



GRAND CIRCUS

CODING • BOOTCAMPS

# JAVA BOOTCAMP

AGILE

**AGILE**

The background of the slide is a repeating pattern of the Grand Circus Detroit logo in a light gray color. The logo consists of a stylized house icon with a flag on top, followed by the words "GRAND CIRCUS" and "DETROIT" in a smaller font below it.

# TOPICS

- Agile
- SCRUM

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# AGILE

## WHAT IS AGILE?

Agile methodology is an *alternative* to traditional project management, typically used in software development.

It helps teams respond to *unpredictability* through incremental, iterative work, known as *sprints*.

# AGILE

## THE 12 PRINCIPLES OF AGILE SOFTWARE

- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

# AGILE

## THE 12 PRINCIPLES OF AGILE SOFTWARE

- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Businesspeople and developers must work together daily throughout the project.
- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.



# AGILE

## THE 12 PRINCIPLES OF AGILE SOFTWARE

- Working software is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.

# AGILE

## THE 12 PRINCIPLES OF AGILE SOFTWARE

- Simplicity—the art of maximizing the amount of work not done—is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

SCRUM

# SCRUM

## WHAT IS SCRUM?

- Perhaps the most popular of the agile methodologies
- Uses iterative, incremental practices
- Increases productivity by focusing on building features that the customer really needs

# SCRUM

Requirements

Design

Code

Test

Rather than doing all of  
one thing at a time...

...Scrum teams do a little of  
everything all the time

# SCRUM VS. WATERFALL

## WATERFALL

Using a waterfall process (as opposed to an agile one) involves writing down everything that is necessary to a project to fullest extent possible and then building exactly that.

## VS. SCRUM

A Scrum process is broken up into feedback loops so that problems can be identified and fixed along the way and a minimum amount of work and time is wasted.

# SCRUM FRAMEWORK

## Roles

- Product owner
- Scrum Master
- Team

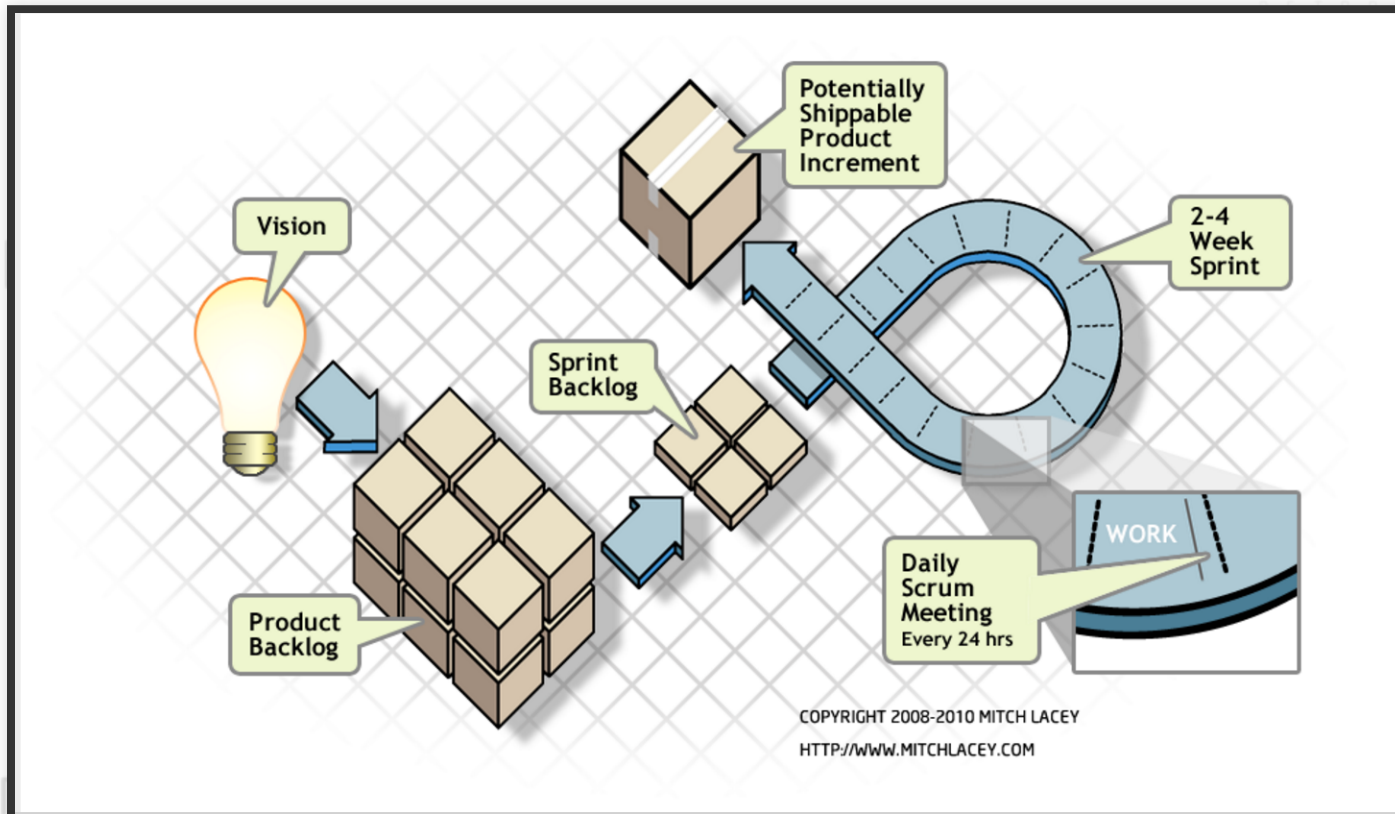
## Ceremonies

- Sprint planning
- Sprint review
- Daily scrum meeting

## Artifacts

- Product backlog
- Sprint backlog
- Burndown charts

# SCRUM PROCESS





# SCRUM ROLES

## PRODUCT OWNER

- Possibly a Product Manager or Project Sponsor
- Decides features, release date, prioritization, \$\$\$

## SCRUM MASTER

- Typically a Project Manager or Team Leader
- Responsible for enacting Scrum values and practices
- Remove impediments / politics, keeps everyone productive

# SCRUM ROLES

## PROJECT TEAM

- 5-10 members; Teams are self-organizing
- Cross-functional: QA, Programmers, UI Designers, etc.
- Membership should change only between sprints

# SPRING PLANNING MEETING



# DAILY SCRUM MEETING

## PARAMETERS

Daily, ~15 minutes, Stand-up

**NOT FOR PROBLEM SOLVING**

Only team members, Scrum Master, product owner, can talk Helps avoid other unnecessary meetings

# DAILY SCRUM MEETING(CONT.)

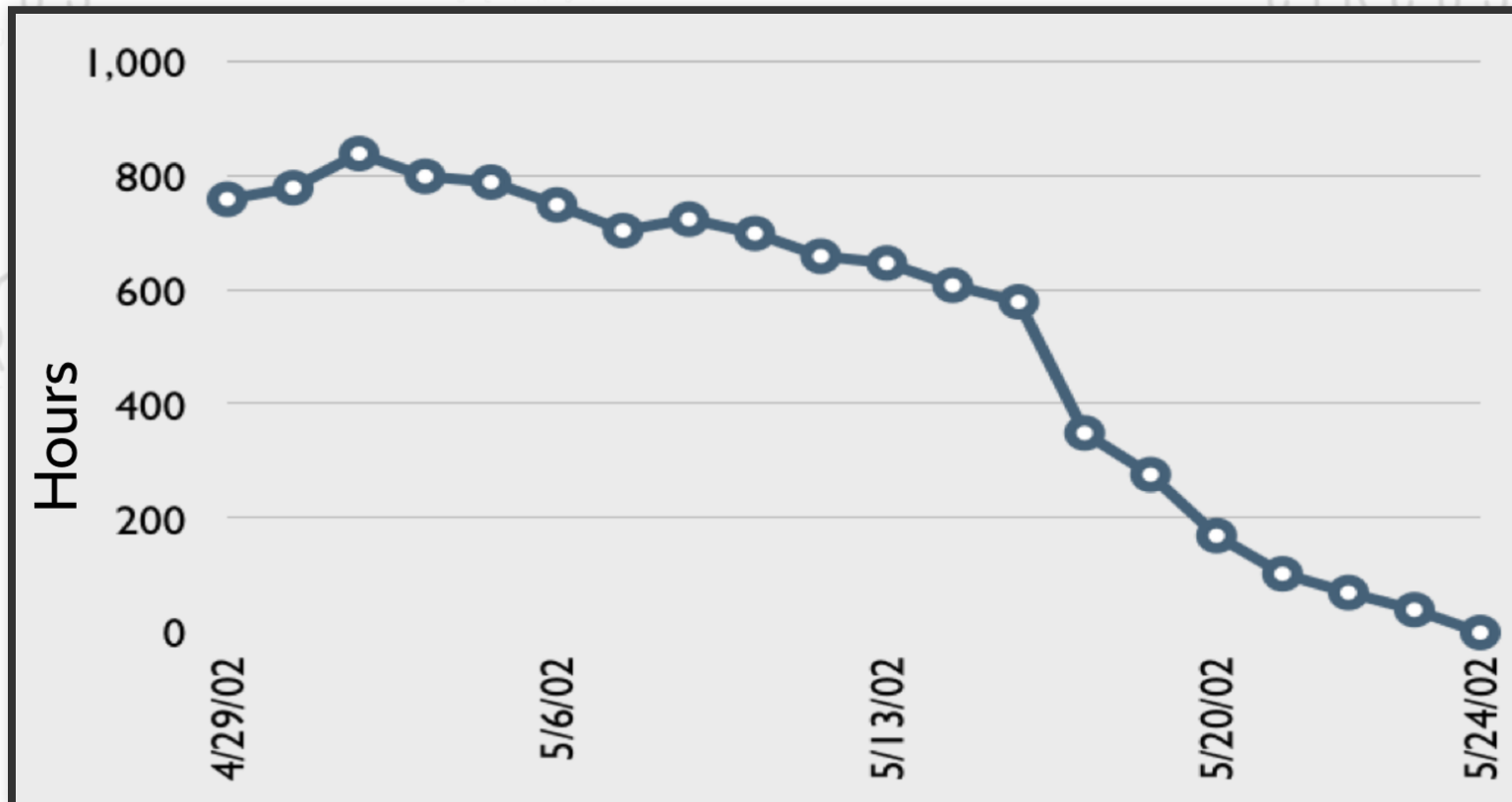
## THREE QUESTIONS ANSWERED BY EACH TEAM MEMBER:

1. What did you do yesterday?
2. What will you do today?
3. What obstacles are in your way?

# SPRINT BURNDOWN CHART

- A display of what work has been completed and what is left to complete
- One for each developer or work item
- Updated every day
- Make best guess about hours/points completed each day

# SAMPLE BURNDOWN CHART



# SPRINT REVIEW

- Team presents what it accomplished during the sprint
- Typically takes the form of a demo of new features or underlying architecture
- Informal
  - 2-hour prep time rule
  - No slides
- Whole team participates
- Invite the world



**RECAP**

# WHAT YOU SHOULD KNOW

- Agile and SCRUM definitions.
- The 12 Agile principles.
- The difference between SCRUM and Waterfall.
- What are the SCRUM framework components.
- What is the SCRUM process.
- What are the SCRUM roles.

# WHAT YOU SHOULD KNOW (CONT.)

- How to conduct a SCRUM daily meeting.
- What is the Sprint backlog.
- How to conduct a Sprint planning meeting.
- What is a Sprint burndown chart.
- How to conduct a Sprint review meeting.