User Stories

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NDC London
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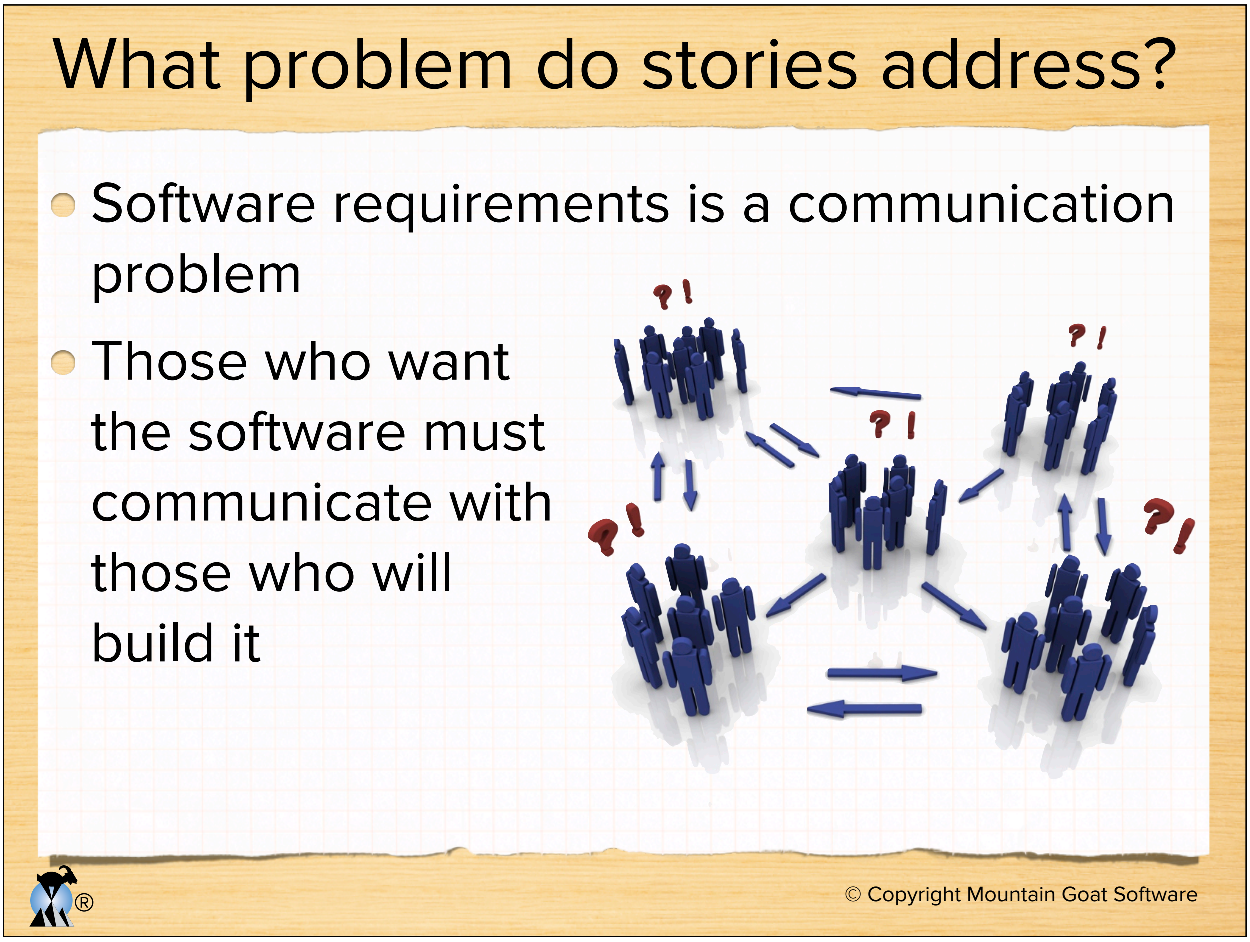


What problem do stories address?

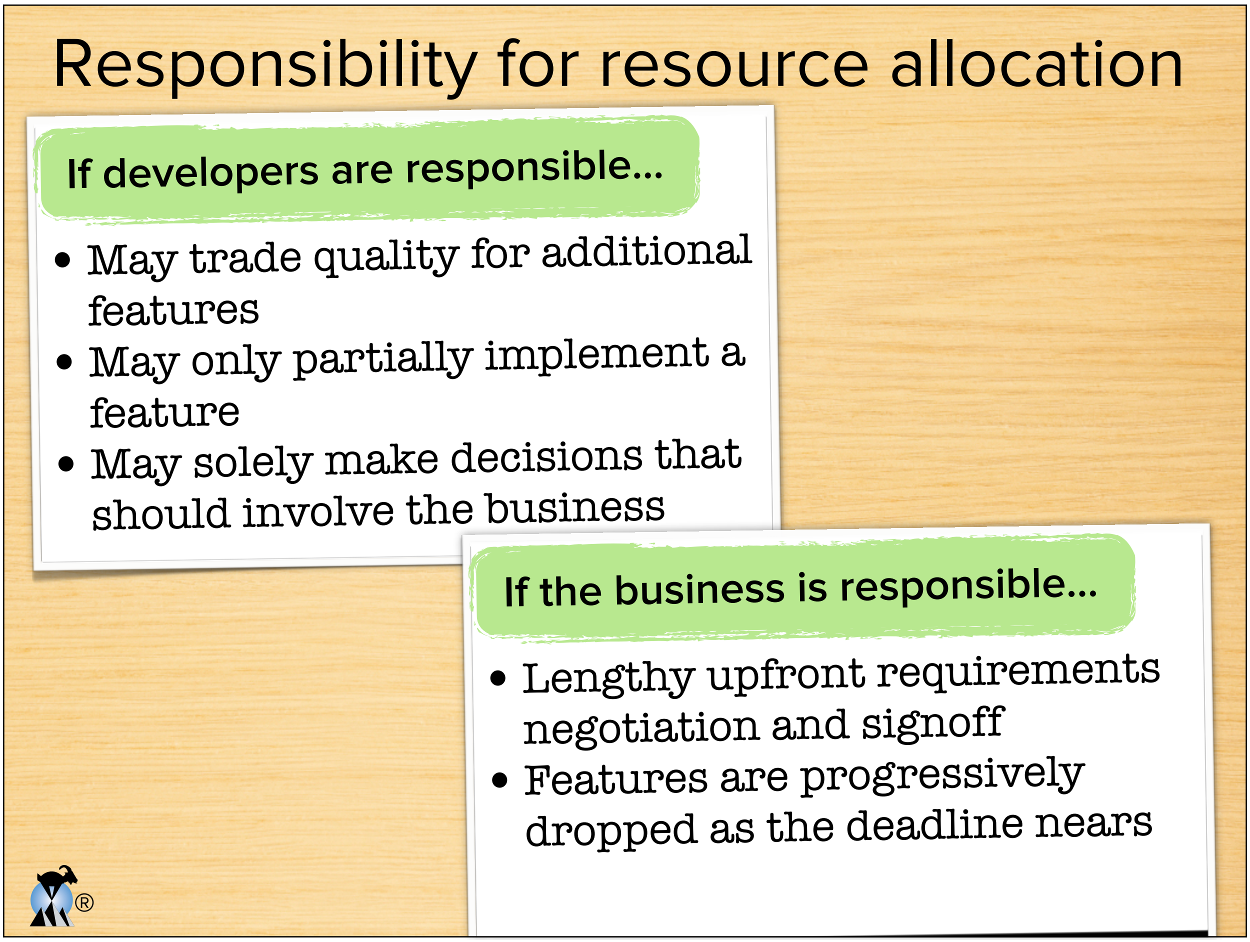
- Software requirements is a communication problem
- Those who want the software must communicate with those who will build it

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



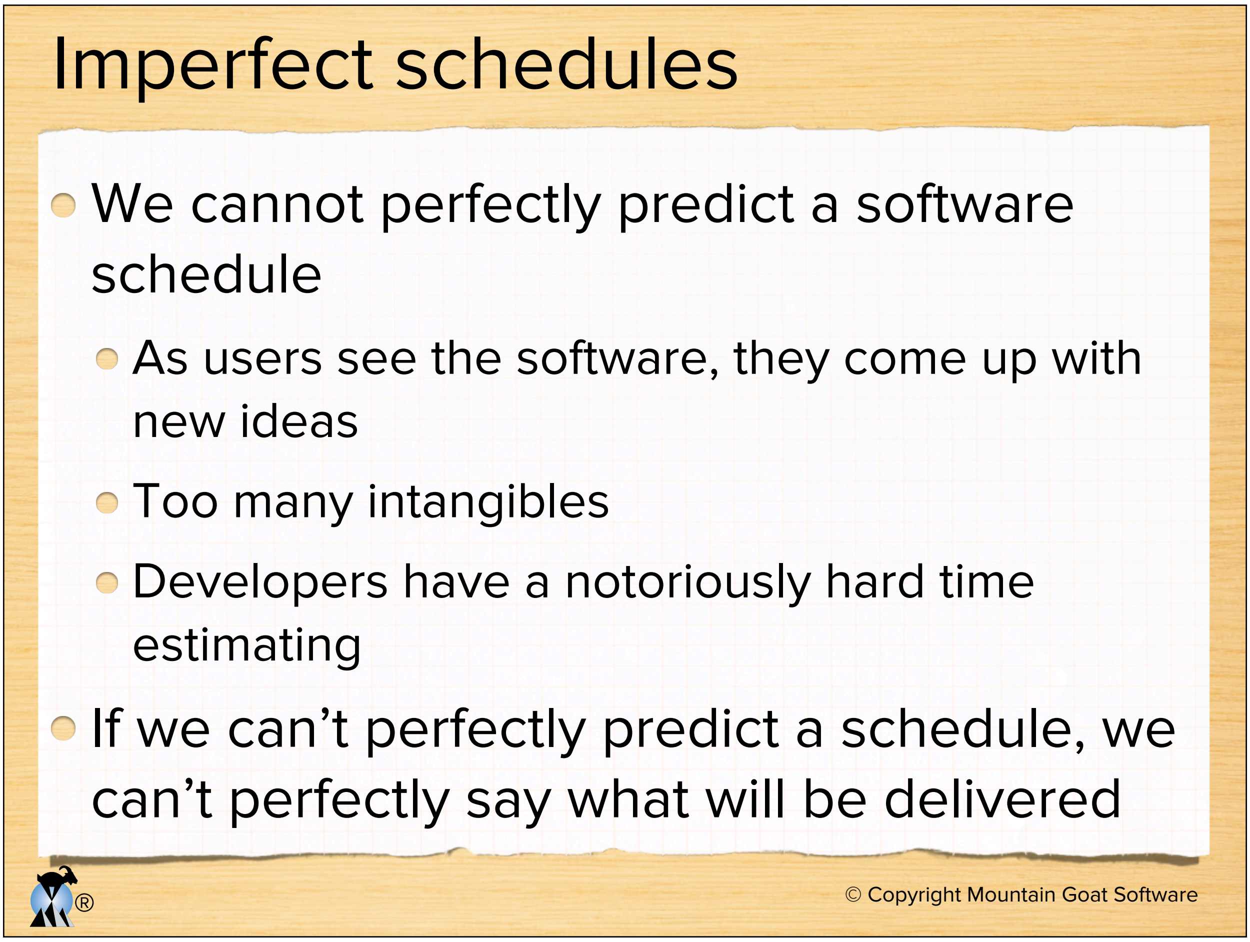
Responsibility for resource allocation

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

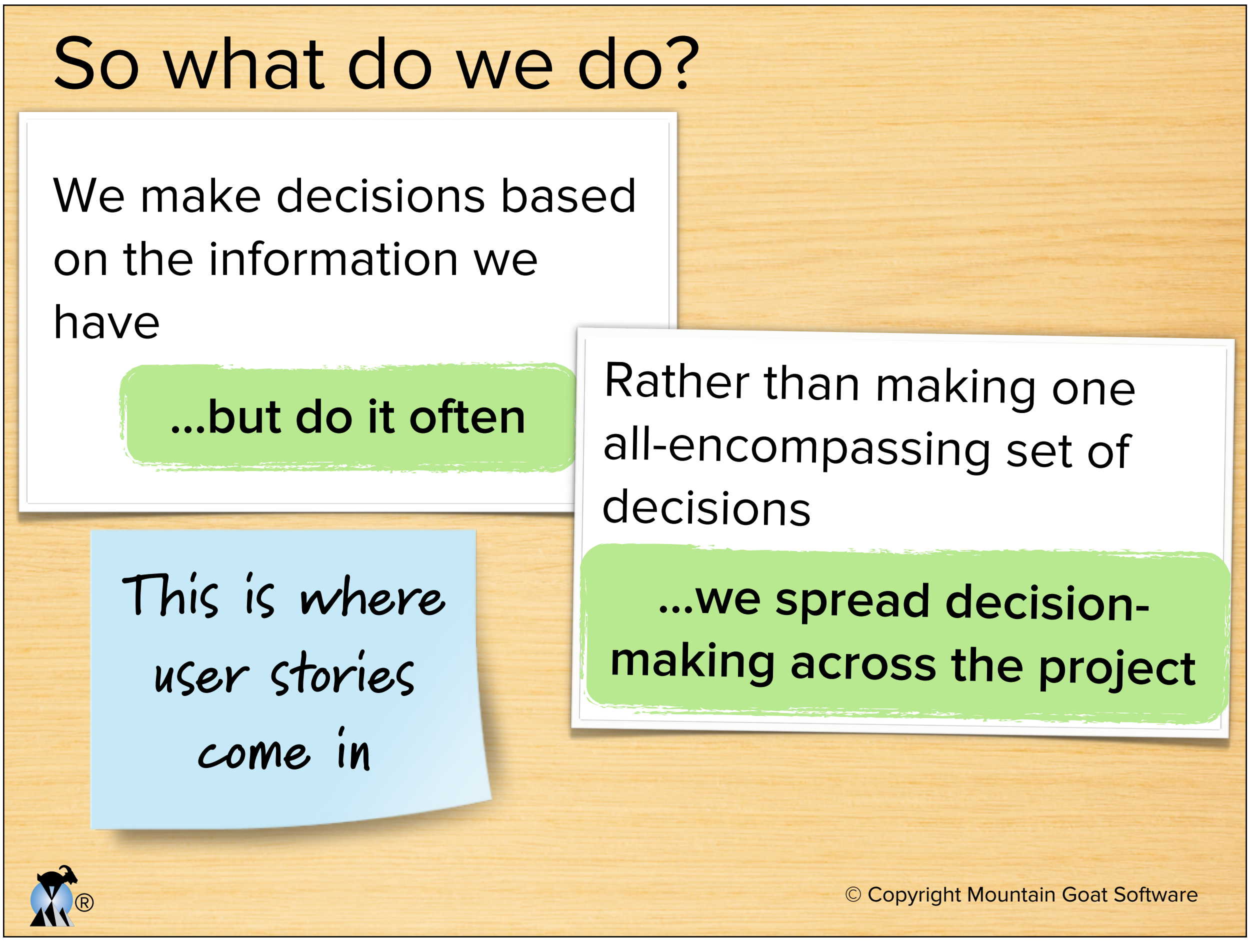
If the business is responsible…

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



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



So what do we do?

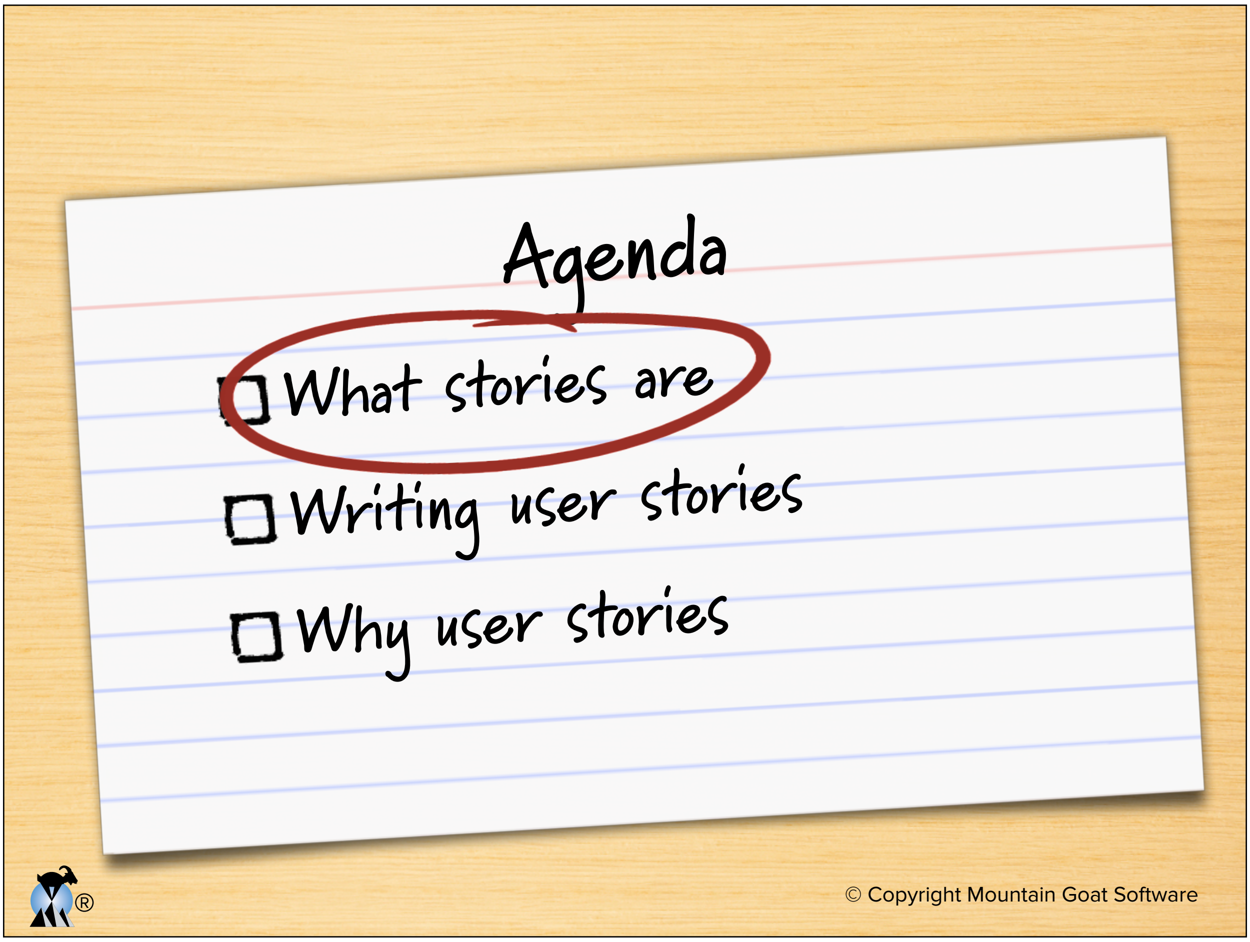
We make decisions based on the information we have

...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

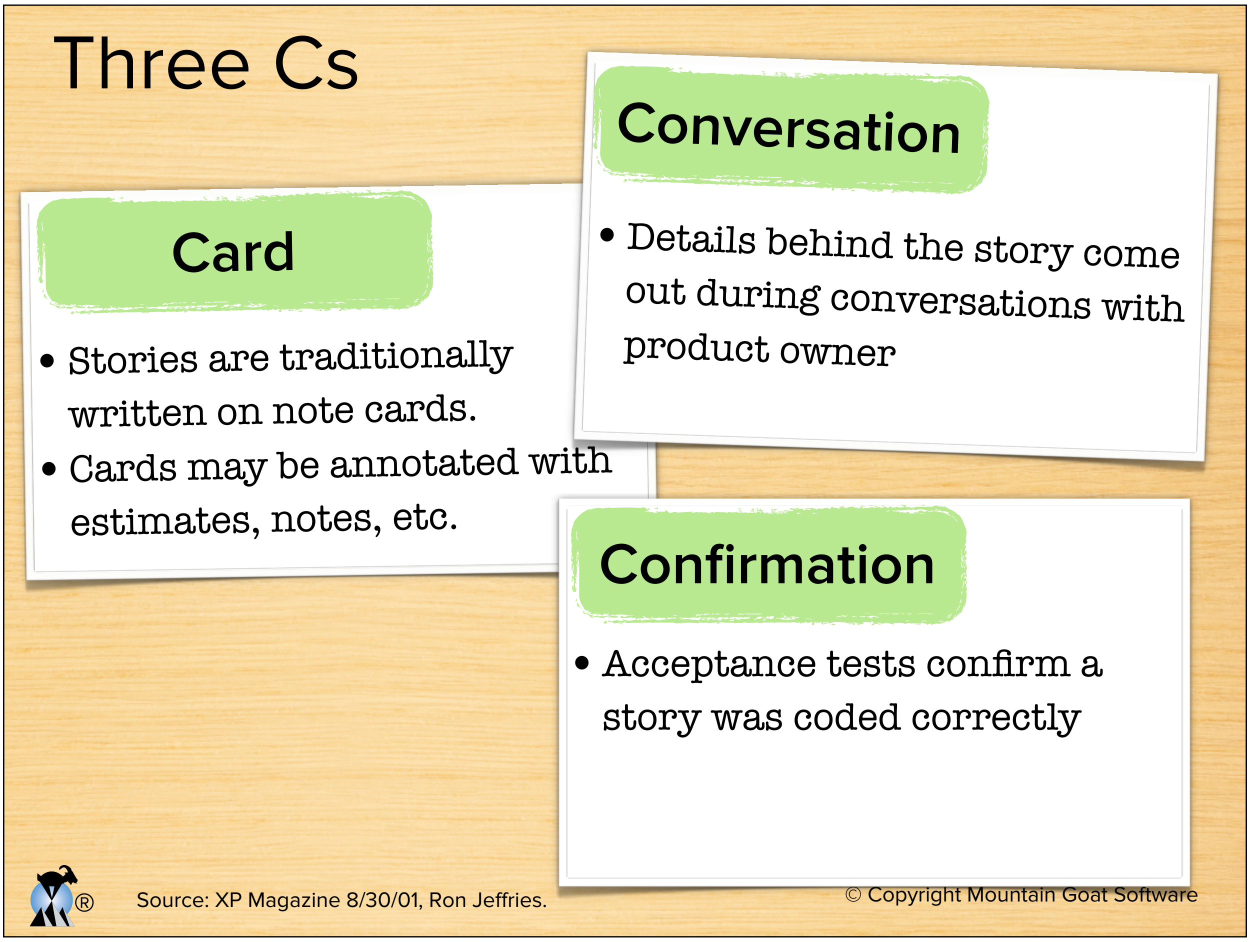


Agenda

□ 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.

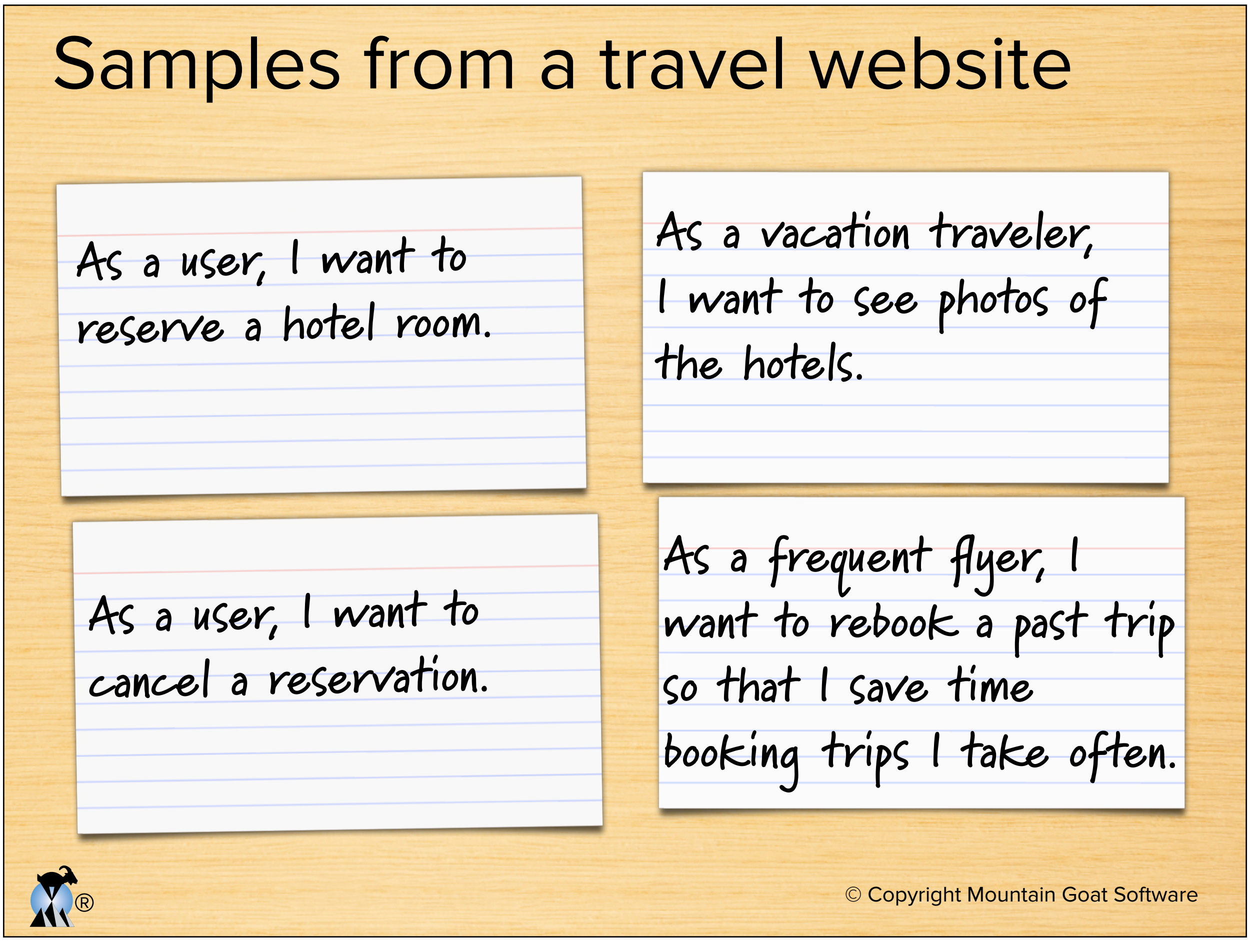
Conversation

- 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.



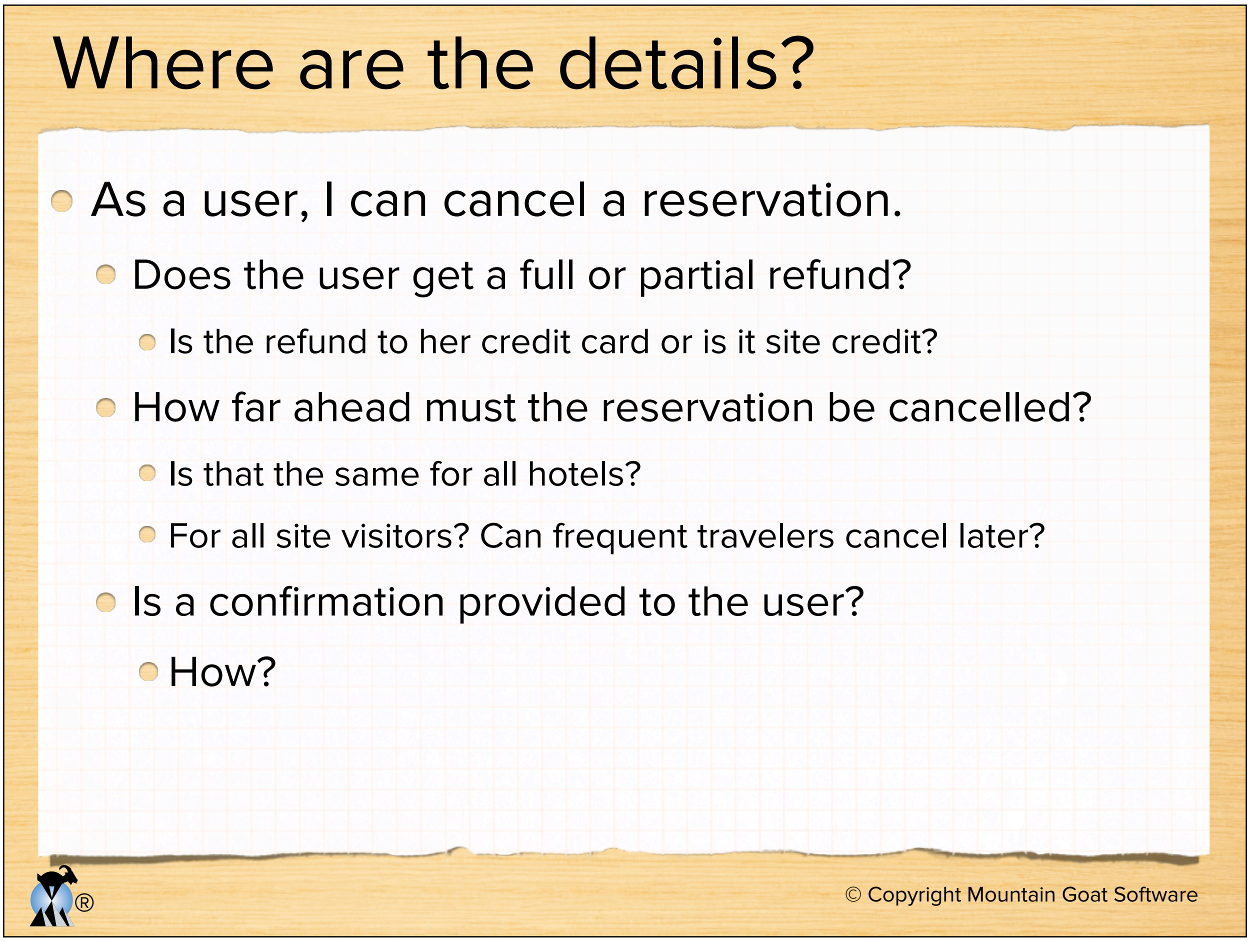
Samples from a travel website

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

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

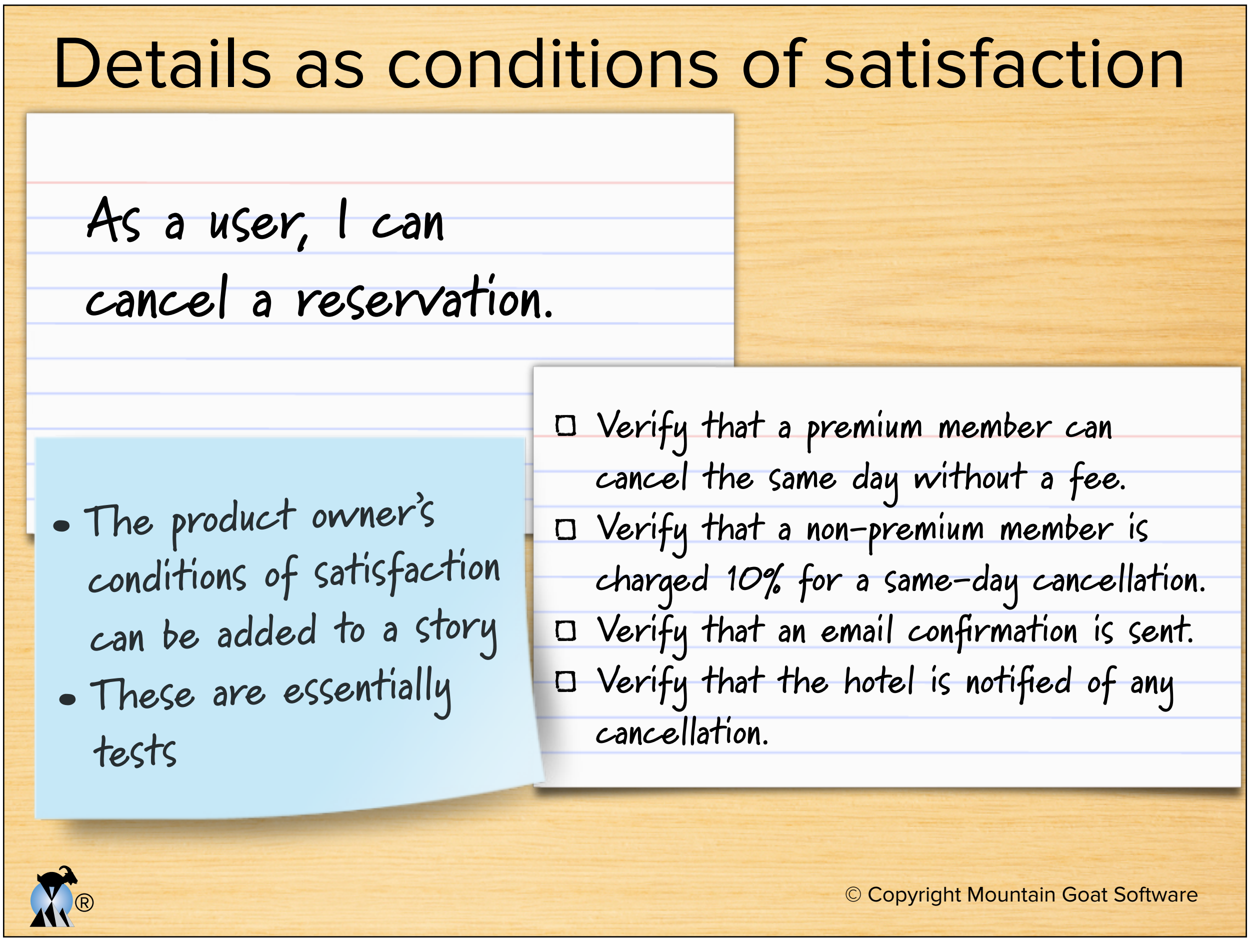
As a user, I want to cancel a reservation.

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



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?

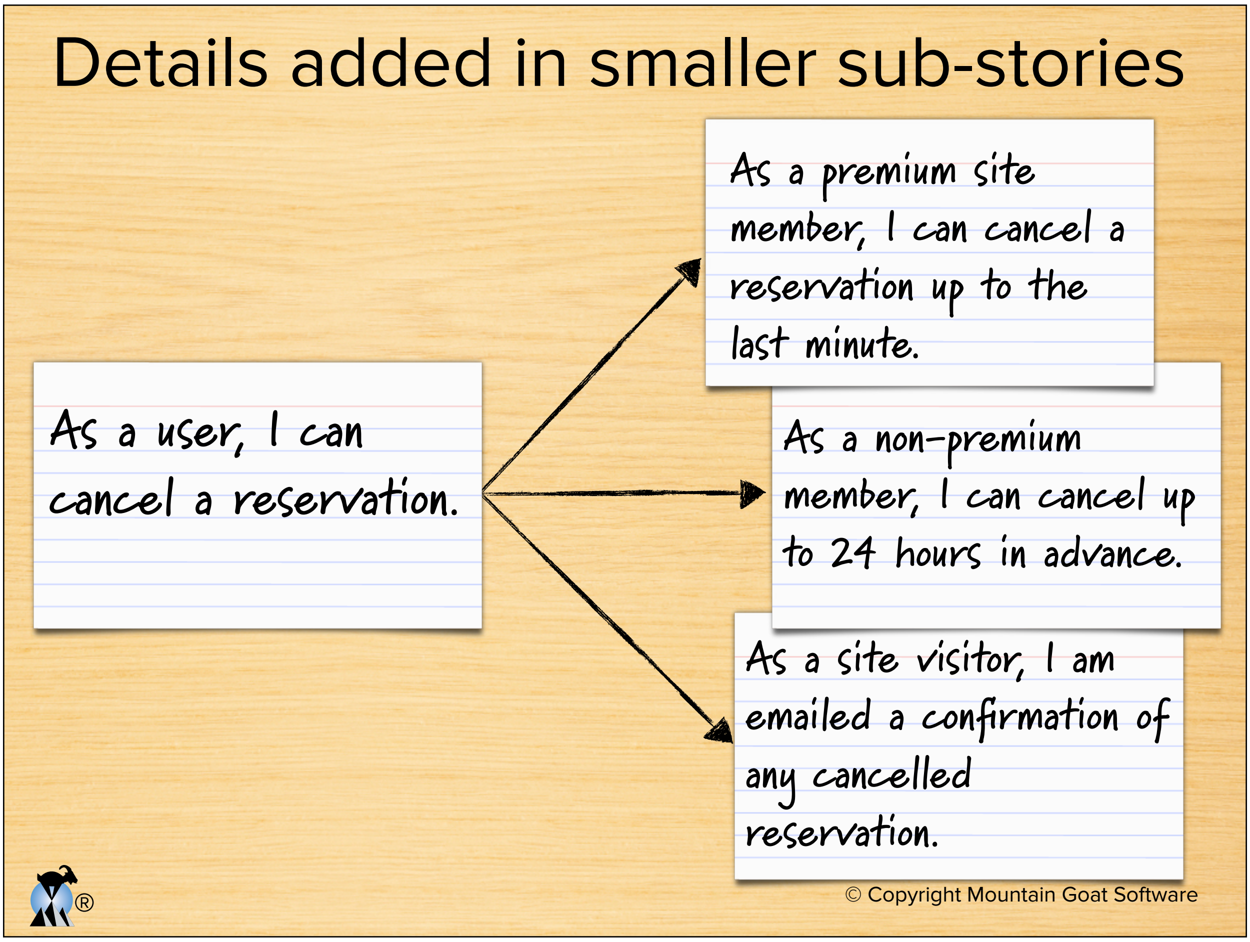


Details as conditions of satisfaction

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.



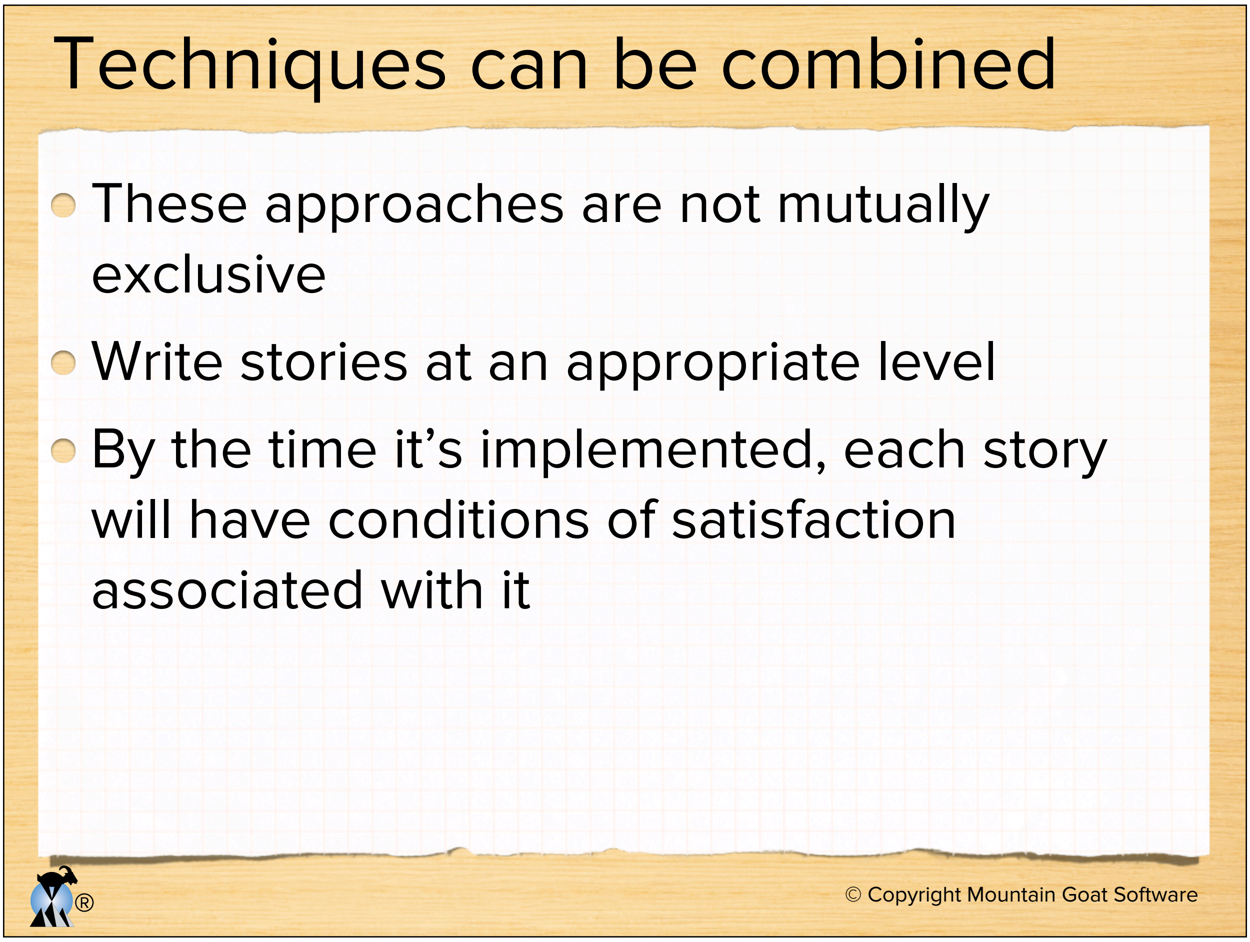
Details added in smaller sub-stories

As a user, I can cancel a reservation.

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

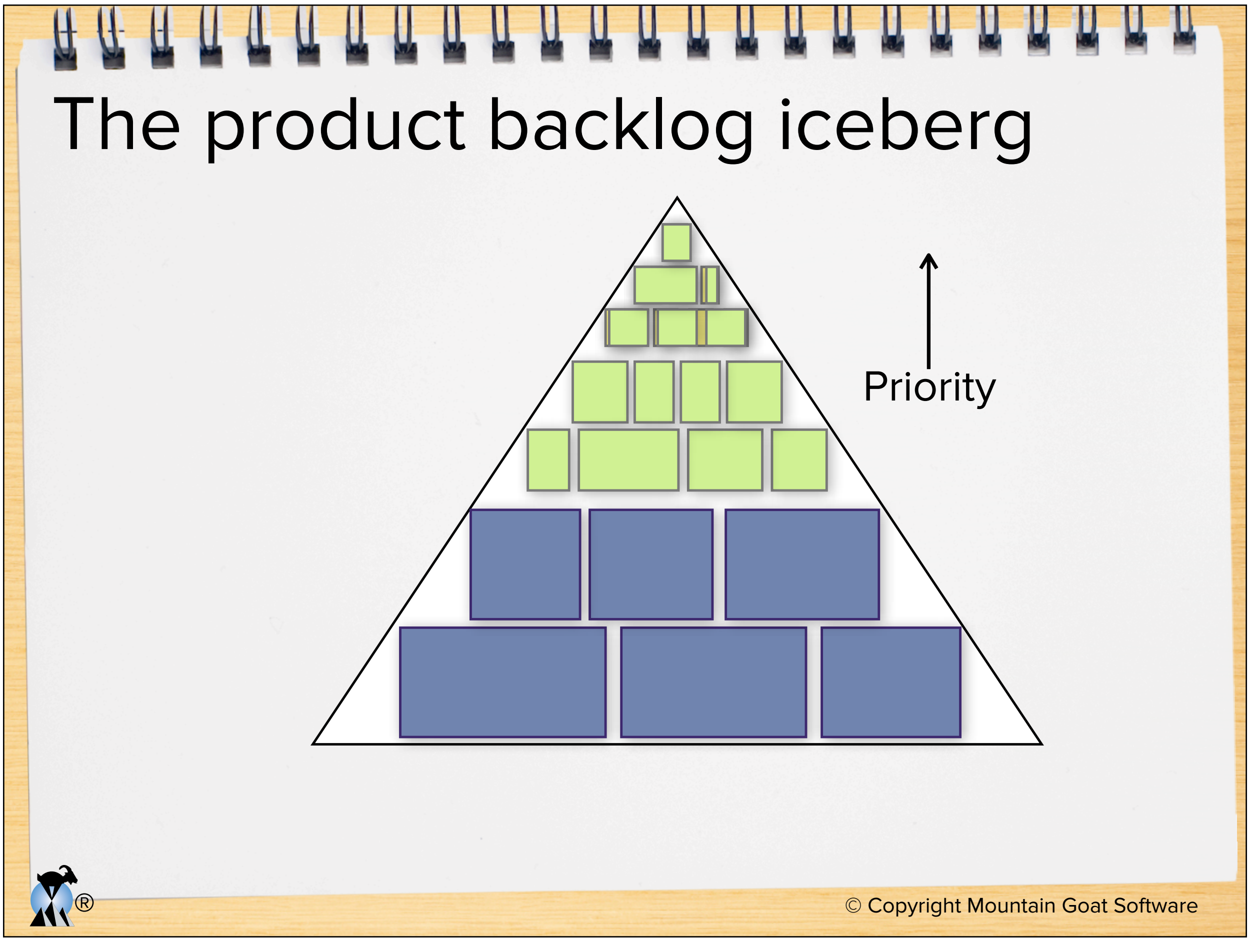
As a non-premium member, I can cancel up to 24 hours in advance.

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

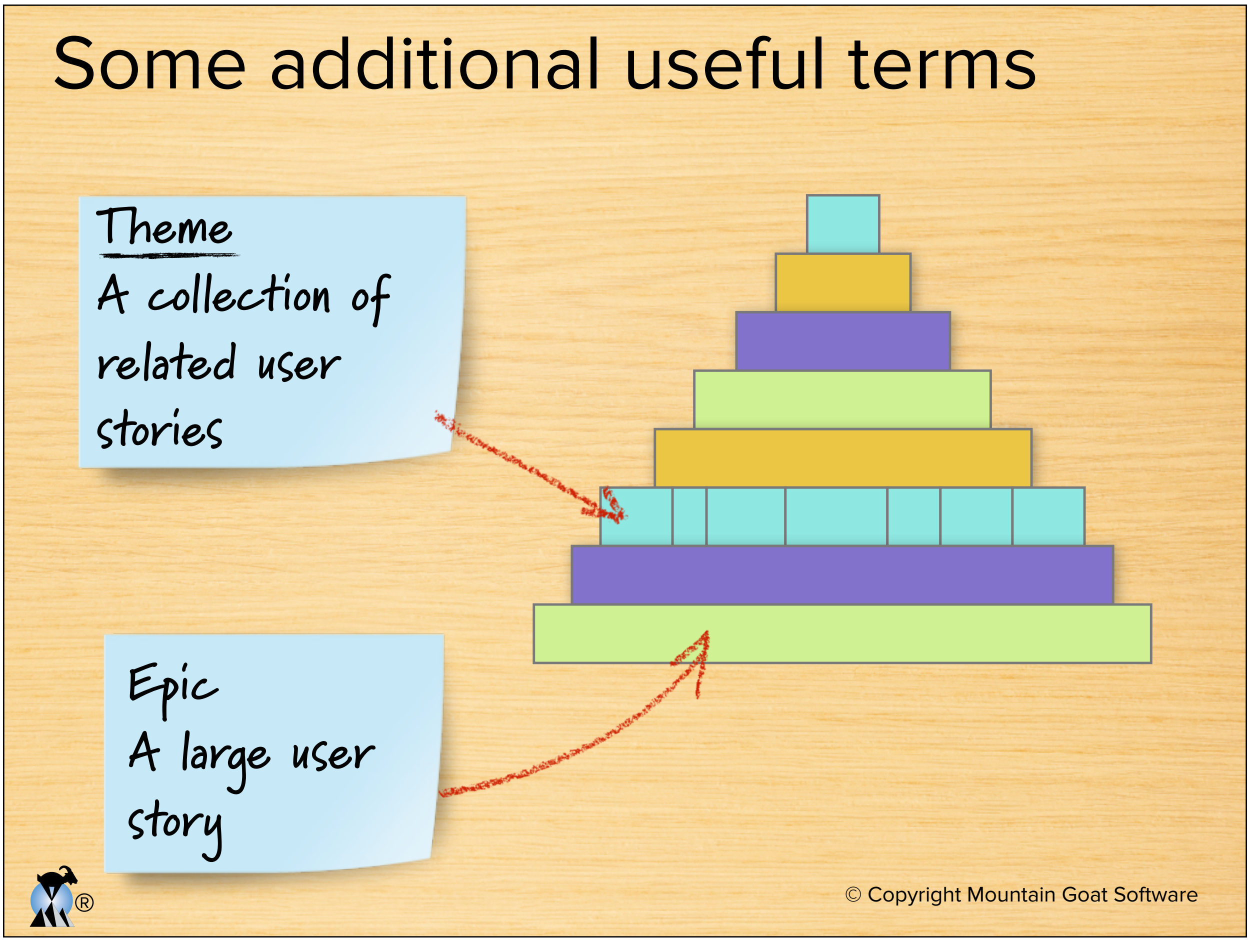


Techniques can be combined

- 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 product backlog iceberg

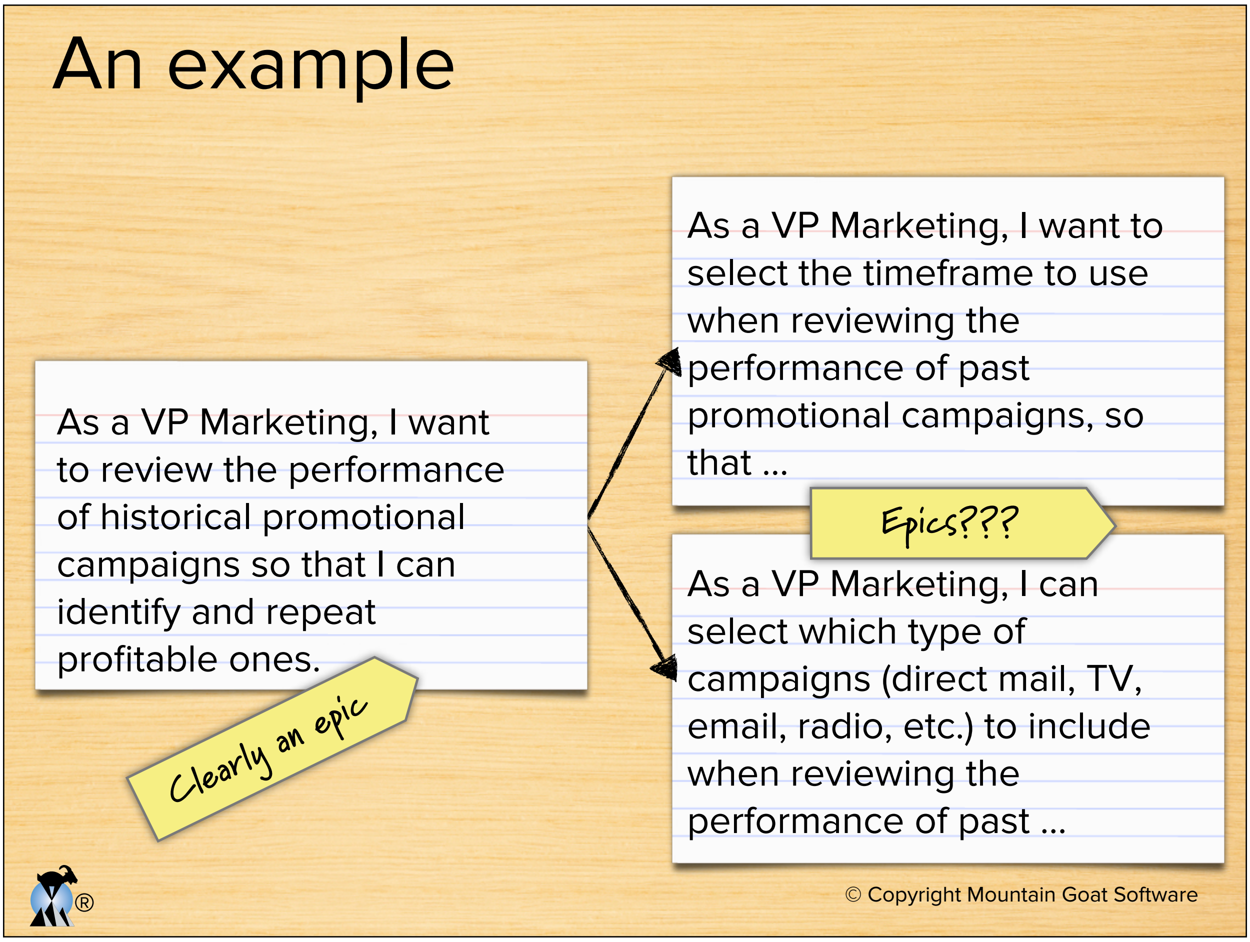


Some additional useful terms

Theme
A collection of related user stories

Epic
A large user story

An example



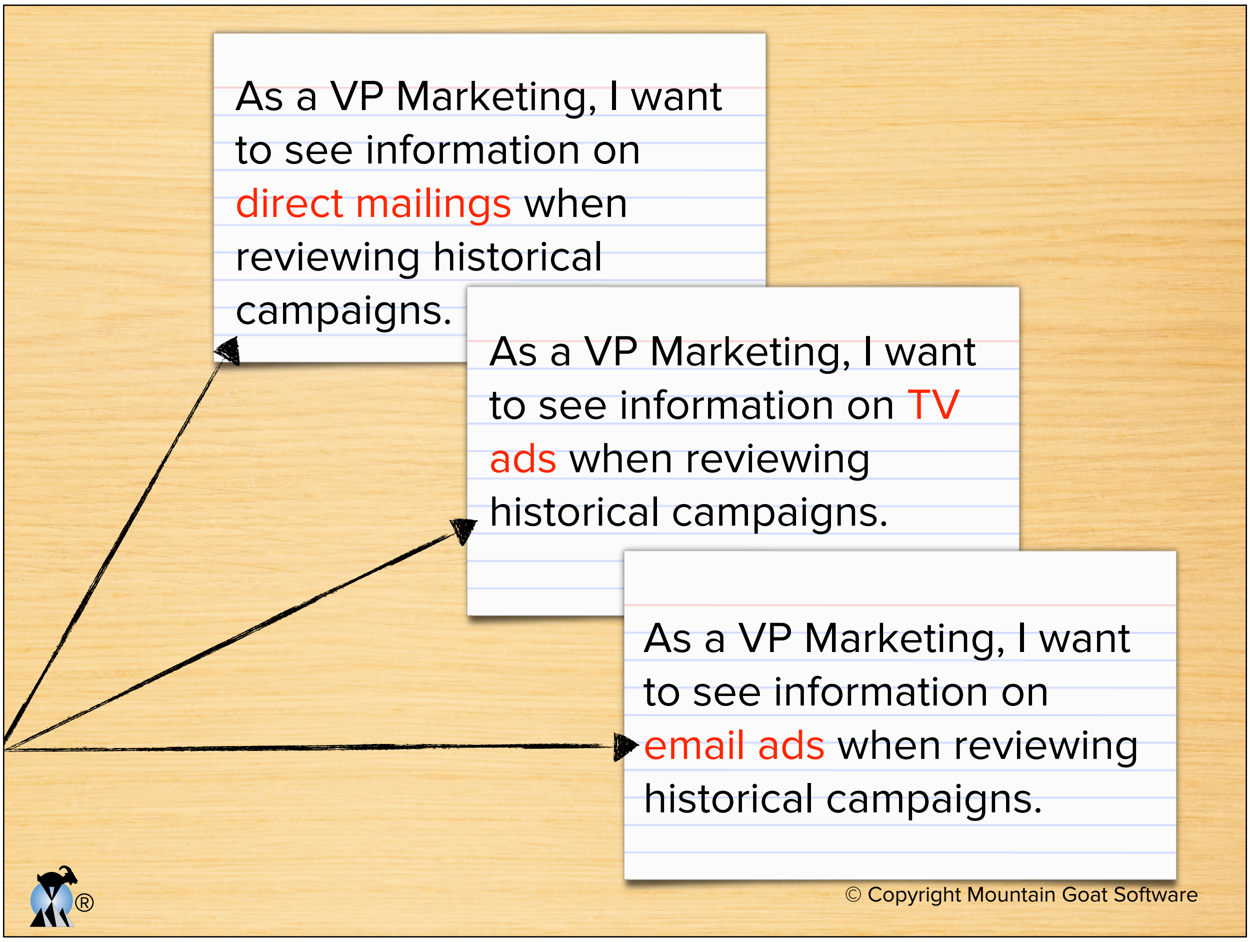
As a VP Marketing, I want to review the performance of historical promotional campaigns so that I can identify and repeat profitable ones.

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???

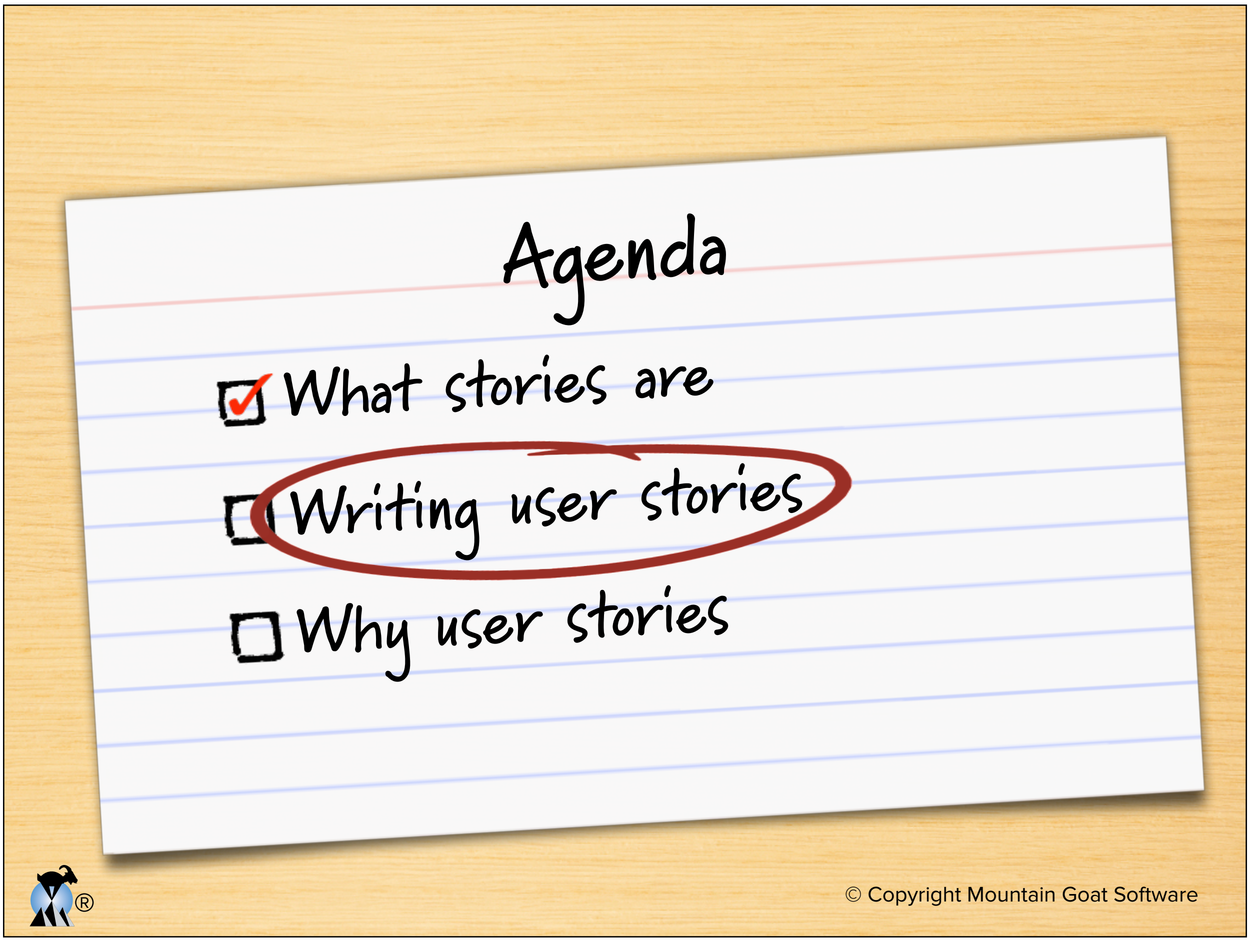
As a VP Marketing, I can select which type of campaigns (direct mail, TV, email, radio, etc.) to include when reviewing the performance of past …



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.



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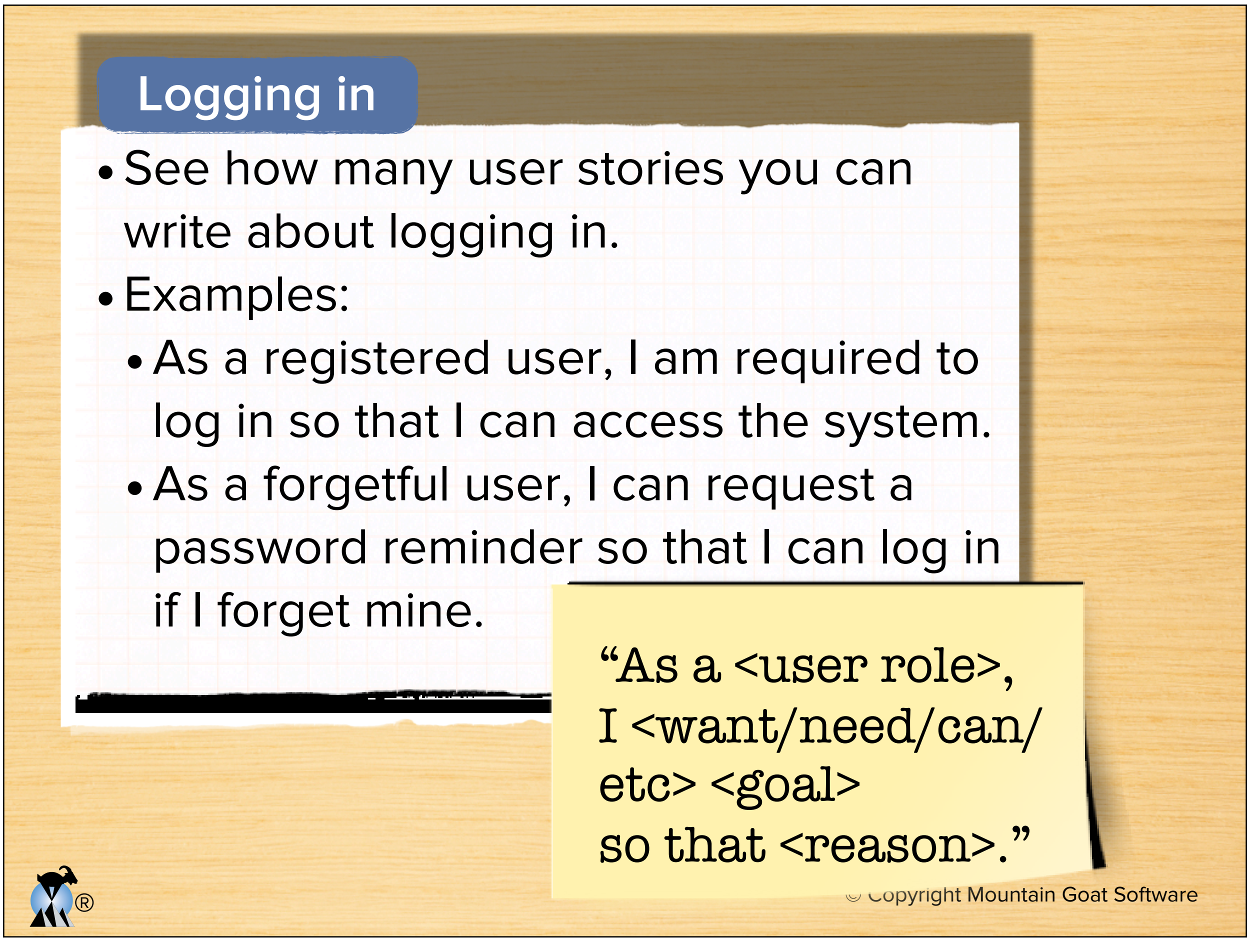


Logging in

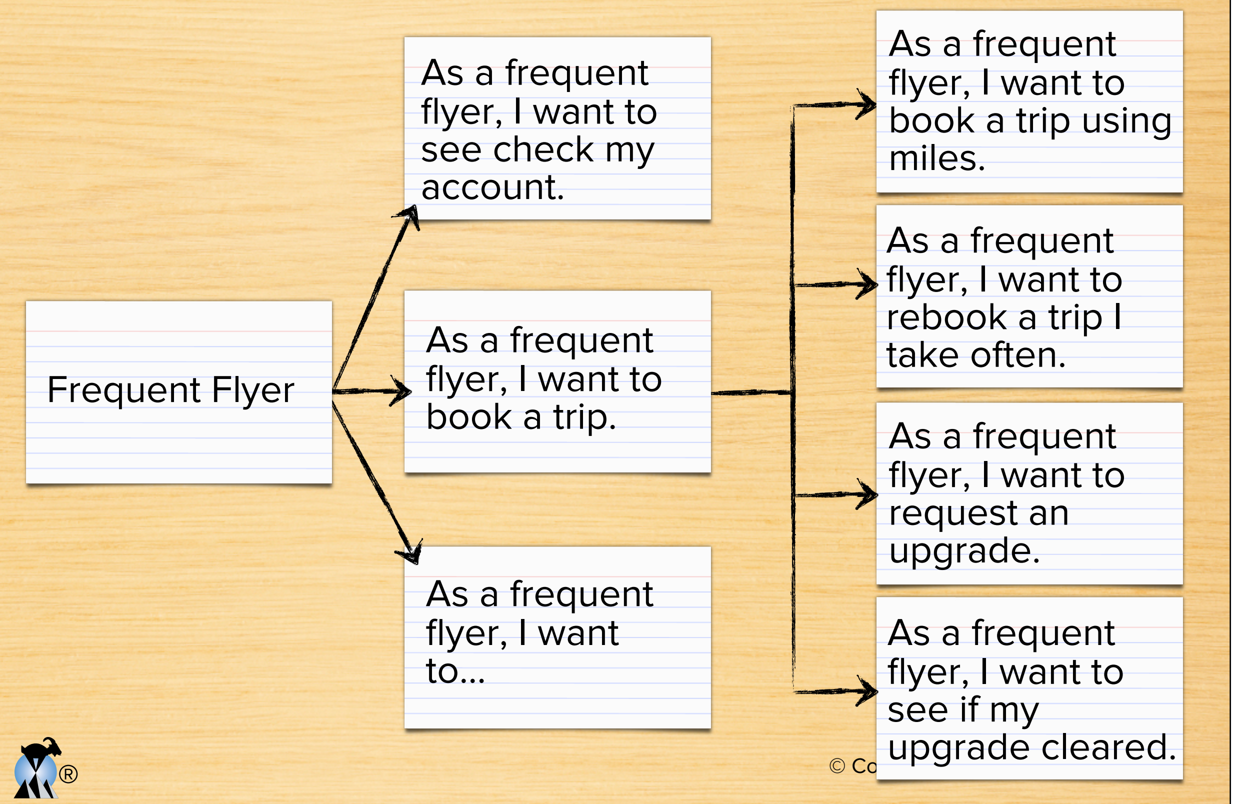
- See how many user stories you can write about logging in.
- Examples:
  - As a registered user, I am required to log in so that I can access the system.
  - As a forgetful user, I can request a password reminder so that I can log in if I forget mine.

"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



Frequent Flyer

As a frequent flyer, I want to see check my account.

As a frequent flyer, I want to book a trip.

As a frequent flyer, I want to…

As a frequent flyer, I want to book a trip using miles.

As a frequent flyer, I want to rebook a trip I take often.

As a frequent flyer, I want to request an upgrade.

As a frequent flyer, I want to see if my upgrade cleared.

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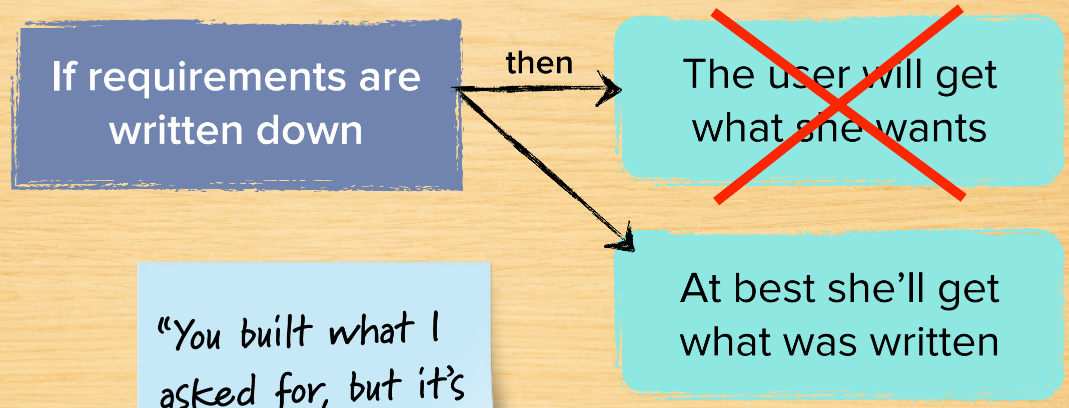
So why user stories?

- Shift focus from writing to talking



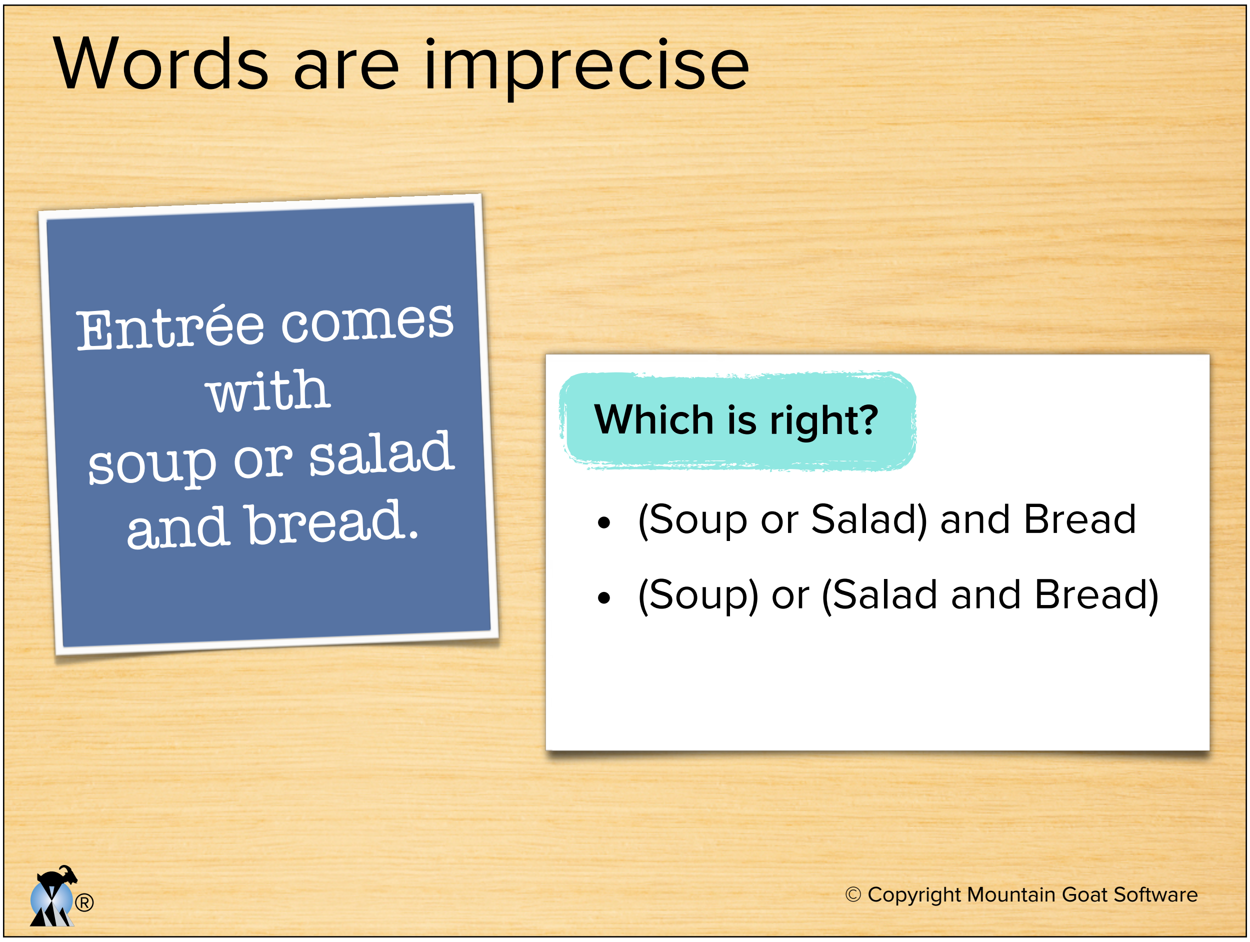
If requirements are written down

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."

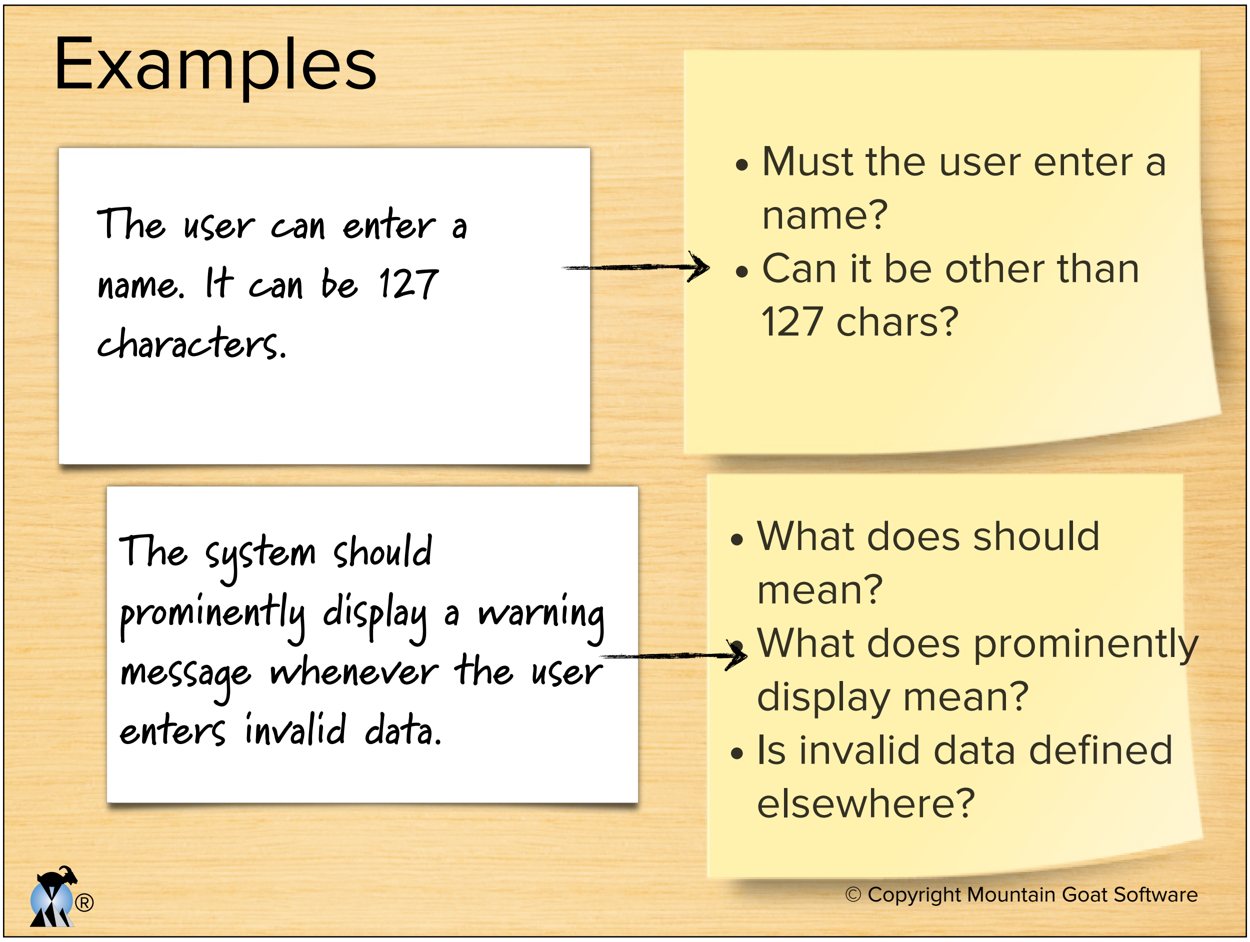


Words are imprecise

Entrée comes with soup or salad and bread.

Which is right?

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



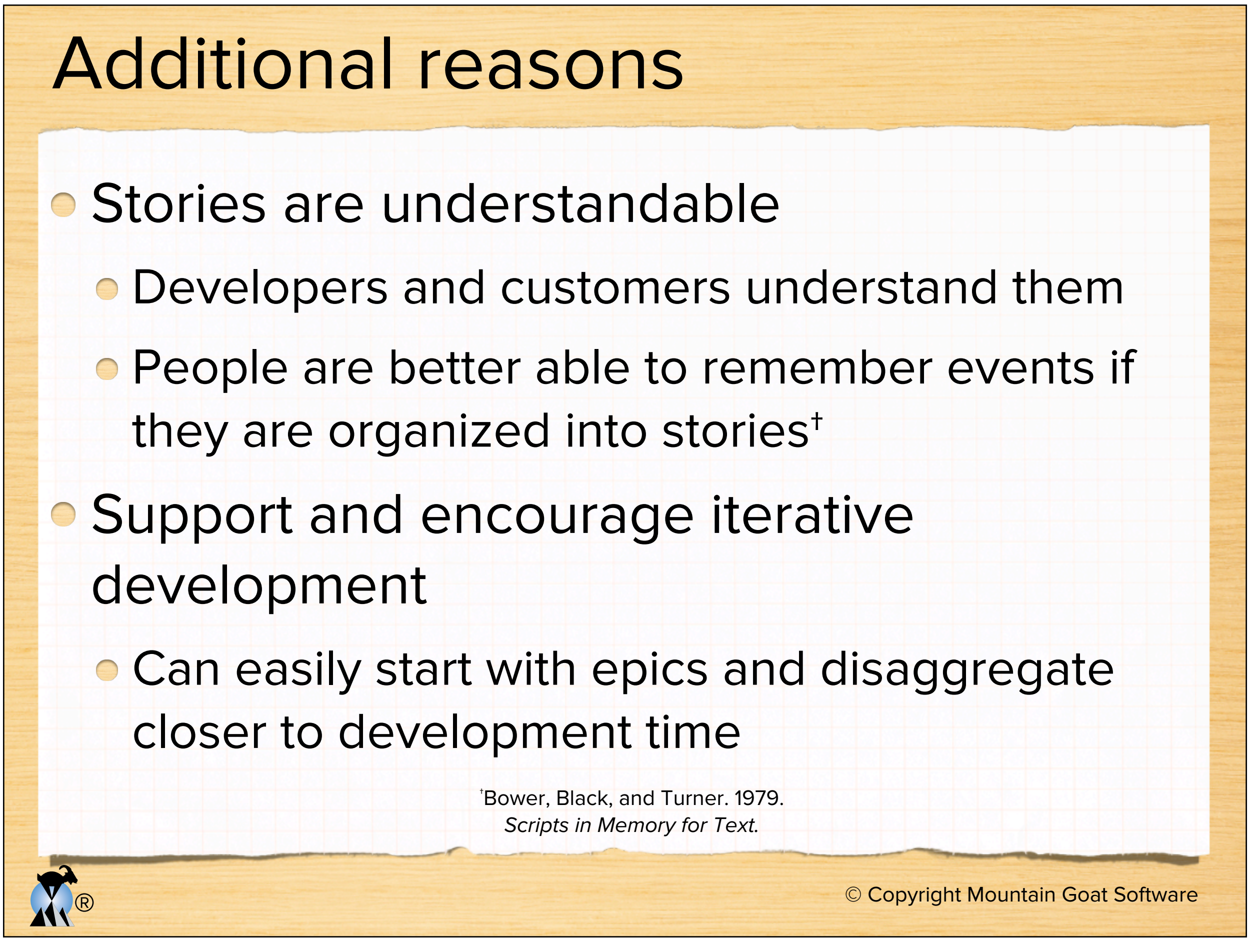
Examples

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[†]
- Support and encourage iterative development
  - Can easily start with epics and disaggregate closer to development time

[†]Bower, Black, and Turner. 1979.
Scripts in Memory for Text.

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[†]
- Stories support participatory design

[†]Guindon. 1990. *Designing the Design Process.*

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.

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