

Working with User Stories

Communication over Specification

Gathering Stories

Roles anchor user stories to user needs

Steps

- brainstorm initial set of user roles
- organise initial set
- consolidate & refine roles
- identify epics or stories for role/persona

Alternative techniques to user roles

Personas
A persona is a representation of a real group of users. Personas are synthesized from data collected from user research. They include behavioural patterns, goals, skills, attitudes, and environments, with a few fictional details to make the persona a realistic character.

Extreme characters
Choosing extreme characters with exaggerated emotional attitudes in addition to typical characters may lead you to stories you are likely to miss otherwise.

Gathering stories

Observation
Identify implied and explicit requirements by observing users of the future system at work in their natural environments.

Story writing workshop
Collect requirements and new ideas in a creative environment.
Creativity is amplified by sharing ideas, efficient consolidation.

User interview
Identifies requirements and also discovers mind-set and attitude.
Also works well with users that are less extrovert.

Estimating with User Stories

Relative sizes stay stable longer

Estimate the size of stories with story points instead of estimating the expected effort. This gives you a more stable base for future progress forecasting. Let the whole team estimate, but beware of mutual influence.

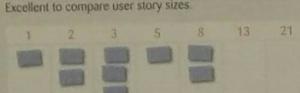
Techniques

Planning poker
To make sure nobody is influenced by peers when estimating.
Discuss and re-estimate when estimates differ a lot.



	fibonacci	T-Shirt Sizes
1	1	XS
2	2	S
3	3	M
5	5	L
8	8	XL
13	13	XXL
21	21	XXXL
34	34	?
55	55	?
7	7	?

Triangulate
To make sure nobody is influenced by peers when estimating.
To allow discussions about what we see in the user story and to arrive at a common understanding of the relative size.
Excellent to compare user story sizes.



Planning with User Stories

User stories enable lightweight planning

Utilise the user story order in the backlog for prioritisation.
The backlog may grow, shrink and reorder over the whole lifetime.

Progressive level of details

Manage stories in the backlog

Epic
placeholder for a set of user stories

Product backlog
iteration backlog
Tasks to work on

User Story
represents functionality that is valuable to a user or customer

tend backlog regularly when gaining new insight
add, split, change, re-order, remove

Task
notable steps to do to realize user story

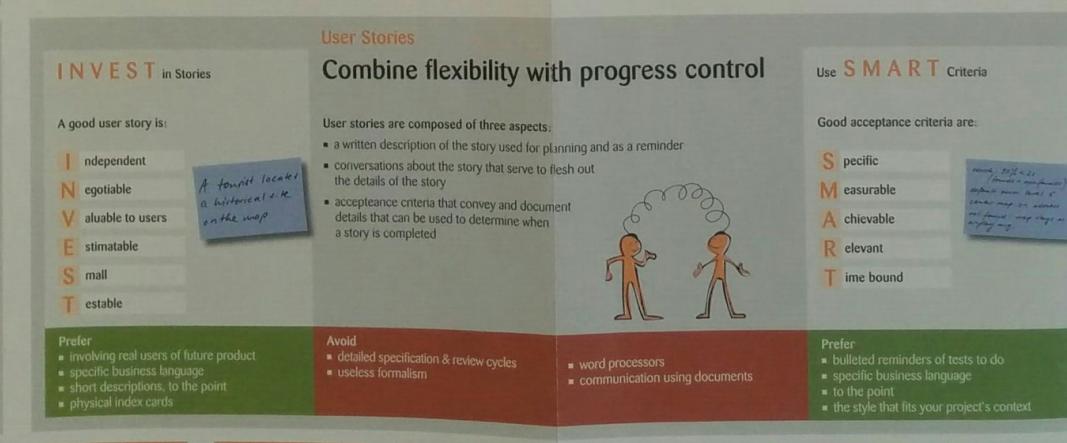
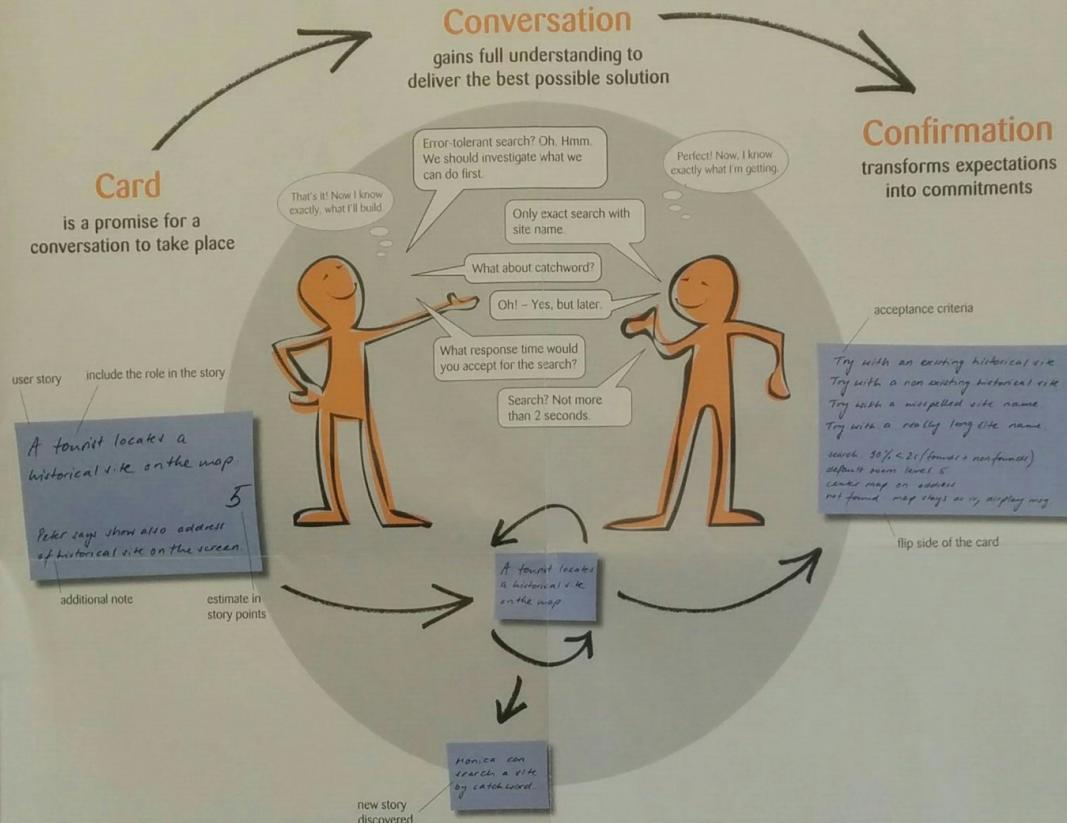
exhaustive up-front specification & planning
large backlog with hundreds of stories
considering stories as static/unchangeable
elaborate dependency tracking

Prefer
break down as you progress
detail just-in-time
prioritise according to business benefits
remove what you do not need anymore

detailed specification & review cycles
word processors
communication using documents

Avoid
involving real users of future product
specific business language
short descriptions, to the point
physical index cards

bulletted reminders of tests to do
specific business language
to the point
the style that fits your project's context

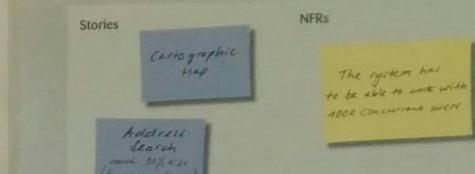


Non-Functional Requirements

NFRs on cards or as acceptance criteria

Non-functional requirements may impact the implementation of any user story. You may consider the NFRs in any iteration. You may derive acceptance criteria for a specific story from a NFR card to fulfil or implement the non-functional requirement.

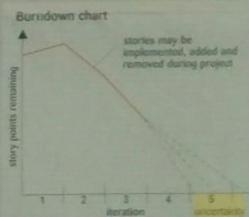
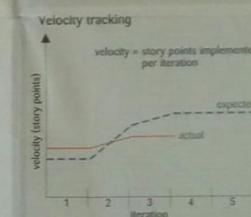
Product backlog



Measuring & Monitoring

Forecast progress based on velocity

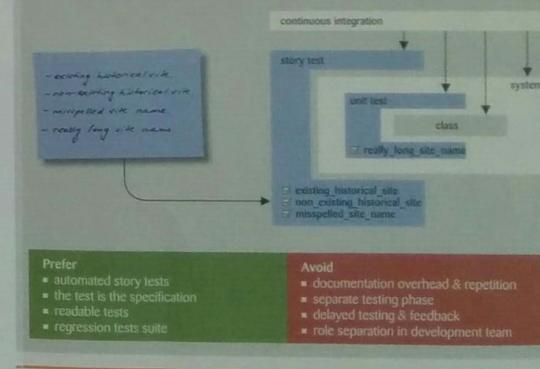
Velocity translates story points into effort. The relative size of the stories remains the same even if effort per story point changes.

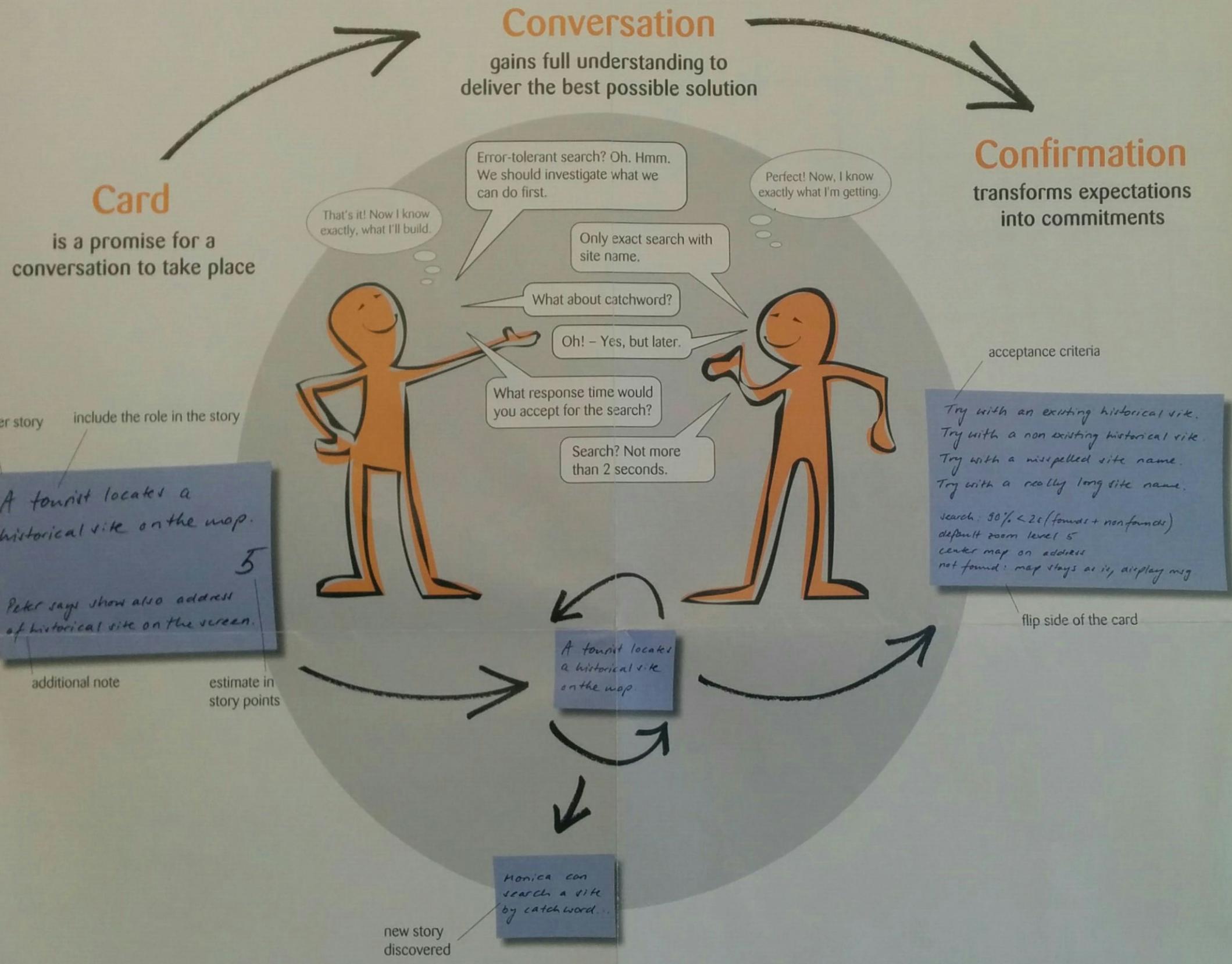


Testing with User Stories

Test becomes specification

Implement the tests in a way that allows the domain expert to verify the tests independently or together with the developer/tester. Readable & maintainable tests are easier kept up-to-date than a separate test specification.





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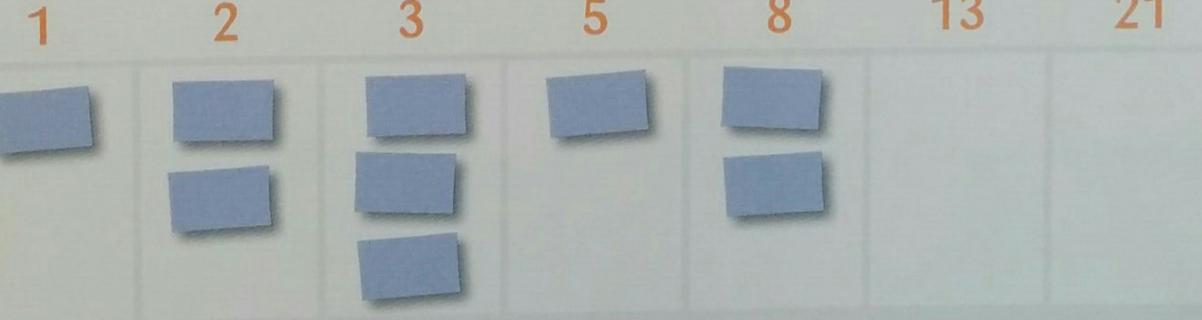
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Triangulate	To make sure nobody is influenced by peers when estimating. To allow discussions about what we see in the user story and to arrive at a common understanding of the relative size. Excellent to compare user story sizes.		1 2 3 5 8 13 21	1 2 3 5 8 13 21 34 55 ?

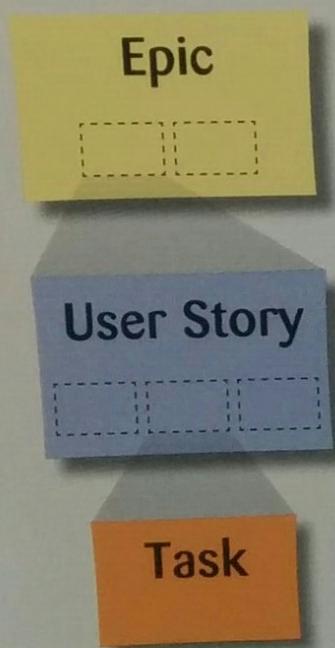
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Progressive level of details

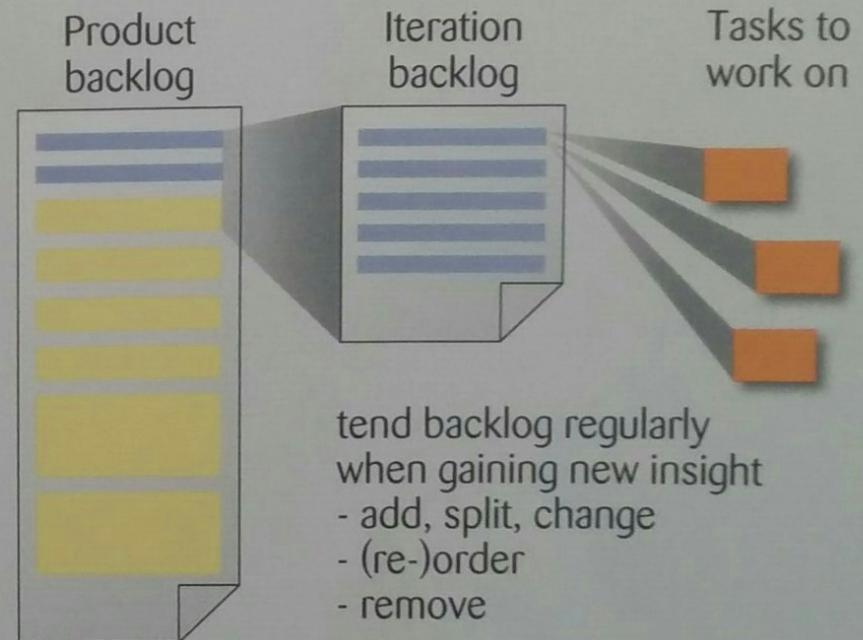


placeholder for a set of user stories

represents functionality that is valuable to a user or customer

notable steps to do to realize user story

Manage stories in the backlog



Prefer

- break down as you progress
- detail just in-time
- prioritise according to business benefits
- remove what you do not need anymore

Avoid

- exhaustive up-front specification & planning
- large backlogs with hundreds of stories
- considering stories as stable/unchangeable
- elaborate dependency tracking

INVEST in Stories

A good user story is:

I ndependent

N egotiable

V aluable to users

E stimatable

S mall

T estable

A tourist located
a historical site
on the map.

Prefer

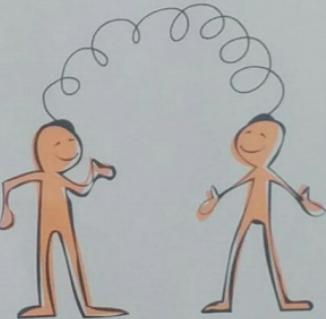
- involving real users of future product
- specific business language
- short descriptions, to the point
- physical index cards

User Stories

Combine flexibility with progress control

User stories are composed of three aspects:

- a written description of the story used for planning and as a reminder
- conversations about the story that serve to flesh out the details of the story
- acceptance criteria that convey and document details that can be used to determine when a story is completed



Avoid

- detailed specification & review cycles
- useless formalism

- word processors
- communication using documents

Good acceptance criteria are:

S pecific

M easurable

A chievable

R elevant

T ime bound

search: 50% < 20
(homework + non-functional)
defect fix zoom level 5
center map on address
not found: map stays at my
display size.

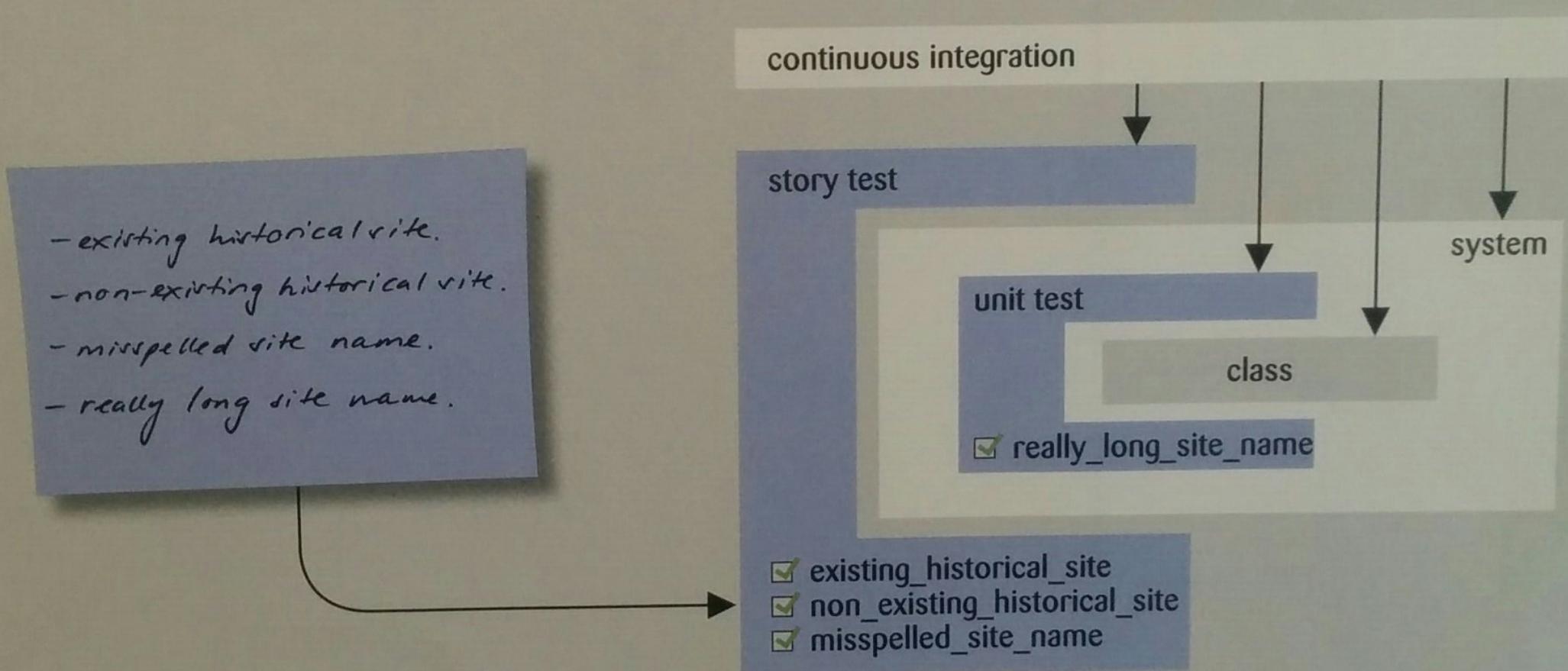
Prefer

- bulleted reminders of tests to do
- specific business language
- to the point
- the style that fits your project's context

Testing with User Stories

Test becomes specification

Implement the tests in a way that allows the domain expert to verify the tests independently or together with the developer/tester. Readable & maintainable tests are easier kept up-to-date than a separate test specification.



Prefer

- automated story tests
- the test is the specification
- readable tests
- regression tests suite

Avoid

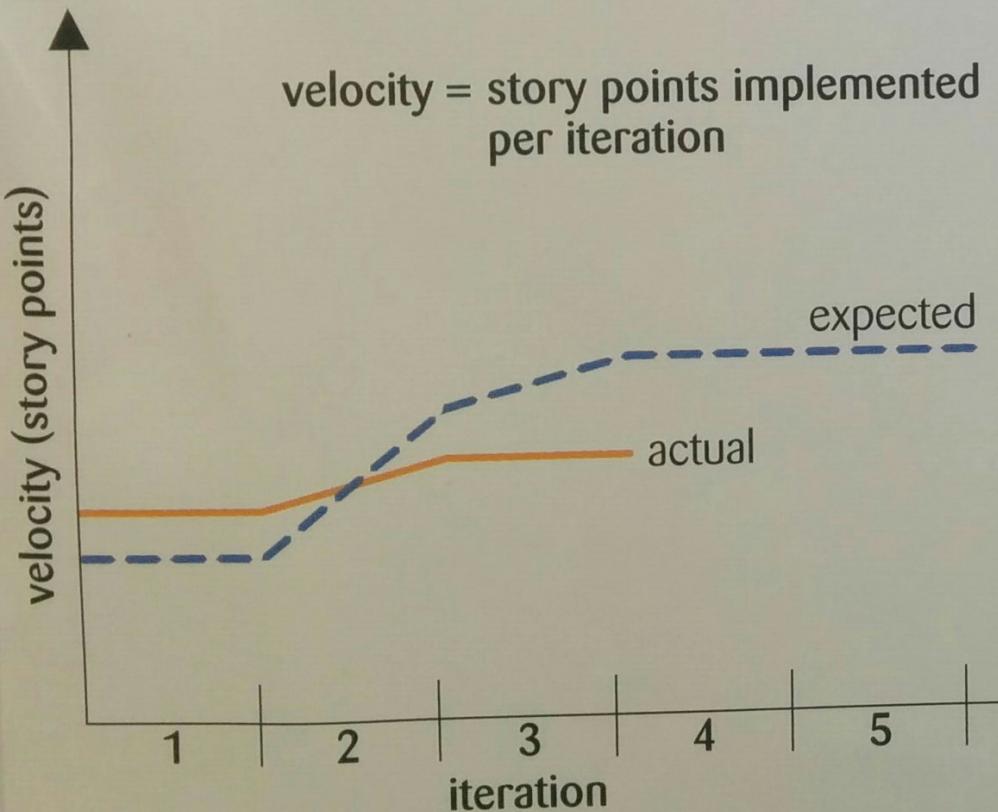
- documentation overhead & repetition
- separate testing phase
- delayed testing & feedback
- role separation in development team

Measuring & Monitoring

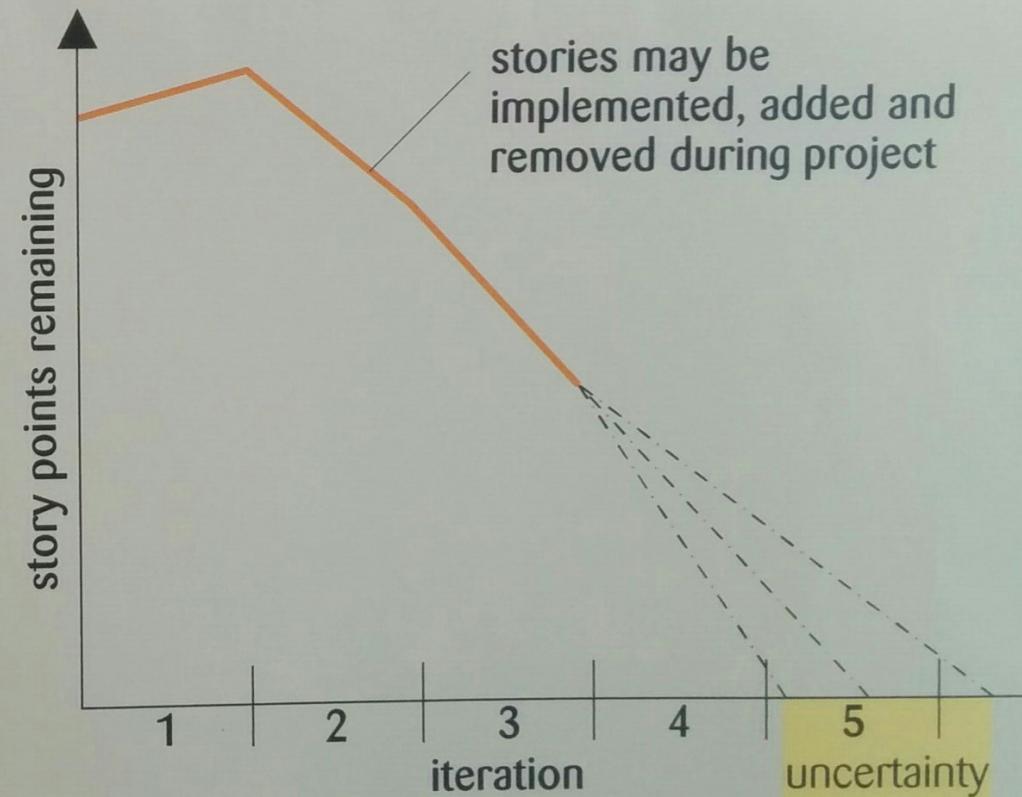
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Velocity tracking



Burndown chart



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Product backlog

Stories

Cartographic
Map

Address
Search
search : 90% < 2s
(found + non found)

NFRs

The system has
to be able to work with
1000 concurrent users.