

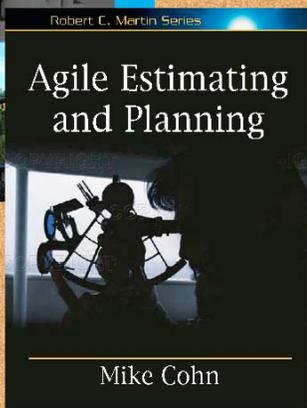
User Stories for Your Product Backlog

Mike Cohn
April 14, 2008



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Mike Cohn - background



- Agile coach and trainer**
- Founding member and director of Agile Alliance and Scrum Alliance
 - Founder of Mountain Goat Software
 - Ran my first Scrum project back in 1995
 - Typical programmer to manager etc. progression



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What Stories Are

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Ron Jeffries' 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 the story was coded correctly

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

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Samples from a travel website

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

As a vacation planner, 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.



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

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

As a user, I can cancel a reservation.

- 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

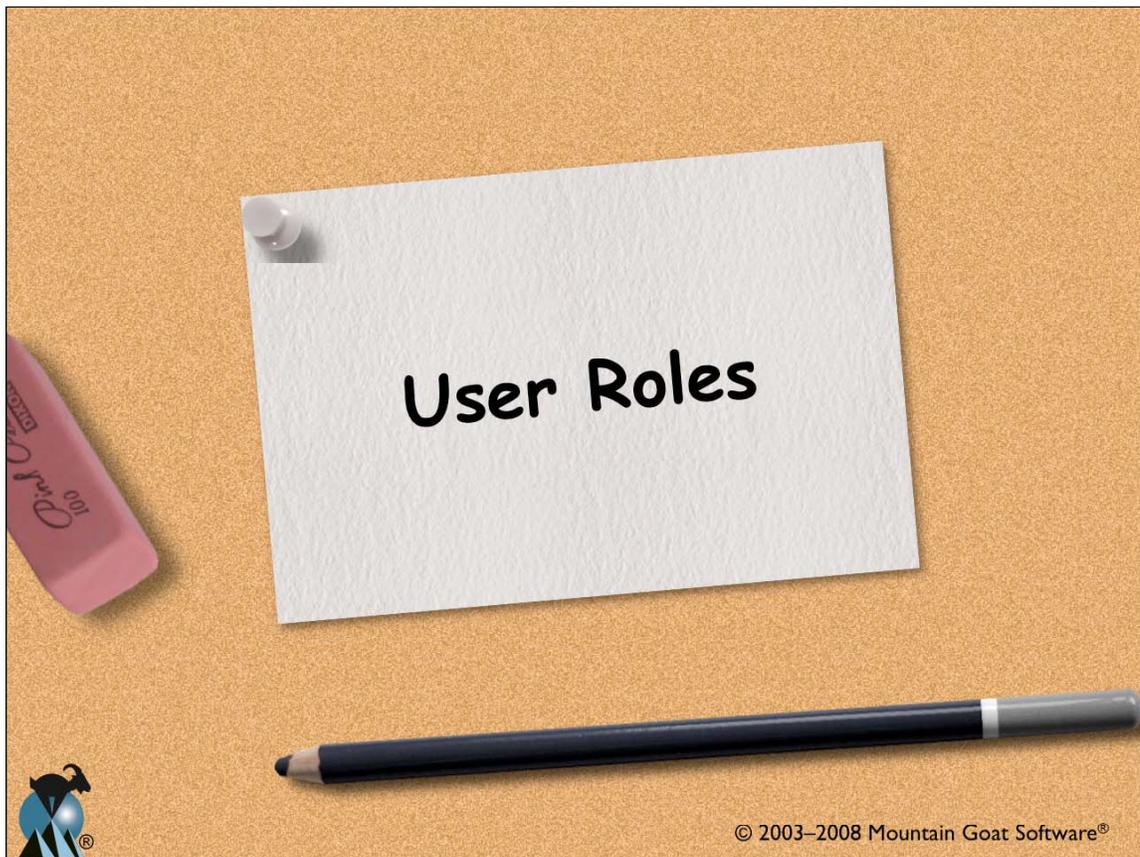
As a non-premium member, I can cancel up to 24 hours in advance.

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



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

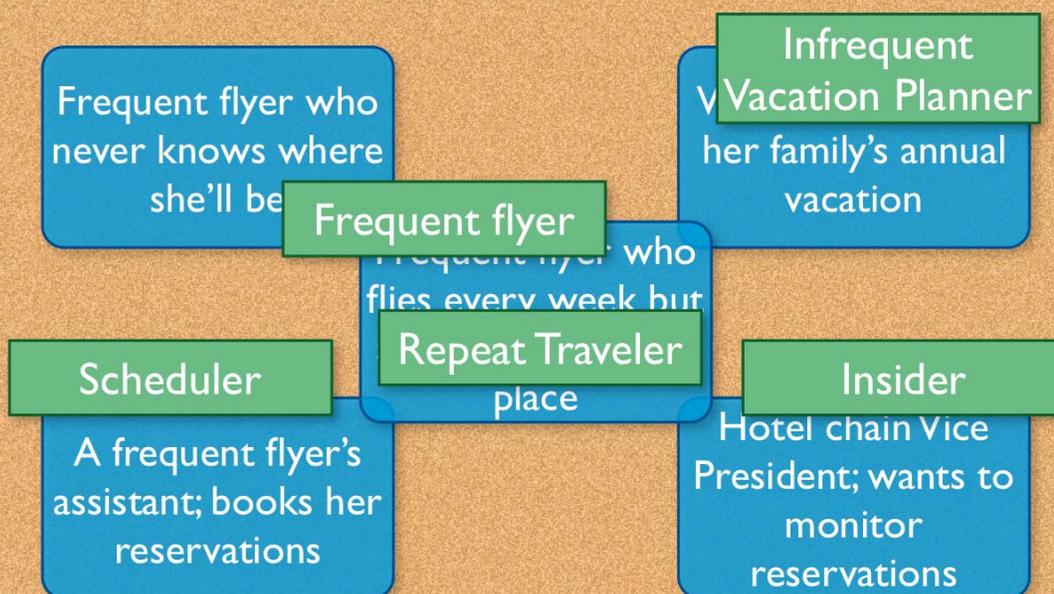


“The User”

- Many projects mistakenly assume there’s only one user:
 - “The user”
- Write all stories from one user’s perspective
- Assume all users have the same goals
- Leads to missing stories



Common attributes



User roles

- Broaden the scope from looking at one user
- Allows users to vary by
 - What they use the software for
 - How they use the software
 - Background
 - Familiarity with the software / computers
- Used extensively in usage-centered design



Source: *Software for Use* by
Constantine and Lockwood (1999).

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System and programmer users

As the payment verification system, I want all transactions to be well-formed XML.

As a programmer, I want an API for deleting widgets from the database.



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Decorated roles

As a forgetful user, I want to be able to request a password reminder so I can log in again.



User role modeling



We've been hired by to develop a website for the local high school. To get us started they've said they like the site on the next slide.

1. Brainstorm the user roles who will interact with this site.



The Bronx High School of Science

http://www.bxscience.edu/index.jsp?rn=5297

the **bronx high school of science**
 75 West 205th Street, Bronx, NY 10468 Telephone: (718) 817-7700
 Valerie J. Reidy, Principal

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welcome to **science**

Welcome to the Bronx High School of Science's Website. Bronx Science is a place where students and faculty alike experience the power of the motivated mind.

Bronx Science is not simply an educational institution, it is a home for an ever-growing family with one common goal -- to advance the self and our society.

Student Activities | Student Resources | Student Rules & Responsibilities | Student-to-Student Advice | Study Skills | Test & Bell Schedule

photo album | **bulletin board** | **departments**
 ● **faculty / staff** ● **classes / homework**

news & announcements

- [All Library Books Due by May 30th](#)
- [Incoming Student Orientation Day begins at 8:30am on Thursday, June 8th, 2006](#)
- [2006-2007 NYC Department of Education School Year Calendar now available](#)
- [Summer School at Bronx Science](#)
- [Starting March 28th College Office Help Desk](#)
Mondays-Thursdays: 9th and 10th periods
[Show All »](#)

alumni directory

Total Entries: 22130

- [Matthew Gologor \(1991\)](#)
- [Raymond Park \(1989\)](#)
- [Alejandro Cruz \(2000\)](#)
- [Irwin Lublin, PhD \(1948\)](#)
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events calendar

- [Memorial Day Observed-School Closed](#)
Date: 5/29/2006
- [All Library Books Due](#)
Date: 5/30/2006
- [Indian Cultural Assembly](#)
Date: 5/31/2006
Location: 9th Period
- [Prom, Waldorf-Astoria, 7-12PM](#)
Date: 6/1/2006
Time: 07:00 PM to 12:00 PM
Location: Waldorf-Astoria
- [SATs](#)
Date: 6/3/2006
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memoirs

- [The day JFK was assassinated](#)
- [caught in the act](#)
- [RIP John Gao](#)
- [Freshman Year of John Gao](#)

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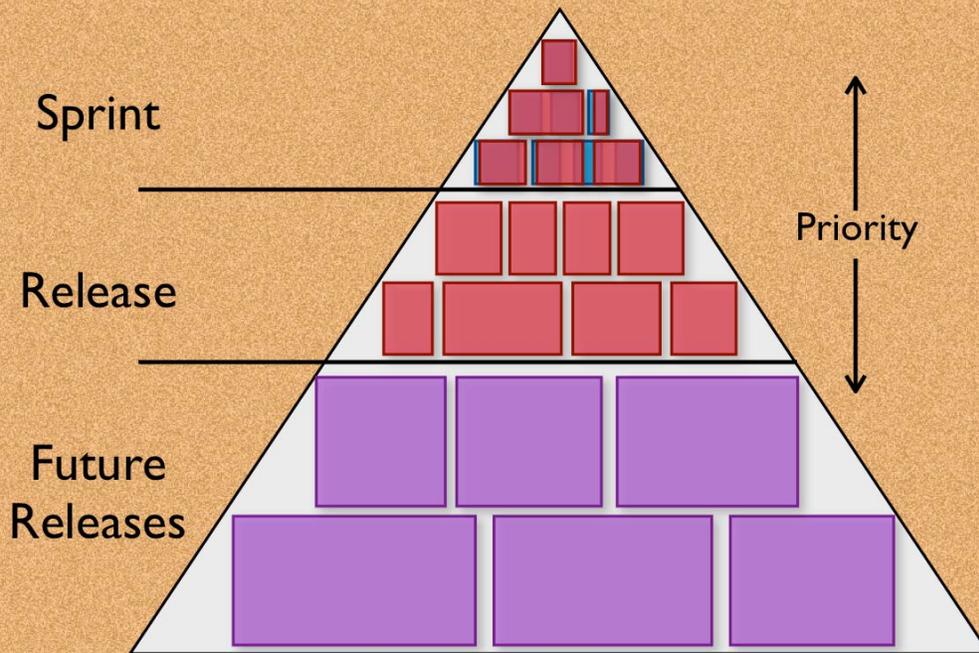
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Writing User Stories

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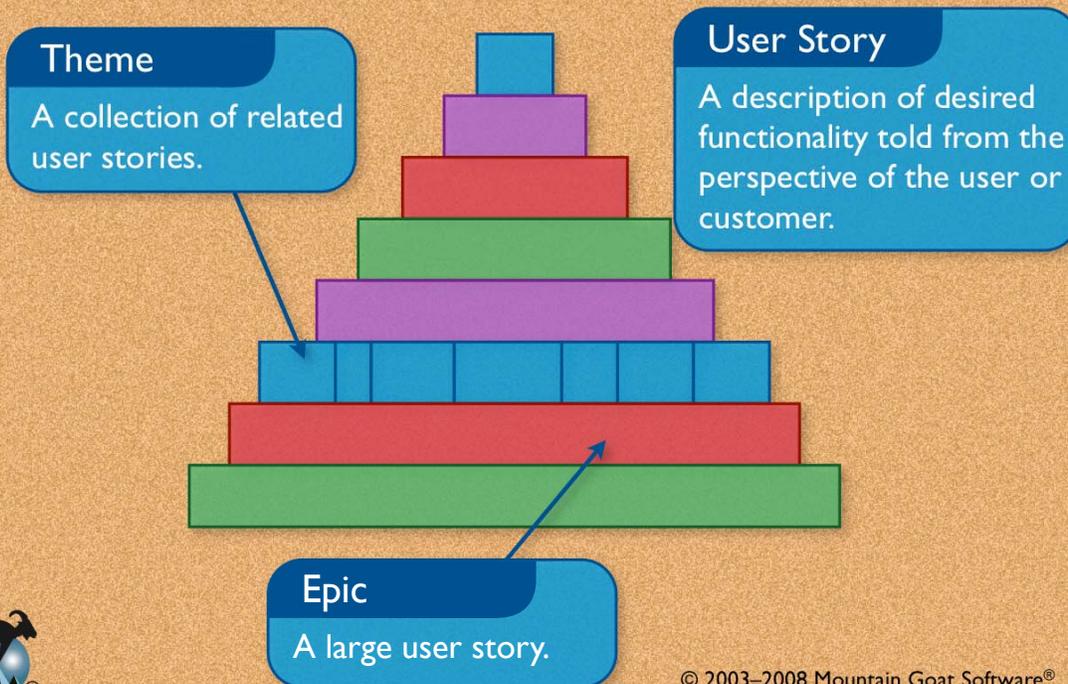
The product backlog iceberg



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Stories, themes and epics



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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 I can identify and repeat profitable ones.

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 historical promotional campaigns.



An example

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 **television** advertising when reviewing historical campaigns.

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



Finally, add the Conditions Of Satisfaction

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

- See how many viewers by age range.
- See how many viewers by income level.



Another example

As a player I want online multiplayer so I can connect to the internet and play against other players online.

Clearly an epic

As a player I want to have a player lobby so I can see the online games available for me to join and be able to join one.

Epics??



An example

As a player I want to see how many players are in a game in progress.

As a player I want to join a game in progress.

As a player I want to start a new game.



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Story-writing workshops

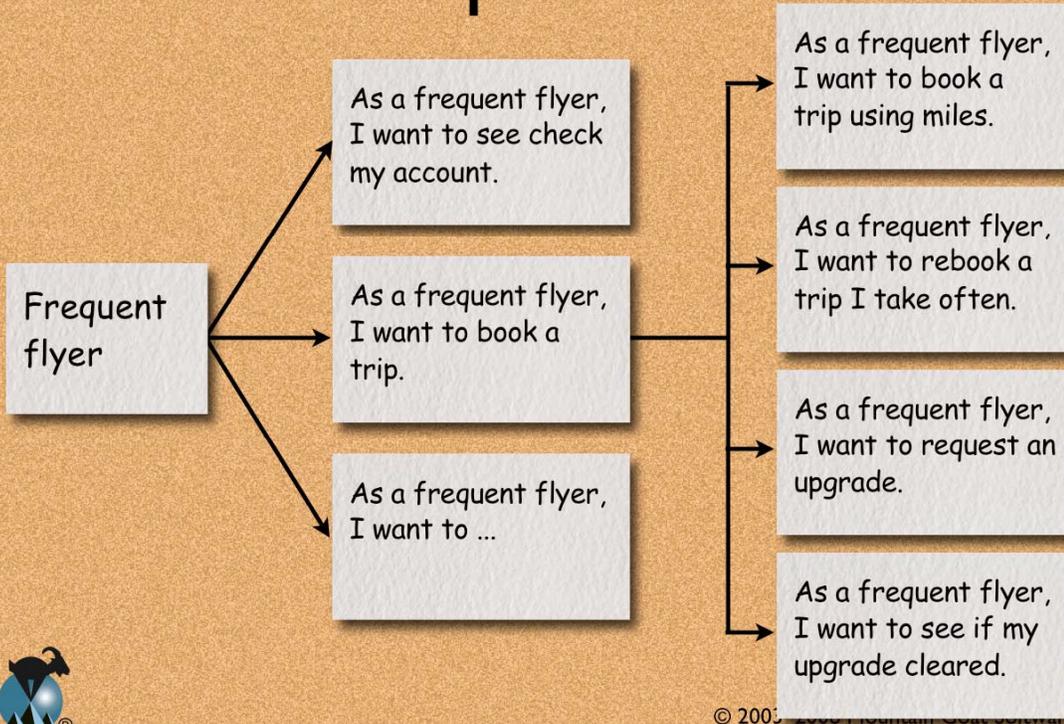
- Includes developers, users, customer, others
- Brainstorm to generate stories
- Goal is to write as many stories as possible
 - Some will be “implementation ready”
 - Others will be “epics”
- No prioritization at this point



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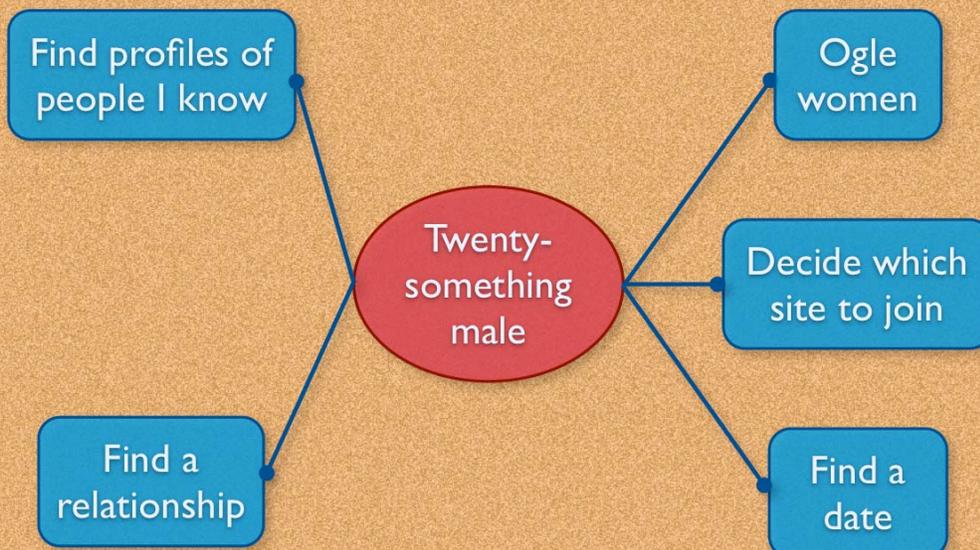
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Start with epics and iterate



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Or start with a mindmap



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A story-writing workshop



Conduct a story-writing workshop for one or more of the user roles you've previously identified.

Use this template

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



Why User Stories



1

Stories shift the focus from writing to talking.

If requirements are written down

then

~~The user will get what she wants~~

At best she'll get what was written

"You built what I asked for, but it's not what I need."



Words are imprecise

Main dish comes with soup or salad and bread.

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



2

Stories are equally understandable by developers and customers.

3

Stories support and encourage iterative development.

4

Stories are the right size for planning.

5

Stories support participatory design.



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Stories emphasize the user's goals not the system's attributes.

What are we building?

1. The product shall have a gas engine.
2. The product shall have four wheels.
 - 2.1. The product shall have a rubber tire mounted to each wheel.
3. The product shall have a steering wheel.
4. The product shall have a steel body.



Source: Adapted from *The Inmates are Running the Asylum* by Alan Cooper (1999).

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What if we had stories instead?



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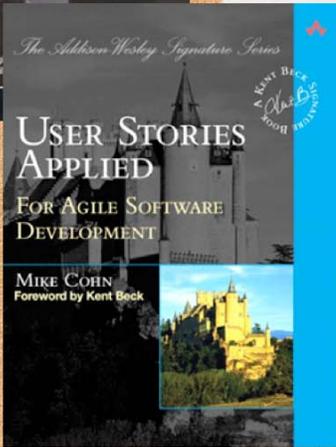
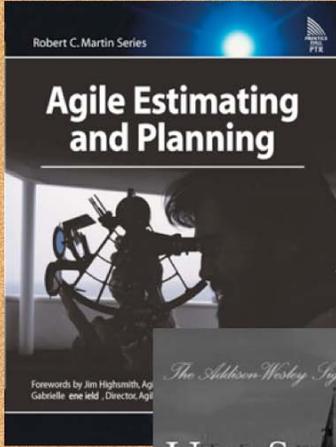
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The product



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