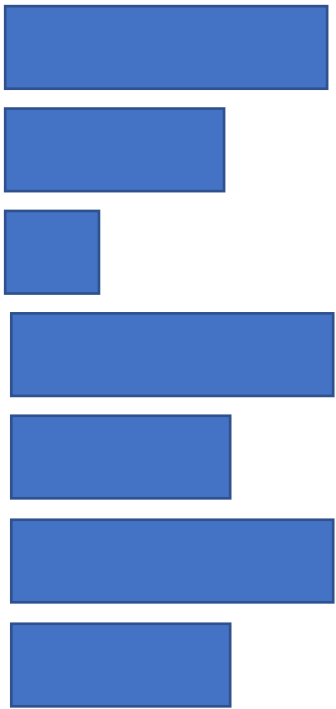


# Agile Requirements, Scrum, Extreme Programming, Agile Tools

# Agile Requirements

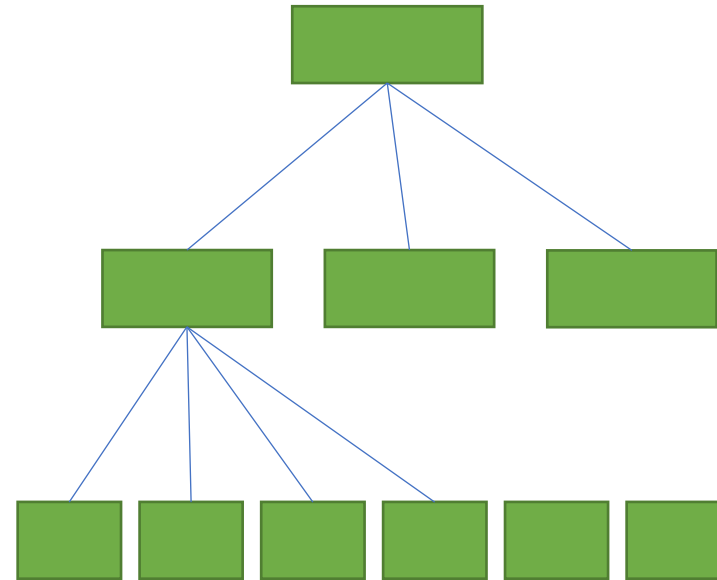
Backlog



Epics

Features

User Stories



1 to 3 Months

2 to 4 Weeks

~40 Hours

# Agile Requirements - Examples

Epic

Customer Management (in MBRS)

Features

Renting Books from MBRS

User Stories

As a 'Receptionist' at MBRS, I want to scan the books given by a customer and initiate rental so that I see a list of books rented on the screen.

As a 'Receptionist' at MBRS, I want to process the best promotion plan for a customer during book rental so that the customer gets maximum benefits

As a 'Receptionist' at MBRS, I want to confirm book rental and print receipt so that customer can complete book rental

# Different Types of Use Stories

- Business User Story - These are related to business requirements or features required by end users.
- Technical User Story – These are related to implementing technical requirements or architectural/design related components. Example: Implementing a centralized logging system or exception handler or enhancing the design of report builder
- Bug Fixes – These are related to fixing defects in the product or application

# 3 Cs of User Stories

- **Card** – User stories are written in a card (post card size)
- **Conversation** – User stories are written in a conversational format (Who , What , Why)

As a << role >>, I want to << ..... >>, so that I can do << ..... >>

As a 'Receptionist' at MBRS, I want to confirm book rental and print receipt so that customer can complete book rental

- **Confirmation** – The acceptance criteria (what tests will we run to confirm that the user story works as expected).

# Use Case vs. User Story

User Stories	Use Cases
Short descriptions	Short or lengthy descriptions
Focuses on 'Who', 'What' and 'Why'	Focuses on 'Flow' and 'Interactions'
Provides general guidance	Provides in-depth guidance
Does not include technical details	Includes technical details
Originated in Agile Methods (Extreme Programming (XP))	Originated in OOAD

# Scrum

# Introduction to Scrum





# 3 Roles, 4 Meetings, 3 Artefacts

## **Roles**

- Product Owner
- Scrum Master
- Team

## **Meetings**

- Sprint Planning
- Sprint Review
- Sprint Retrospective
- Daily Scrum Meeting

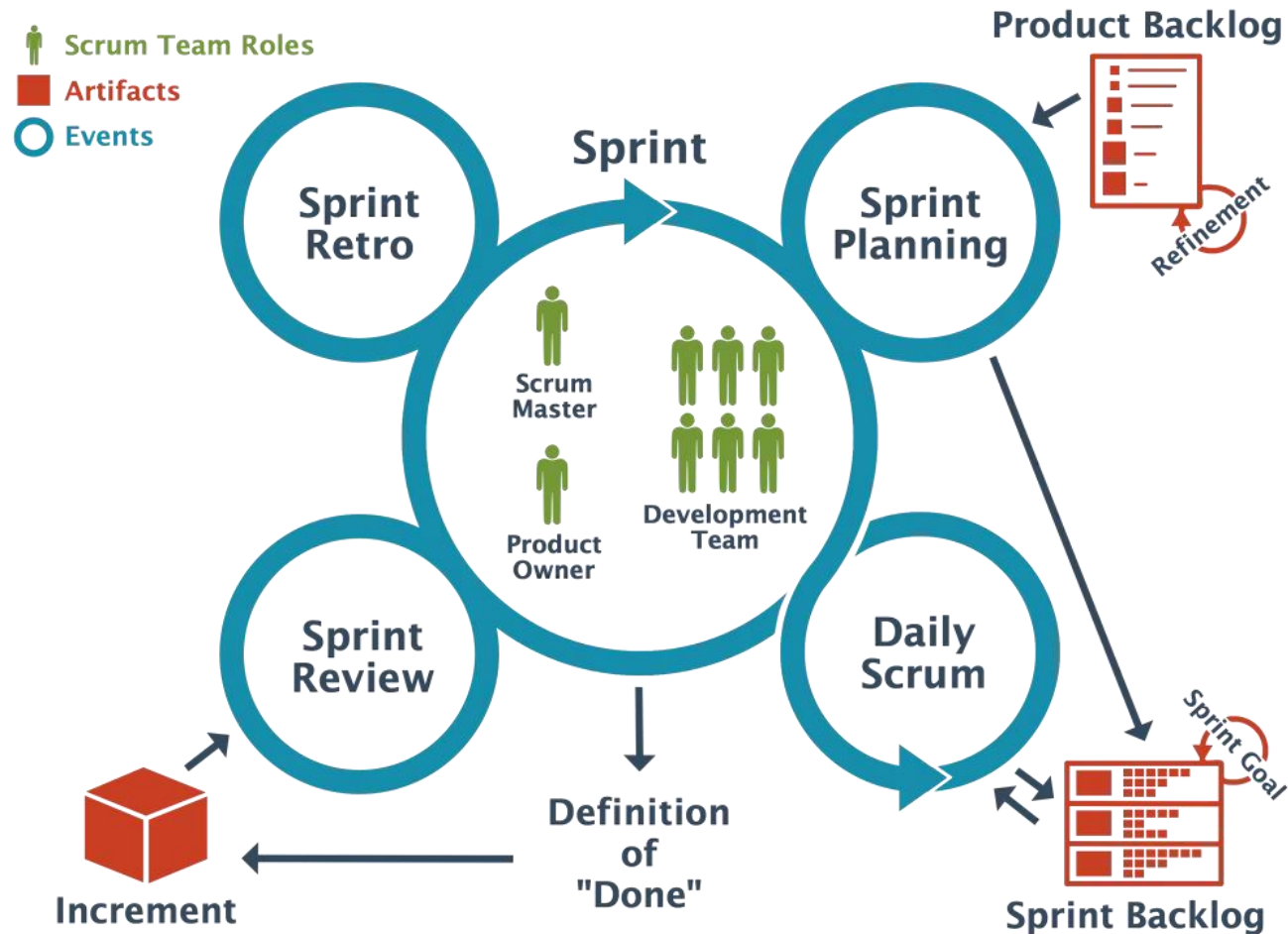
## **Artefacts**

- Product Backlog
- Sprint Backlog
- Burndown Charts

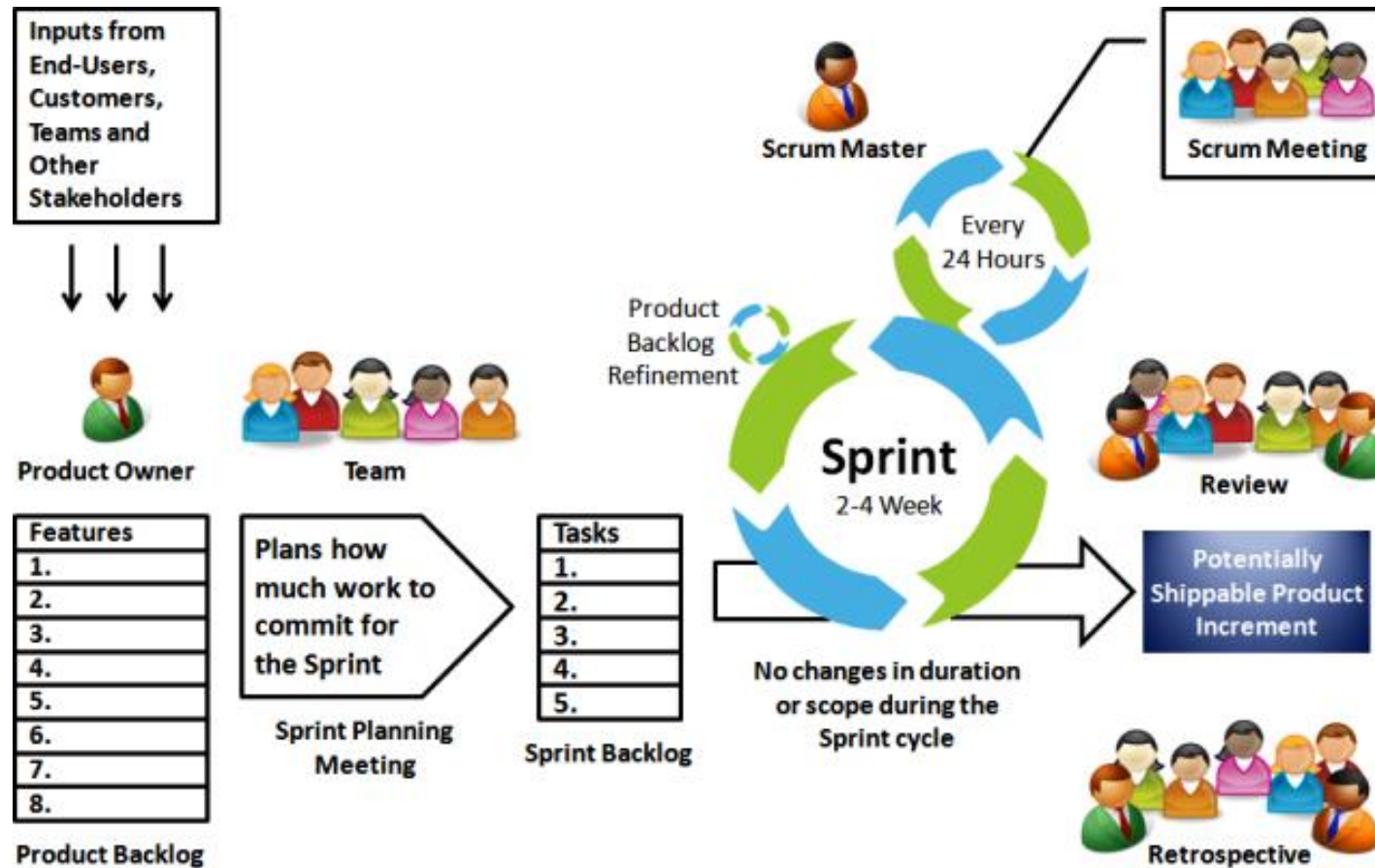
# Scrum Values



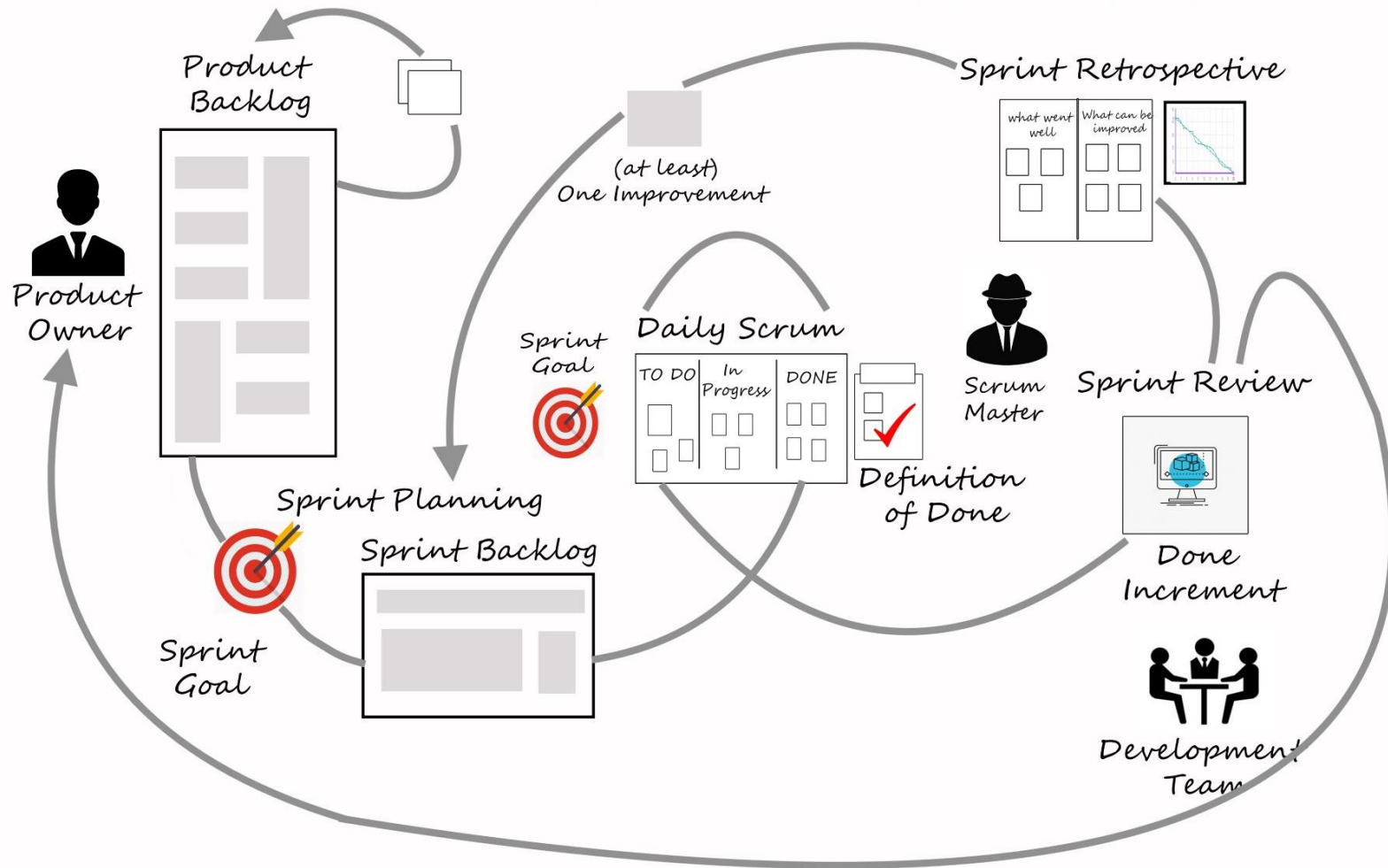
# Scrum Lifecycle



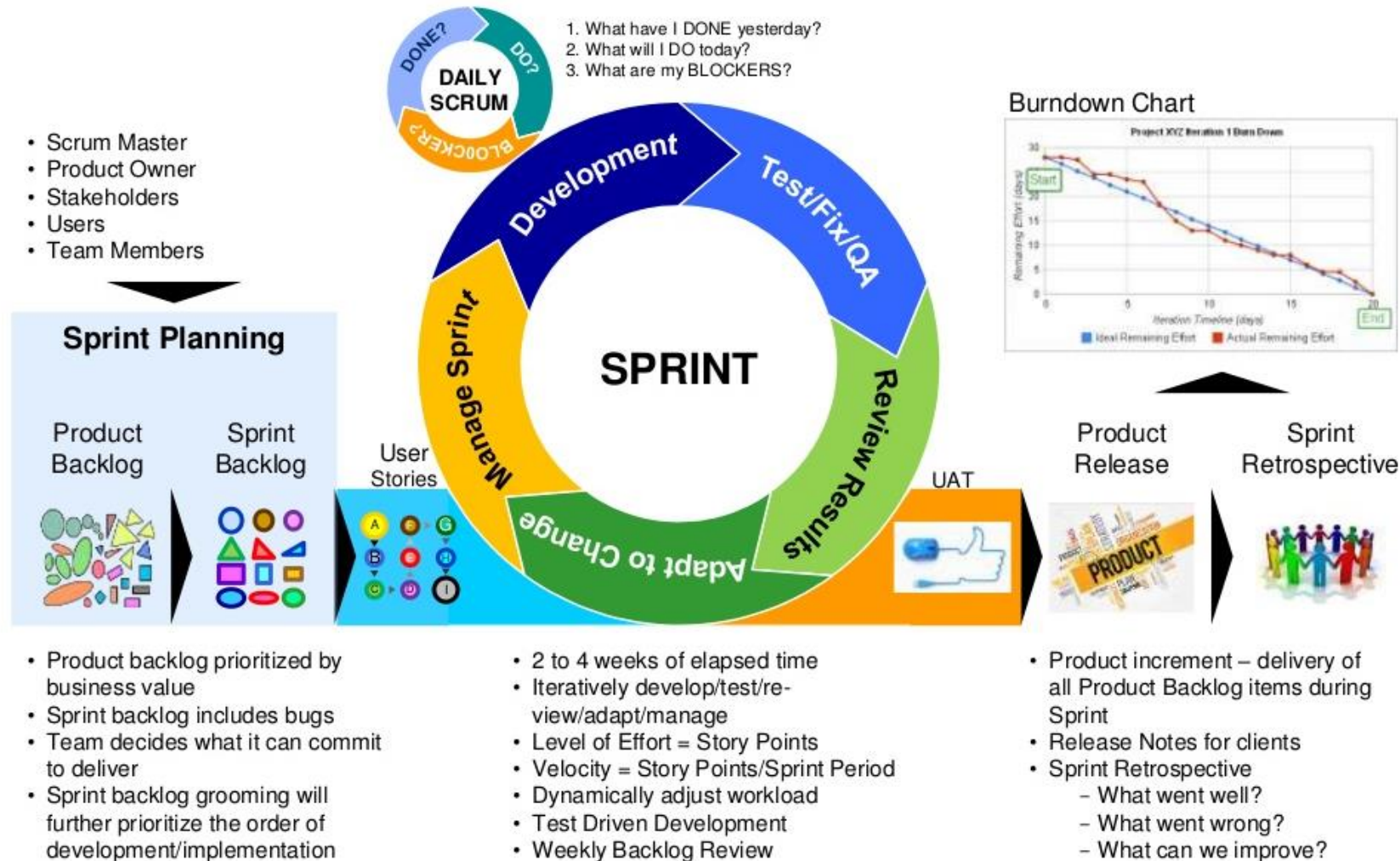
# Creating Potentially Shippable Product



# Roles



# Detailed View



# Question 11

The smallest form of representing requirements in Agile projects is

- A. Epic
- B. Feature
- C. User Story
- D. Business Requirement

ANSWER: C

# Question 12

The average efforts required to implement a user story is typically

- A. 2 Weeks
- B. 1 Month
- C. ~40 Hours
- D. Difficult to predict

ANSWER: C



# Question 13

Scrum ceremonies are,

- A. Sprint Planning, Sprint Review, Sprint Retrospective, Daily Scrum Meeting
- B. Sprint Planning, Sprint Estimation, Sprint Review, Daily Scrum Meeting
- C. Sprint Planning, Sprint Review, Sprint Demo, Daily Scrum Meeting
- D. Sprint Planning, Sprint Estimation, Sprint Tracking, Sprint Review

ANSWER: A

# Question 14

Sprint planning is performed based on the inputs from

- A. Product Backlog
- B. Sprint Backlog
- C. User Story
- D. Business Requirements

ANSWER: B

# Question 15

Which of the following is true about the size of Sprints?

- A. The size of a Sprint is 2 to 4 weeks
- B. The size of a Sprint cannot be more than 4 weeks
- C. It is recommended that the size of all Sprints are the same for several consecutive Sprints (time-boxing)
- D. All of the above

ANSWER: D

# Extreme Programming(XP)

# Introduction to XP

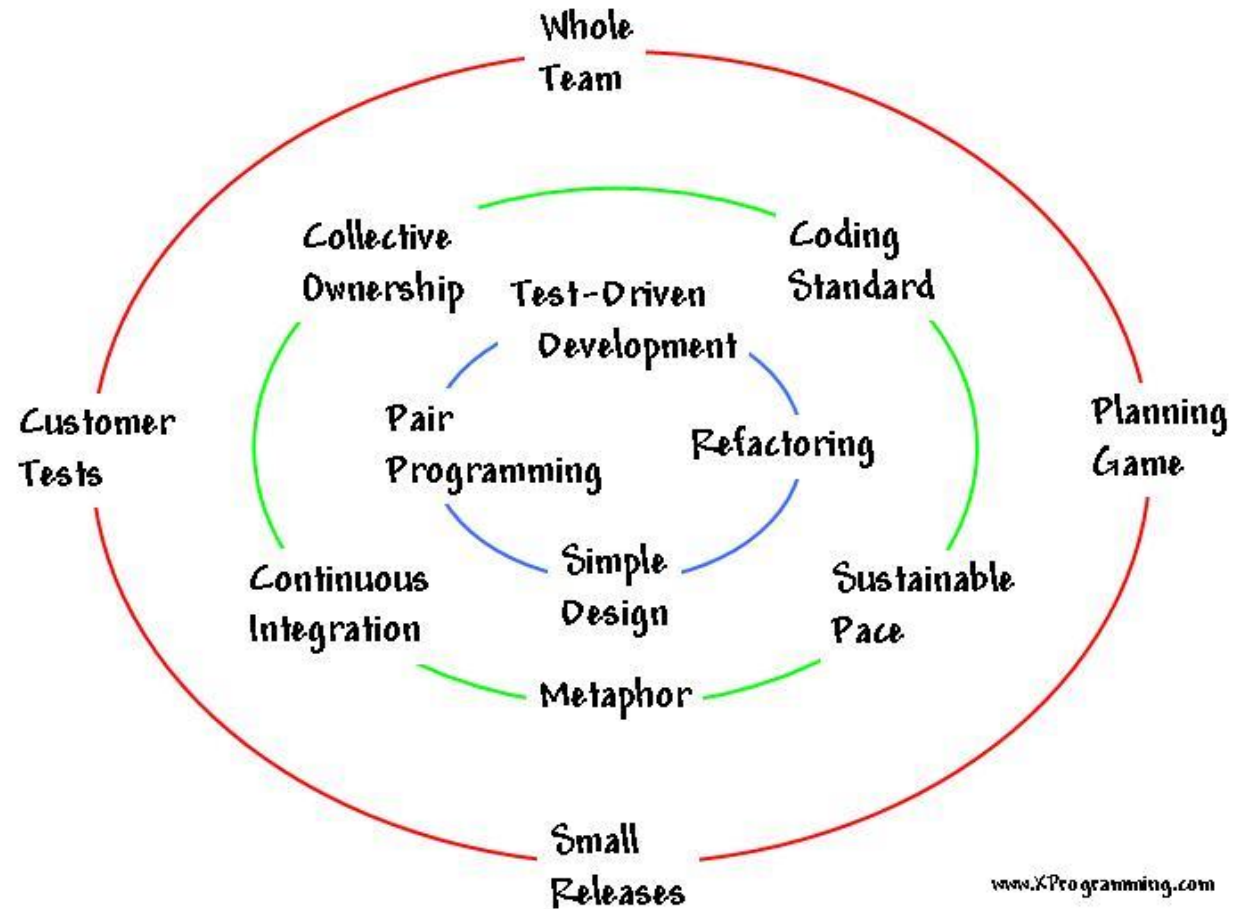
- XP is one of the Agile Methods. Key focus areas include,
  - Feedback: Instead of lots of documentation to capture what customer wants up front, XP emphasizes plenty of feedback
  - Embrace change: iterate often, design and redesign, code and test frequently, keep the customer involved
  - Short Iterations: Deliver software to the customer in short (2 week) iterations
  - High Quality: Eliminate defects early, thus reducing costs

# XP Values

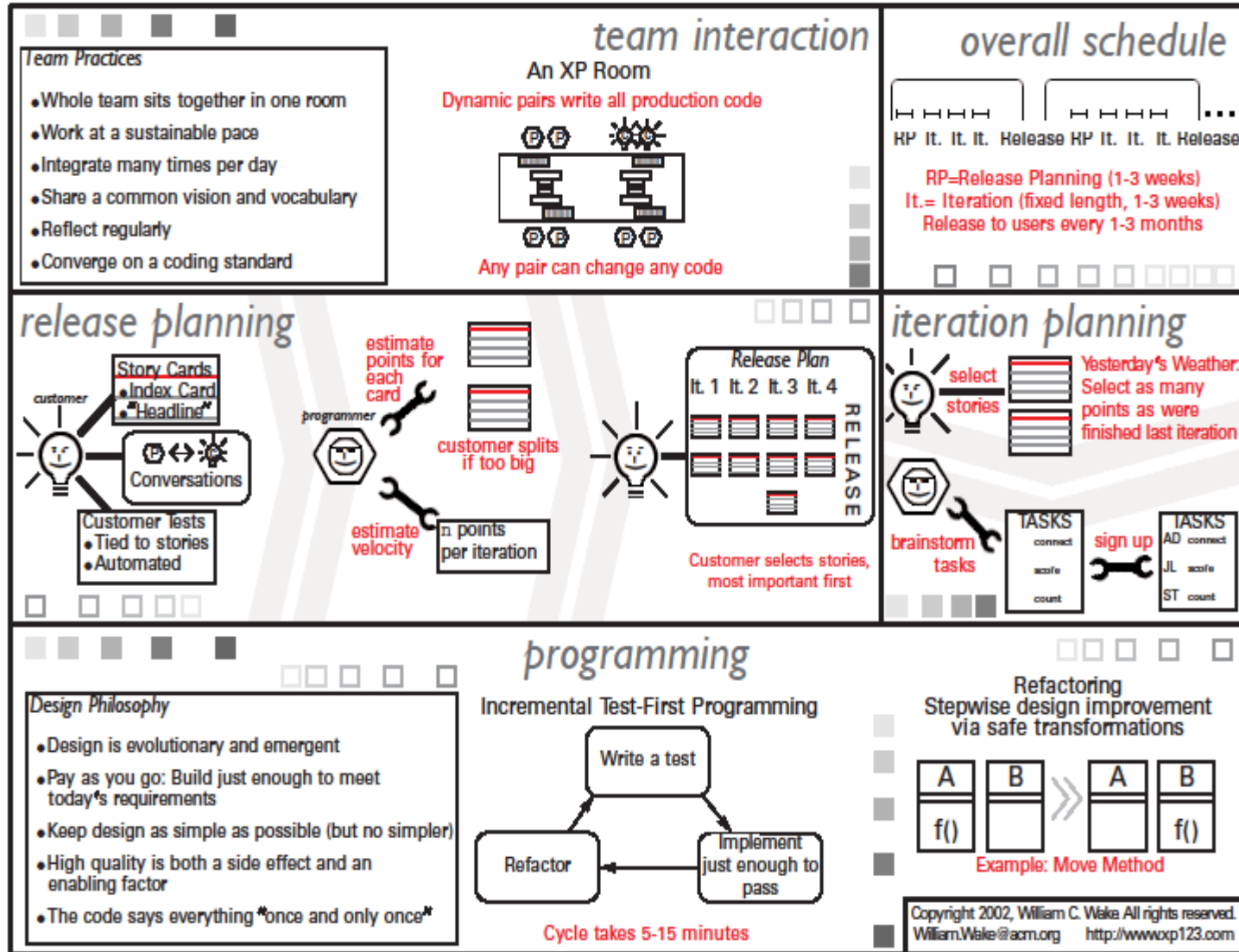
- Communication
- Simplicity
- Feedback
- Courage
- Respect

# XP Practices (the original 12 practices)

1. The Planning Game
2. Small Releases
3. Metaphor
4. Simple Design
5. Testing
6. Refactoring
7. Pair Programming
8. Collective Ownership
9. Continuous Integration
10. 40-hour week
11. On-site Customer
12. Coding Standard



# Extreme Programming Overview





# Question 16

Which of the following are the XP practices related to coding?

- A. Coding Standard, Pair Programming, Refactoring, Collective Ownership
- B. The Planning Game, 40-hour week, Small Releases, Testing
- C. Continuous Integration, On-site Customer, Small Releases, Testing
- D. Continuous Integration, Simple Design, Small Releases, The Planning Game

ANSWER: A

# Question 17

The term 'User Story' originated from which Agile method?

- A. Scrum
- B. Extreme Programming
- C. DSDM
- D. Lean Development

ANSWER: B

# Question 18

The role 'Product Owner' is from which Agile method?

- A. Scrum
- B. Extreme Programming
- C. DSDM
- D. Lean Development

ANSWER: A

# Question 19

It is recommended that the duration of Daily Scrum Meeting (or Daily Standup Meeting) is

- A. 30 minutes
- B. 15 minutes
- C. 1 hour
- D. 4 hours

ANSWER: B

# Question 20

In Scrum, who is responsible for providing guidance and deciding on prioritizing user stories?

- A. Scrum Master
- B. Product Owner
- C. Project Manager
- D. Team Members

ANSWER: B

# Question 21

The 3Cs of user stories include

- A. Card, Confirmation, Convenience
- B. Card, Conviction, Confirmation
- C. Card, Conversation, Confirmation
- D. Card, Communication, Conversation

ANSWER: C

# Tools Used in Agile Web Development Projects

# Agile tools for agile teams

Stay on track as you plan, develop, and deliver products.



**Jira Align**  
Enterprise Agile planning



**Jira Software**  
Project and issue tracking



**Confluence**  
Document collaboration

## Build at the speed of innovation

Plan software projects, collaborate on code, test and deploy products.



**Jira Software**  
Project and issue tracking



**Bitbucket**  
Git code management



**Sourcetree**  
Git and mercurial desktop client

## Move work forward

Create, organize, discuss, and complete work, together.



**Confluence**  
Document collaboration

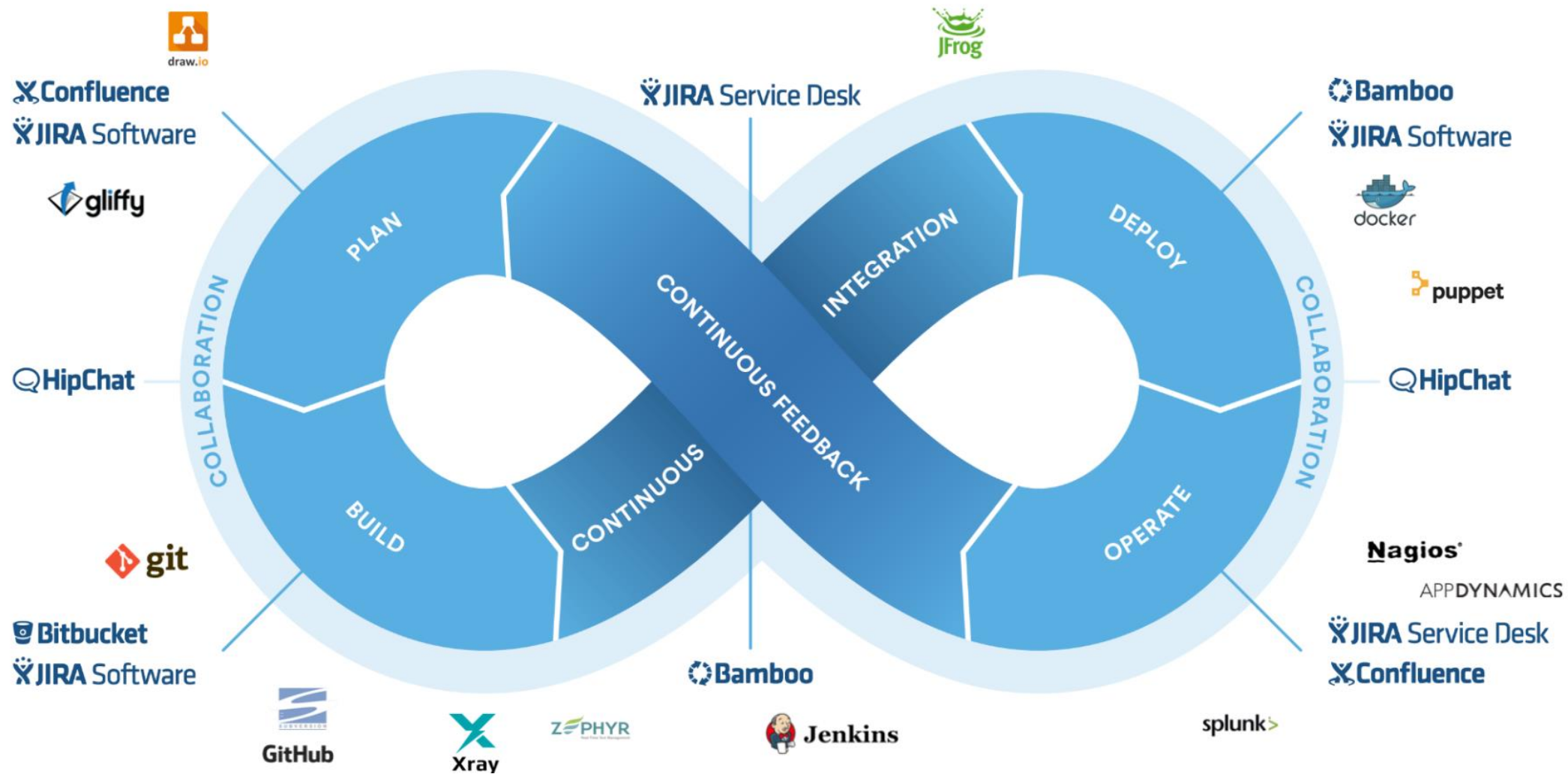


**Trello**  
Collaborate visually on any project



**Jira Work Management**  
Business team collaboration





# Summary

- ✓ Agile Requirements
- ✓ Scrum
- ✓ Extreme Programming (XP)
- ✓ Agile Tools

Thank You!