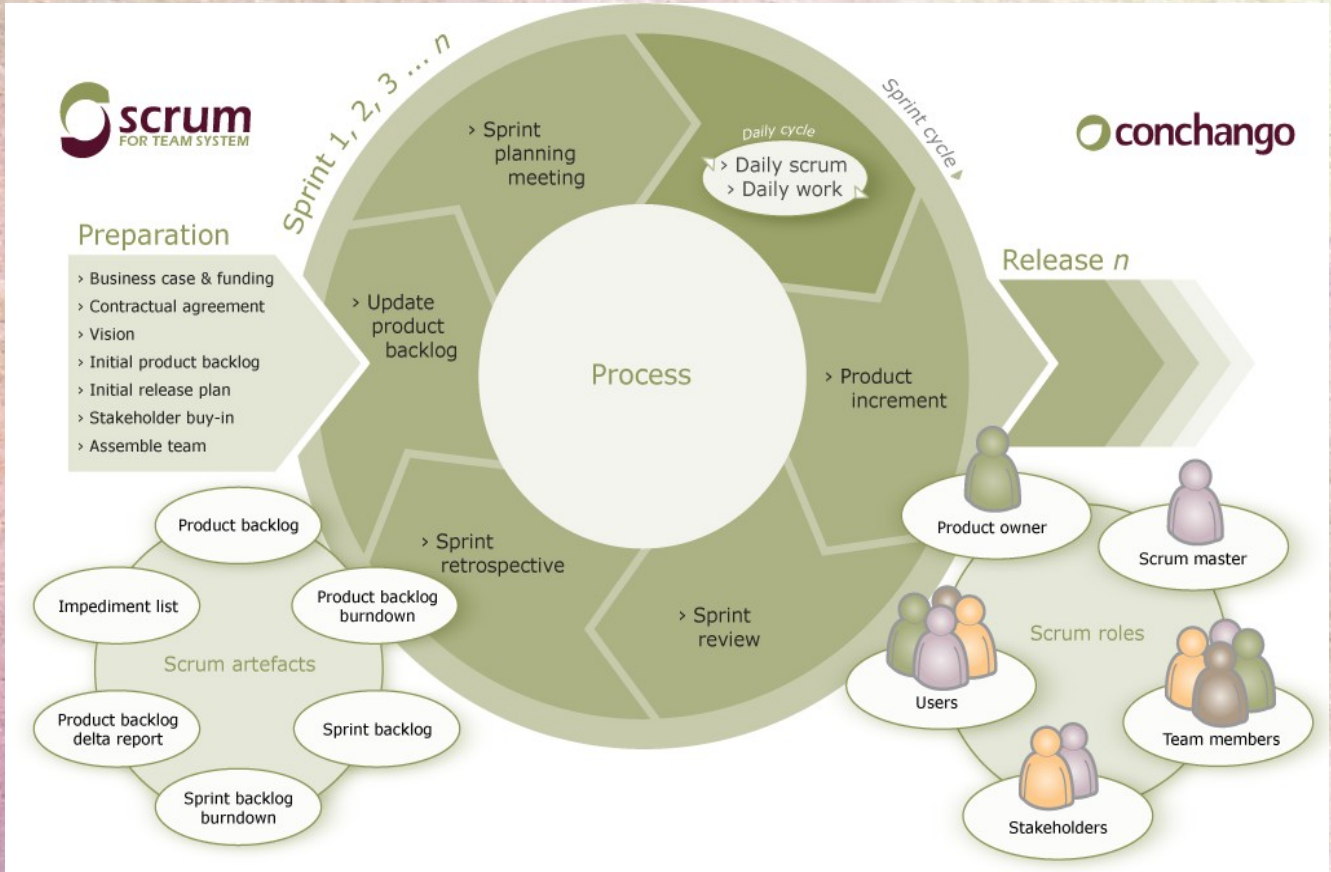


Scrum & Testing



Mark Rotteveel



Who am I

- **Mark Rotteveel**
- **Born in 1979**
- **Nerd since 1989**
- **Likes: reading, computers and beer**
- **In IT since 1999, tester since 2006**
- **Working for Pluton since 2008**
- **Currently as tester at TomTom**

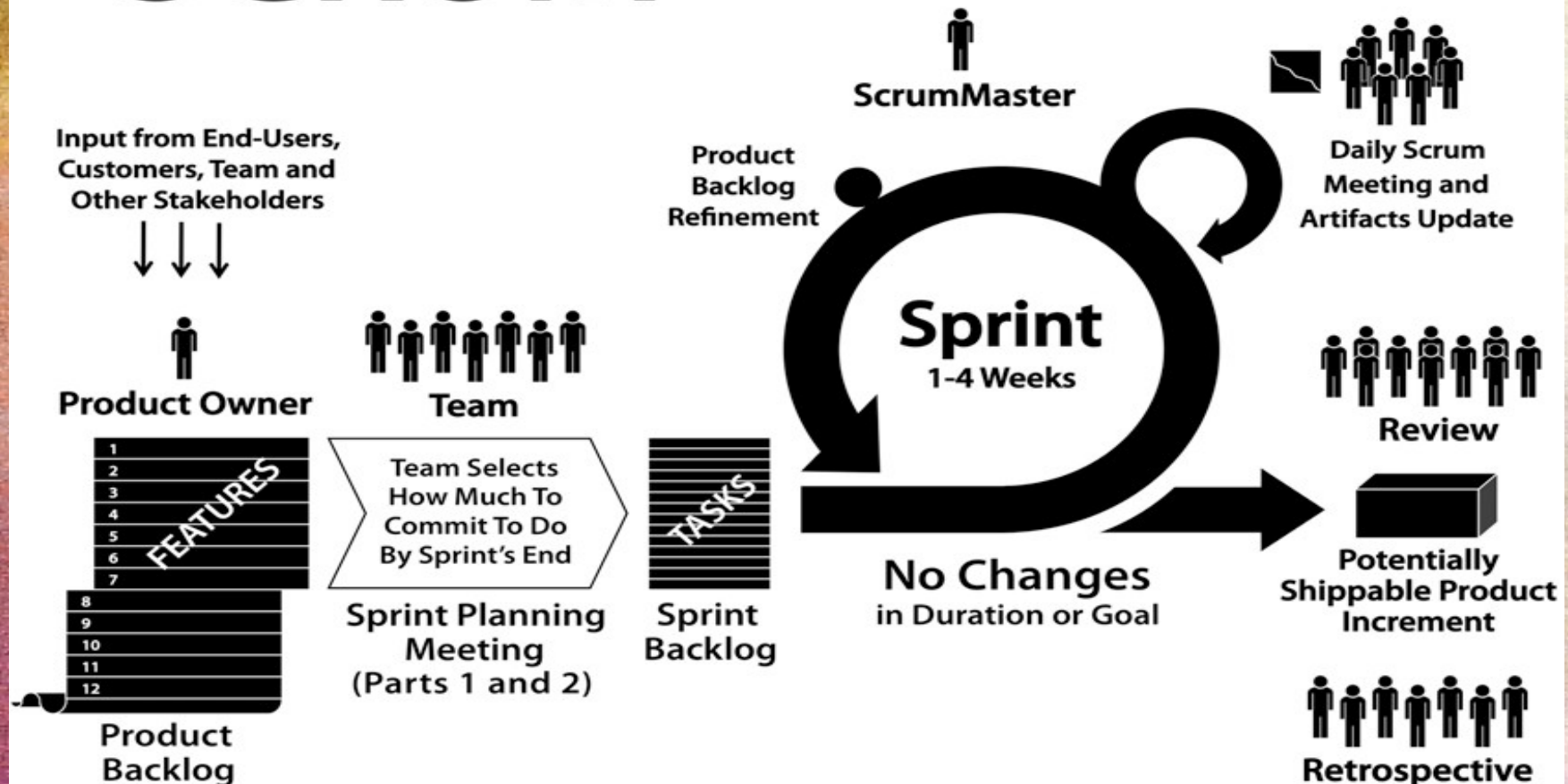


Overview

- **The basics of scrum**
- **Planning, Sizing and Tracking**
- **Why use scrum**
- **Scrum & testing**
- **Scrum & open source**

The basics of scrum

SCRUM



Source: http://scrumtraininginstitute.com/home/stream_download/scrumprimer

Basics: components & roles

- **Product Backlog**
 - **Userstories**
- **Tasks**
- **Sprint (timebox)**
- **Product**
- **Demo**
- **Product Owner**
- **The Team**
- **Scrum Master**

Basics: workflow

- **Product Owner updates Product Backlog**
 - **New requirements**
 - **Priority**
- **Team selects stories from backlog**
 - **Sizes stories (effort, complexity)**
 - **Commits to stories for sprint**
 - **Breakdown in tasks**

Basics: workflow(2)

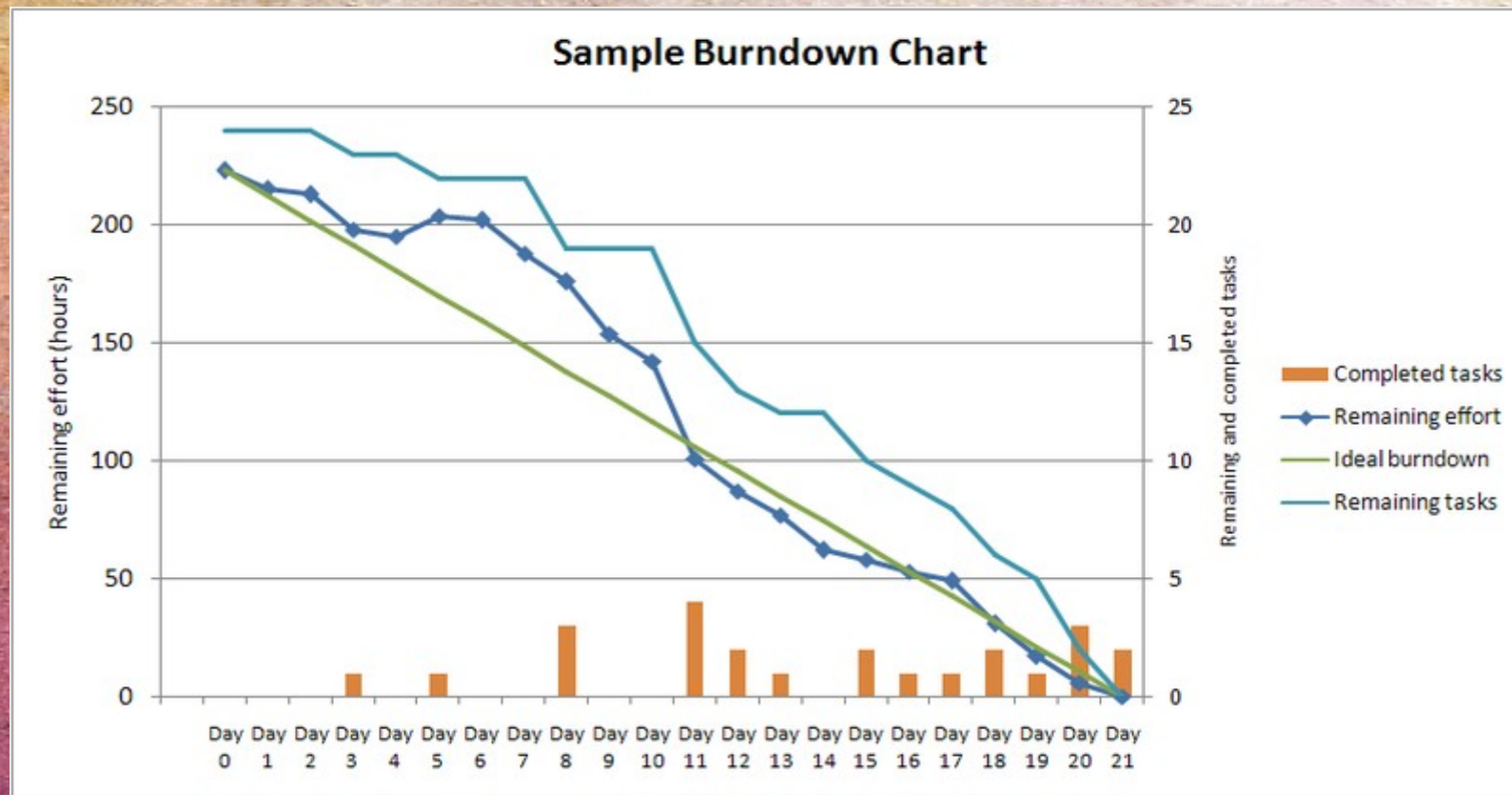
- **Daily standup: short status update within Team**
 - **Track progress**
- **Designing, developing, testing, etc**
- **At end of sprint: Demo of stories finished**
 - **Potentially shippable product**
 - **New insights for requirements/user stories**
- **At end of sprint: Retrospective**
 - **Lessons learned for future sprints**

Planning, Sizing and Tracking

- **Planning of a sprint is based on storypoints and historic velocity**
- **Velocity is the number of storypoints completed in a given sprint (or day)**
- **Every story is sized in storypoints based on expected complexity, or time required**
- **The team commits to a number of storypoints (and stories) for the next sprint**

Planning, Sizing and Tracking

- **Progress in a sprint is tracked with a burndown-chart**



Source: http://en.wikipedia.org/wiki/Burn_down_chart

Why use scrum?

- **Flexibility**
 - **Early feedback**
 - **Priorities change**
 - **People change their mind**
- **Early shippable product**
- **Team Happiness**
- **Especially useful when there are a lot of unknowns**

Scrum & Testing

- **Testers embedded in The Team**
 - **Focus**
 - **Quick turnaround time**
 - **Interaction + knowledge sharing**
- **Testers outside The Team**
 - **Bigger picture**
 - **Regression testing**
 - **User / Production acceptance**
 - **'Independence'**

Scrum & Testing : Embedded

- **Create testsuite for current userstories**
 - **Automated**
 - **Manual**
- **Work with developers to get clear requirements**
- **Quick feedback during the sprint**
- **Guard quality of current userstories**
- **Handover testsuite + stories to Outside testers**

Scrum & Testing: External

- **Perform regression testing**
 - **Testsuites provided by embedded testers**
 - **Testsuites developed by testers**
 - **Based on bug reports**
 - **Based on customer feedback**
- **Guard overall quality (including old + new userstories)**
- **Feedback to scrumteam(s) to improve quality of future userstories**

Scrum & Testing: No external team

- **External team is optional**
- **Fully automated regression suite required if no external team is available**
- **All team members (developers + testers) are responsible for keeping tests from failing**

Scrum & Testing: Software quality

- **A userstory or task is only done when**
 - **Developers have completed the story**
 - **Testers have created tests**
 - **Quality of the story is good**
 - **The new code doesn't break existing functionality (failure of regression tests)**
- **Quality is a joint effort!**

Scrum & Testing : Pitfalls

- **Lack of (detailed) requirements => Low quality tests or lack of coverage**
- **Focus on current user stories can degrade quality of older functionality**
- **Embedded testers lose objectivity**

Scrum & Open source

- **Using scrum for open source development is possible**
- **Requires**
 - **One 'Product Owner' who sets the goals and priorities**
 - **Focus as a team**
 - **Team located in one location (or at least multiple members per location)**

Scrum & Open source

- **Not useful when**
 - **Geographically dispersed members**
 - **Scrum activities like standup, planning and retrospective lose effectiveness**
 - **Lack of cooperation or common goal**
 - **Lack of shared ownership**

The background of the slide is an abstract, painterly composition. It features broad, overlapping washes of color. The top left corner is dominated by a bright yellow, which transitions into a pale green towards the top right. The bottom half of the image is a mix of soft, muted purple and pink tones, with some darker, more saturated purple areas. The overall texture is soft and blended, resembling watercolor or soft oil paint.

Discussion & Questions