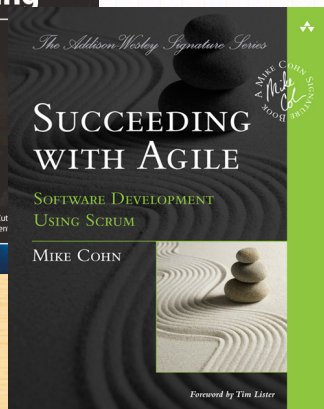
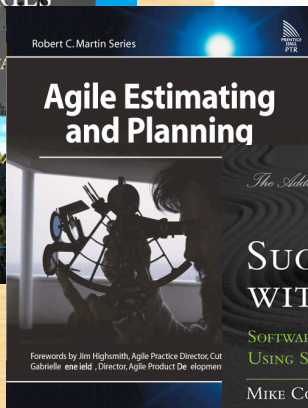


© Copyright Mountain Goat Software

31

## Mike Cohn

mike@mountaingoatsoftware.com  
www.mountaingoatsoftware.com  
twitter: mikewcohn  
(720) 890-6110



© Copyright Mountain Goat Software

32