Questions about Scrum

Answers to these questions are in the free e-book

Scrum and XP from the Trenches
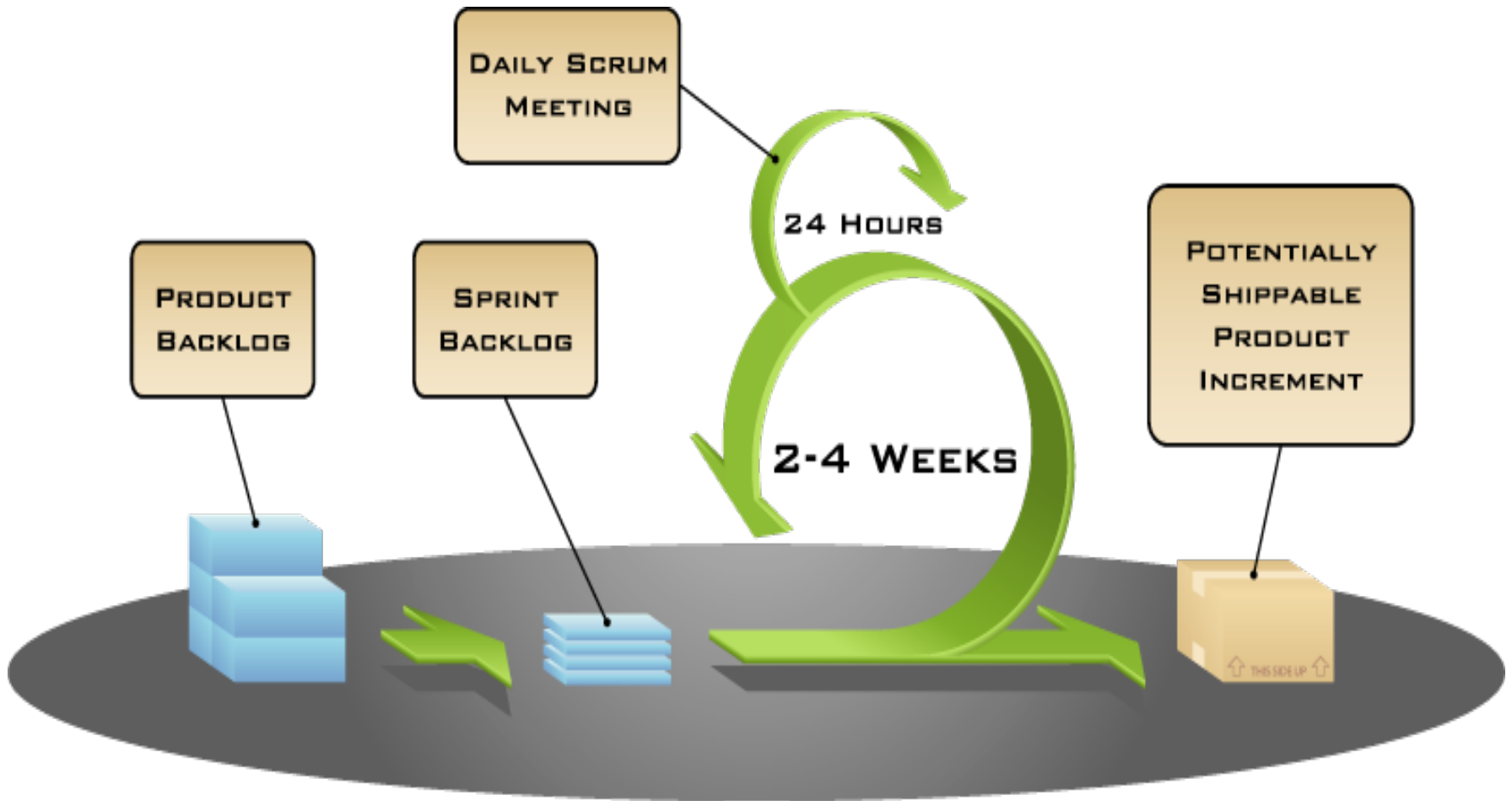
Ken Schwaber said...

Scrum is not a methodology,
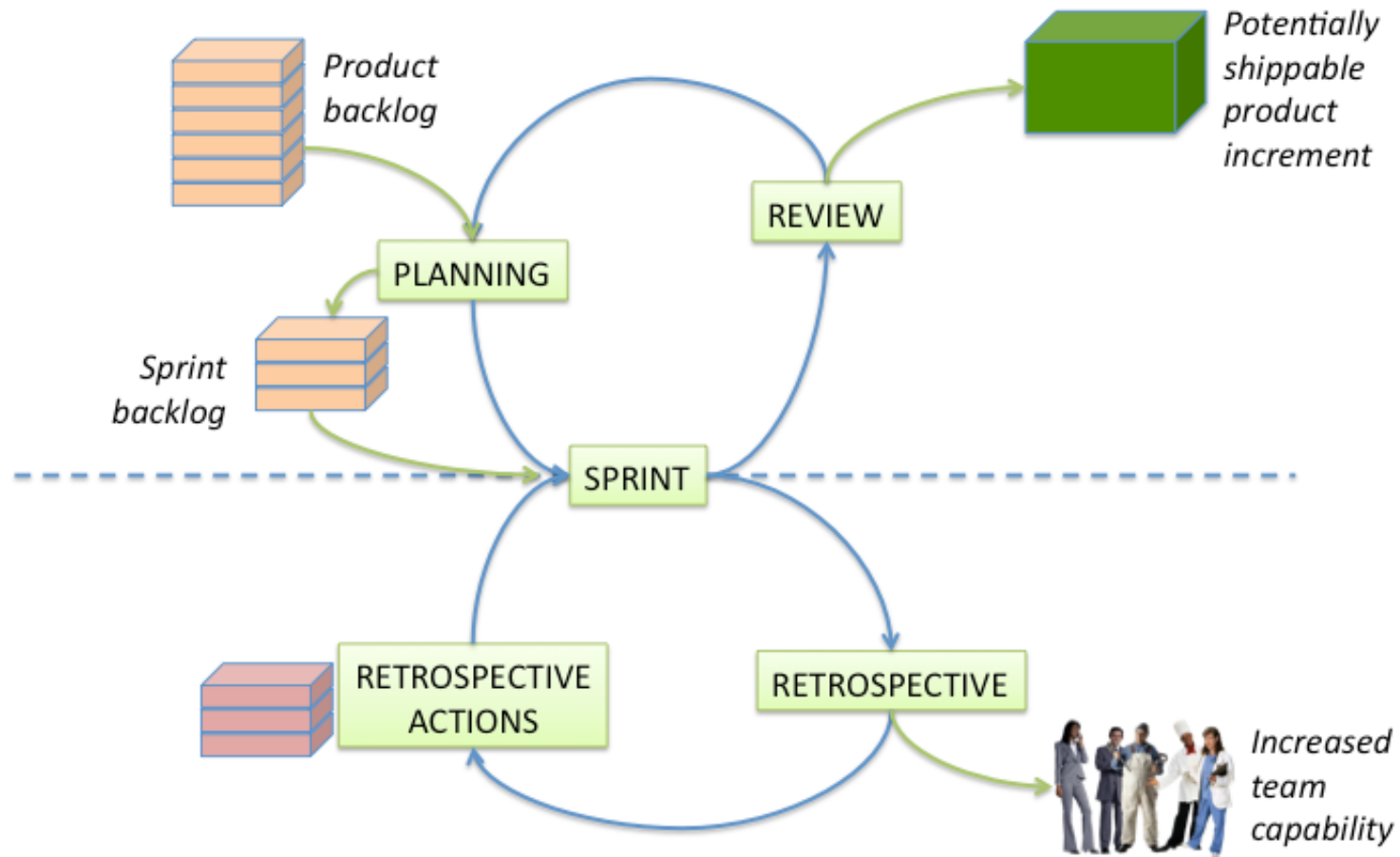
it is a _____.

Ken Schwaber and Jeff Sutherland are the creators of
  Scrum.

Scrum Workcycle

Scrum & Process Improvement

Product deliverable

Product backlog

Sprint backlog

PLANNING

REVIEW

Potentially shippable product increment

SPRINT

RETROSPECTIVE ACTIONS

RETROSPECTIVE

Increased team capability

Capability deliverable

The Roles

What are the **roles** in a Scrum team?

1. Developers

2.

3.

4.

The Roles

Development team

     - what (recommended) size?

     - what is recommended skill level?

Scrum Master

     - what is the purpose?

     - 3 goals of Scrum Master

Product owner

What about these roles?

Tester

Software Designer

UI/UX Designer

Architect

Database Designer

Configuration Manager

Quality Assurance Manager

Requirements Analyst

Business Analyst, U.C. Analyst

Ideal Scrum Master

Mike Cohn's 6 attributes of a good Scrum Master

http://www.mountaingoatsoftware.com/articles/leader-
   of-the-band

A blog entry of practical advice for Scrum Masters:

http://www.mountaingoatsoftware.com/blog/tag/
   scrummaster

Product Owner

Product owner is responsible for …

◆   product backlog

◆   prioritizing items in product backlog

◆   "optimizing the value of work done by dev. team"

◆   ensuring the product backlog is visible, transparent, & clear

◆   participates in Sprint Planning and Demos

◆   has authority to make decisions about the product and its features

http://www.scrumguides.org/scrum-guide.html

Scrum Master

Scrum Master is responsible for

- maintaining progress

  - ensure team has the resources they need

  - help remove impediments

  - shield the team from outside interruptions or interference

- aid in release planning - help product owner obtain maximum value

- facilitate Scrum events - daily Scrum, retrospective, etc.

- help maintain good interpersonal dynamics, team & p.o.

More details here:
https://www.scrumguides.org/scrum-guide.html#team-sm

Scrum Artifacts

Product Backlog - what is it? Where does it come
from?

_____

Story card - what is it?

_____

Scrum-specific Activities

1. Sprint Planning Meeting - at the start of each sprint.

   - Decide what items from product backlog to implement.

   - Product owner participates and prioritizes.

   - Selected items become "Sprint backlog".

   - Sprint backlog items broken down into tasks.

2. Daily Scrum

3. _____ - Powerpoint is not allowed!

4. Sprint Retrospective

Product Backlog

*What is a **product backlog**?*

Who creates the (original) product backlog?

Article:

https://www.mountaingoatsoftware.com/agile/scrum/
   product-backlog

Example:

http://www.mountaingoatsoftware.com/agile/scrum/
   product-backlog/example

Product Backlog spreadsheet

ID	Theme	As a/an	I want to...	so that...	Notes	Priority	Status
2	Game	moderator	create a new game by entering a name and an optional description	I can start inviting estimators	If games cannot be saved and returned to, the description is unnecessary	Required	done
2	Game	moderator	invite estimators by giving them a url where they can access the game	we can start the game	The url should be formatted so that it's easy to give it by phone.		done
5	Game	estimator	join a game by entering my name on the page I received the url for	I can participate			done
6	Game	moderator	start a round by entering an item in a single multi-line text field	we can estimate it			done
8	Game	estimator	see the item we're estimating	I know what I'm giving an estimate for			done
40	~~Game~~	~~participant~~	~~always have the cards in the same order across multiple draws~~	~~It's easy to compare estimates~~	-	Replaced with A08 because I didn't want the story to talk about "the same order" as that might be a UI implementation detail	~~todo~~
35	Non-functional	user	have the application respond quickly to my actions	I don't get bored			done
36	Non-functional	user	have nice error pages when something goes wrong	I can trust the system and it's developers			done
A11	Non-functional	Researcher	results to be stored in a non-identifiable way	I can study the data to see things like whether estimates converged around the first opinion given by "estimator A" for example	No names or story text should be stored but we should store each card of each hand, know who played it, and know the final accepted estimate		
A05	Game	moderator	edit an item in the list of items to be estimated	so that I can make it better reflect the team's understanding of the item			
22	Archive	moderator	export a transcript of a game as a CSV file	I can further process the stories and estimates	Exported file should be directly importable back into the system.		done

Info in the Product Backlog

*What 4 **kinds of info** are in product backlog items?*

Attributes of a Backlog Item

ID

Description - story, bug description

Importance

Acceptance Criteria

Estimated time* (story points, hours, or days)

Optional Attributes

Category of the feature

Why it matters

Requester

Bug Tracking ID, if using a separate bug tracking system

*Estimated Time

When planning a release or sprint, you need to estimate how much time to perform each backlog item.

This is so you correctly size the backlog for a sprint.

Estimate can be hours, days, or "story points".

Not Needed for Initial Backlog

Initial backlog creation doesn't need time estimates.

Your time estimates will be better after you start work on the project!

So, estimate times when the item is under consideration to include in a release or sprint. Re-estimate occasionally.

User Stories

User story is a brief description of a something the system must do, from perspective of a stake holder.

- easy for everyone to understand

- not step by step instructions

- intended to be elaborated or revised later

- should include acceptance criteria, so you know when its done.

User Story Template 1

As a _____(role)_____,

I want _____(goal)_____,

so that _____(benefit)_____. [optional]

As an interior designer,

I want to see furniture by a style or material,

so that I can choose furniture that matches my
   room design

User Story Template 2

In order to _____(benefit or goal)_____,

as a _____(role) _____,

I want _____(desire) _____.

In order to create my product

as an entrepreneur with a product idea,

I want to find people I can trust with skills, interest, and background I need.

User Story Template 3

As _____(role) (when) (where)_____,

I want ____(desire) _____

because ___(why it matters)_____.

As a consumer at home,

I want products delivered to me cheaply,

because traveling in BKK takes too much time and
   sometimes I can't find the place I'm looking for.

Acceptance Criteria

Acceptance criteria or acceptance tests written on back of card, or in spreadsheet of user stories.

- needed to clarify requirements

- needed to know when the story is done.

Given _____(context)_____

when _____(action to perform, or event)_____

then _____(results)_____

But this template is not so universal.

Example

Story: When e-banking patron transfers money a transaction is created and the amount is deducted from balance.

Test 1: view balance page, then transfer 5,100 Bt. Verify balance decreased by same amount. View transaction list and see a new transaction (transfer) with correct date/time, channel, and amount.

Test 2: perform e-banking transfer procedure but cancel it on the confirmation screen. Verify that balance does not change and no transaction appears on transactions list.

More Acceptance Criteria

- *A user cannot submit a form without completing all the mandatory fields.*

- *Information from the form is stored in the registrations database.*

- *Protection against spam is working.*

- *Payment can be made via credit card.*

- *An acknowledgment email is sent to the user after submitting the form*.

Ref: http://www.boost.co.nz/blog/2012/01/use-cases-or-user-stories/

Story Point

What is a "story point"? And how is it used?

In *Scrum & XP from the Trenches,* the author uses:

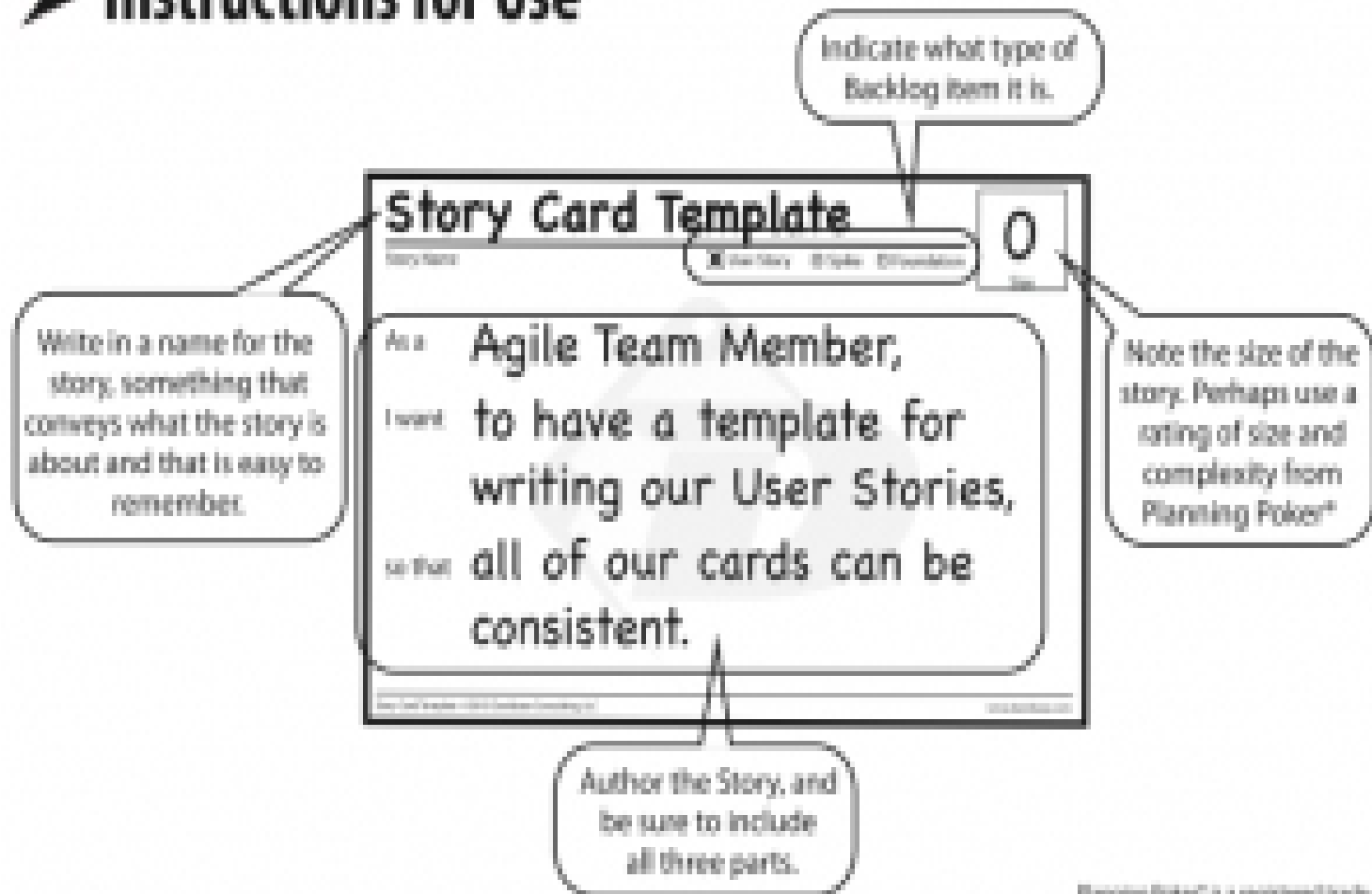1 story point = _____?_____

Example Story Card

Format suggested in *Scrum & XP from the Trenches*

Backlog Item #1

Deposit

Importance

30

Notes

Need a UML sequence diagram. No need to worry about encryption for now.

Estimate

5

How to demo

Log in, open deposit page, deposit €10, go to my balance page and check that it has increased by €10.

Many Different Formats

Backlog & Sprint Planning

"*Make sure the product backlog is in ship-shape <u>before</u> the sprint planning meeting*"

What does that mean?

1. the product backlog exists

2. there is *one* product backlog and *one* product owner

3. importance rating assigned to all items

    –   the ratings of "important" items should all be *different!*

4. the product owner *understands* each story

Sprint Planning

What is the **goal** of the sprint planning meeting?

Who must attend, other than the dev. team?

What is the output of the planning meeting?

(4 items)

Output of Sprint Planning

1. A sprint goal.

2. Sprint backlog, chosen from the product backlog.

3. A date for sprint demo.

4. Defined place & time for the daily scrum.

Desirable:

Milestones - show objective progress toward finishing
the project.

Sprint Goal

The Sprint Goal can be hard to create.

The sprint goal should answer what question?

Sprint Goal

Sprint Goal should answer the question:

"Why are we doing this sprint?"

How to Select Sprint Backlog?

What is the procedure for selecting items for the sprint backlog?

How to Prioritize Stories?

In Sprint Planning Meeting, customer & developers select the stories to implement.

Story cards are placed on a task board (physical or virtual board).

The order matters.

Planning Meeting Time

Sprint planning meeting is time-boxed.

What is the recommended maximum time?
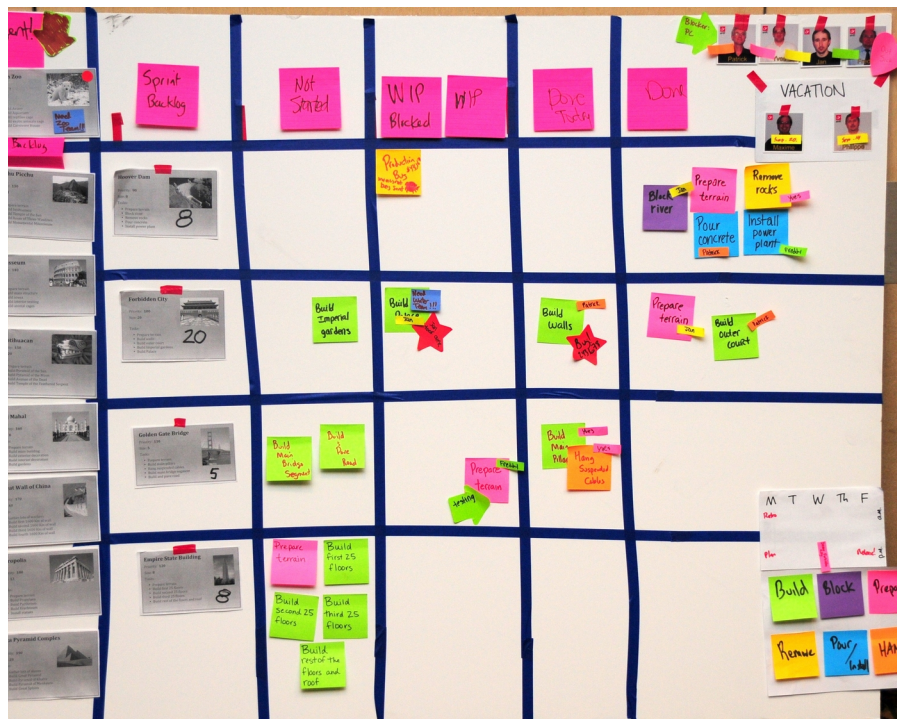
Planning Meeting takes too long

What should you do if the time expires before you have defined a sprint backlog and goal?

(from the book *Scrum & XP from the Trenches*)

Assigning Tasks

The sprint has started!

How are tasks assigned to people? Who assigns?

Dev Team

Scrum dev teams are …

1. Self-organizing. No one tells team who will do what.

2. Cross-functional, with all the skills needed to create the product.

3. Do not have roles other than "developer".

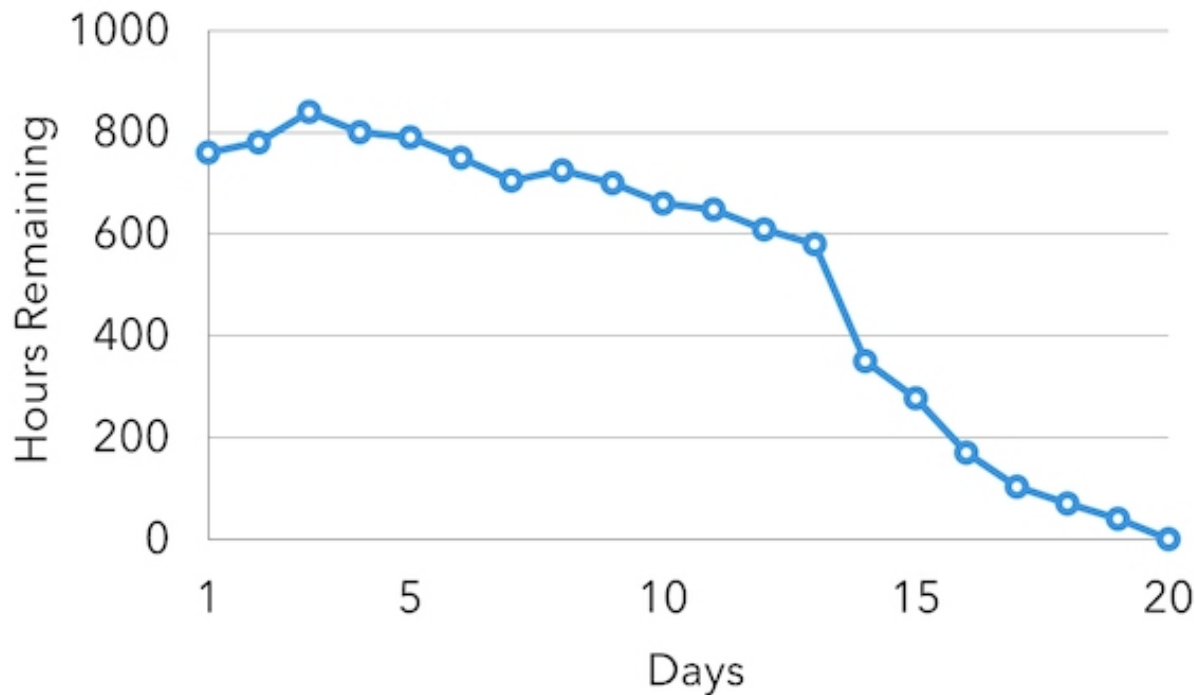4. Don't form sub-teams such as analysts, testers, etc.

Scrum Board

Information radiator for the project team.

See *Scrum & XP from the Trenches, p 48-53.*

Sprint Burndown Chart

What does this sprint burndown chart tell you?

What happened on day 3 and day 13?

Daily Scrum Meeting

Time length: 15 minutes (approx)

1. What 3 questions do team members answer?

   _____

   _____

   _____

2. Who can attend the meeting?

3. Who can speak at the meeting?

What is Not Discussed

1. What is <u>not</u> discussed at daily scrum meeting?

2. So, when it <u>is</u> it discussed?

What are impediments?

Examples from MountainGoatSoftware.com:

- *My ____ broke and I need a new one.*

- *I need help debugging a problem with _____.*

- *I'm struggling to learn _____ and would like to pair with someone on it.*

- *I can't get the vendor's tech support group to call me back.*

- *I can't get the ____ group to give me time to meet with them.*

- *The department VP has asked me to work on something else "for a day or two."*

What are *your* impediments?

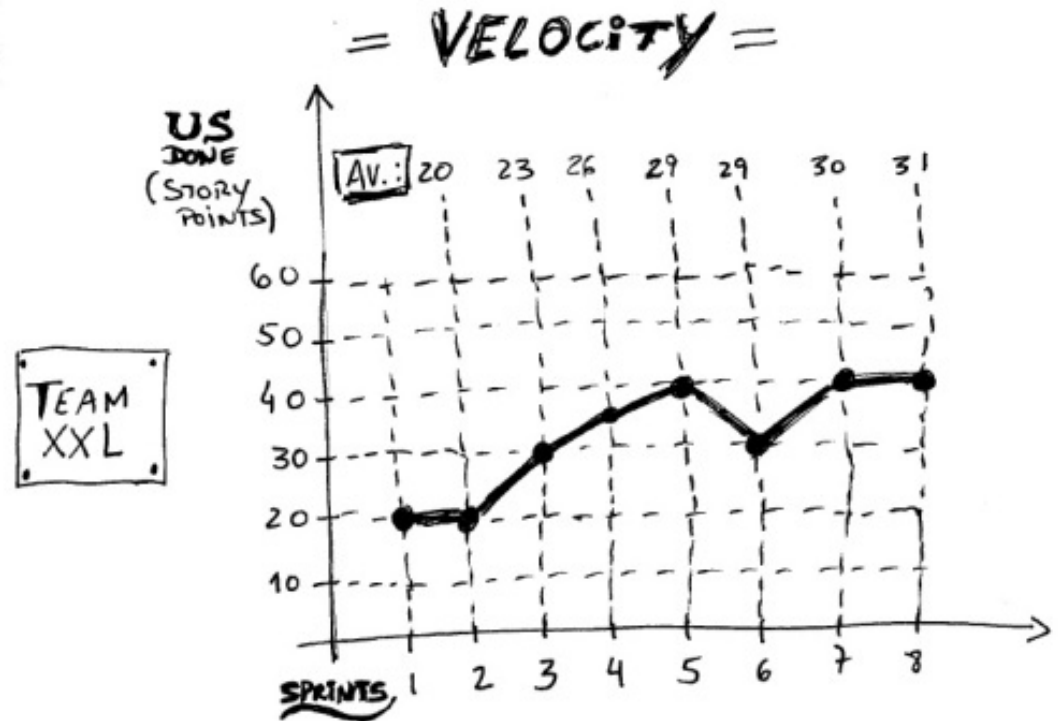What holds up your progress on class projects?

Removing Impediments

Scrum Master's role is to help team be productive by removing impediments.

How?

Velocity

What is the *sprint velocity?*

How do you compute it?

Velocity of Bug Fixes

If a sprint backlog includes bug fixes,
   do they contribute to velocity?

Ref:

https://www.mountaingoatsoftware.com/blog/know-
   exactly-what-velocity-means-to-your-scrum-team

Focus Factor

What is *focus factor*?

Example:

Sprint is 2 weeks (10 working days).

In the last sprint, 4 people worked full-time, 1 person worked 3 days/week.

Total: 10*4+6*1 = 46 person-days.

The team finished 32 story-points(*) of backlog.

What's their focus factor?

(*) 1 story-point = 1 work-day to complete.

Sprint Review & Demo

Every sprint should end with a demo.

Who can attend the demo?

Besides actually demo-ing the software, what do people present at a sprint demo?

Why don't they allow PowerPoint?

Demo Guidelines

- Clearly state the sprint goal.

- Don't spend much **time** preparing (<= 2 hour).

- Make demo **fast-paced**. Demo major work.

- Make it business-oriented: "<u>what</u> we did" instead of "how we did it".

  - *technical demo is OK for technical audience*

- Let the audience try product themselves.

- Don't demo minor bug fixes or trivial features. Just mention them.

- *Scrum & XP …* p. 66.

Retrospective

What is the purpose of a retrospective?

How long is a typical retrospective?

Who should attend?

Who should <u>not</u> attend?

Guidelines: p. 68

- One person is appointed as secretary. He must record the retrospective results.

Examples: p. 71

Is Something Missing?

Scrum does not cover _everything_ you need to do in a software project.

What is missing?

Article:

http://agileforest.com/2012/03/24/scrum-evolution-over-time-part-5-whats-missing/

Use Case vs User Story

How are Use Cases and User Stories different?

Scrum & XP

In *Scrum & XP from the Trenches*, the author writes:

Scrum focuses on _____ and _____ practices,

XP focuses mostly on _____ practices.

Scrum Resources

Scrum and XP from the Trenches. Free ebook.

https://www.infoq.com/minibooks/scrum-xp-from-the-trenches-2/

https://www.mountaingoatsoftware.com/scrum

Scrum Guide - by the inventors of Scrum

https://www.scrumguides.org/scrum-guide.html (1 page)

https://www.scrumguides.org (PDF of *Scrum Guide*)

Presentation Slides

https://www.mountaingoatsoftware.com/agile/scrum/a-reusable-scrum-presentation

Agile Resources

http://agilemanifesto.org