# Agile Software Development for Developers

## Session 2

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# Review

- Introduction
  - ▸ Paradigm and paradigm shift
  - ▸ Agility: An elephant in the dark

- Agility: A definition

- Agile Software Development in a Nutshell
  - ▸ Values
  - ▸ Principles
  - ▸ Practices

- How it works: the Cynefin
  - ▸ Clear, Complicated, Complex, Chaotic, Disorder

- 5 quizzes

# Retrospective

- More practical

- Special focus on beginners
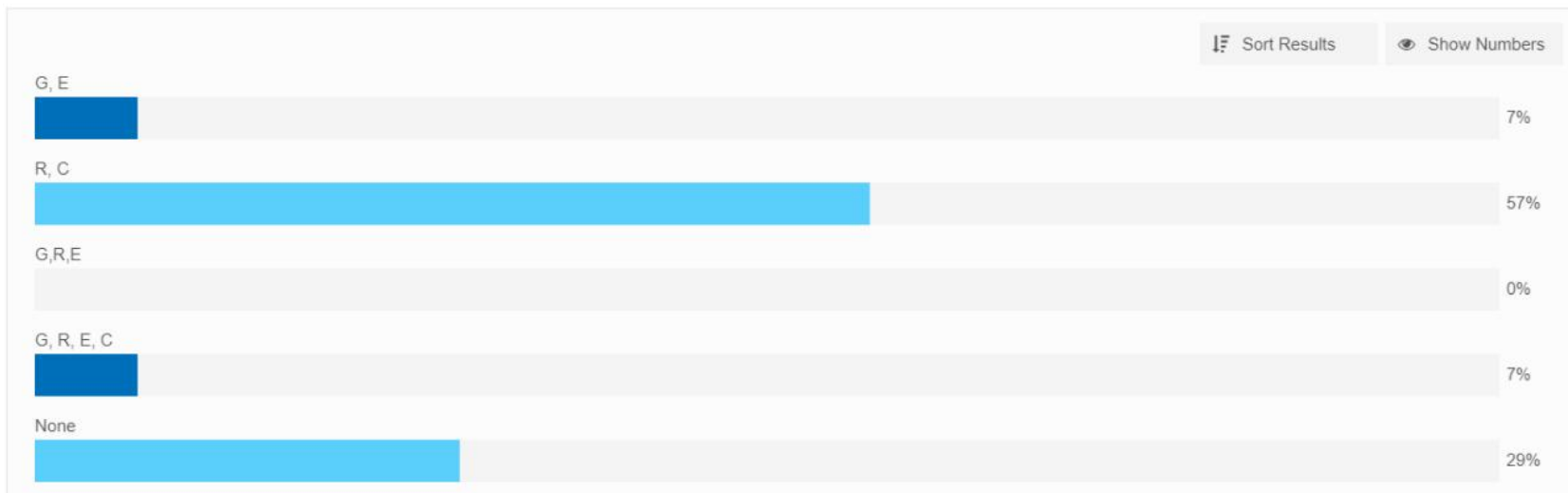
- Sessions for experts

# Q1

Q1. Which one is an agile animal? Cheetah (C), Elephant (E), Giraffe (G), Rabbit (R)

○ G, E

○ R, C

○ G,R,E

○ G, R, E, C

○ None

| Vote | Results |

## Results Breakdown - Part 2 / 6

⬇ Sort Results    👁 Show Numbers

G, E
▇ 7%

R, C
▇▇▇▇▇▇▇▇ 57%

G,R,E
0%

G, R, E, C
▇ 7%

None
▇▇▇▇ 29%

# Q2

Q2: Suppose you are a team leader. There are 3 tasks (2 are in progress and 1 has not started yet) and also 2 of 5 team members are idle. What do you think about first?

- ○ idle team members
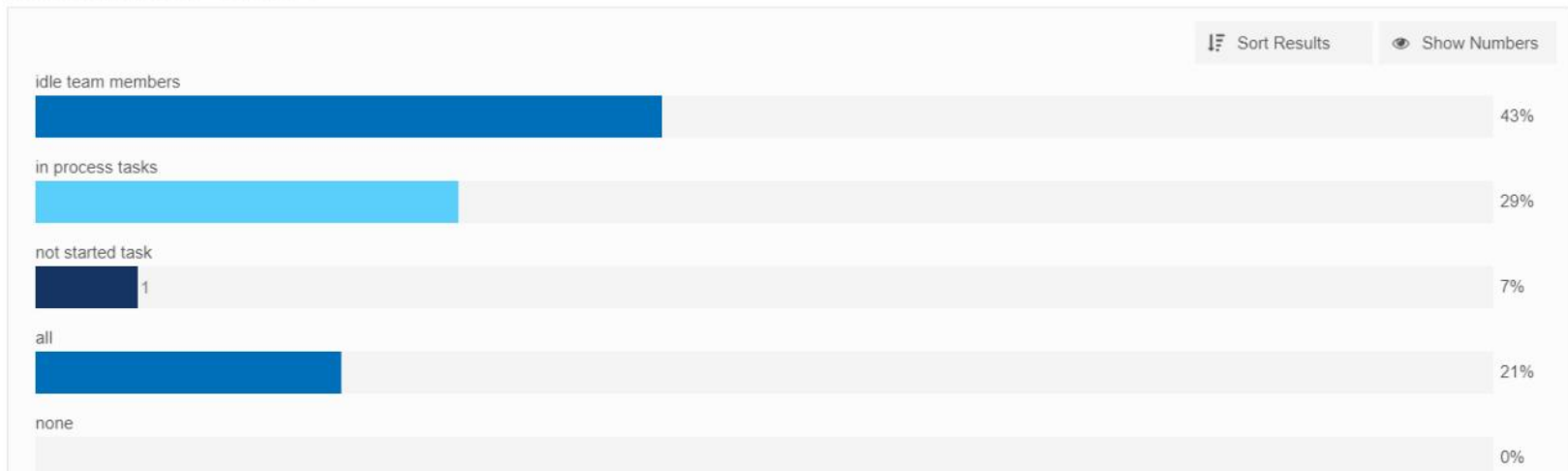- ○ in process tasks
- ○ not started task
- ○ all
- ○ none

**Vote**  **Results**

Results Breakdown - Part 2 / 6

⬇ Sort Results    👁 Show Numbers

idle team members
43%

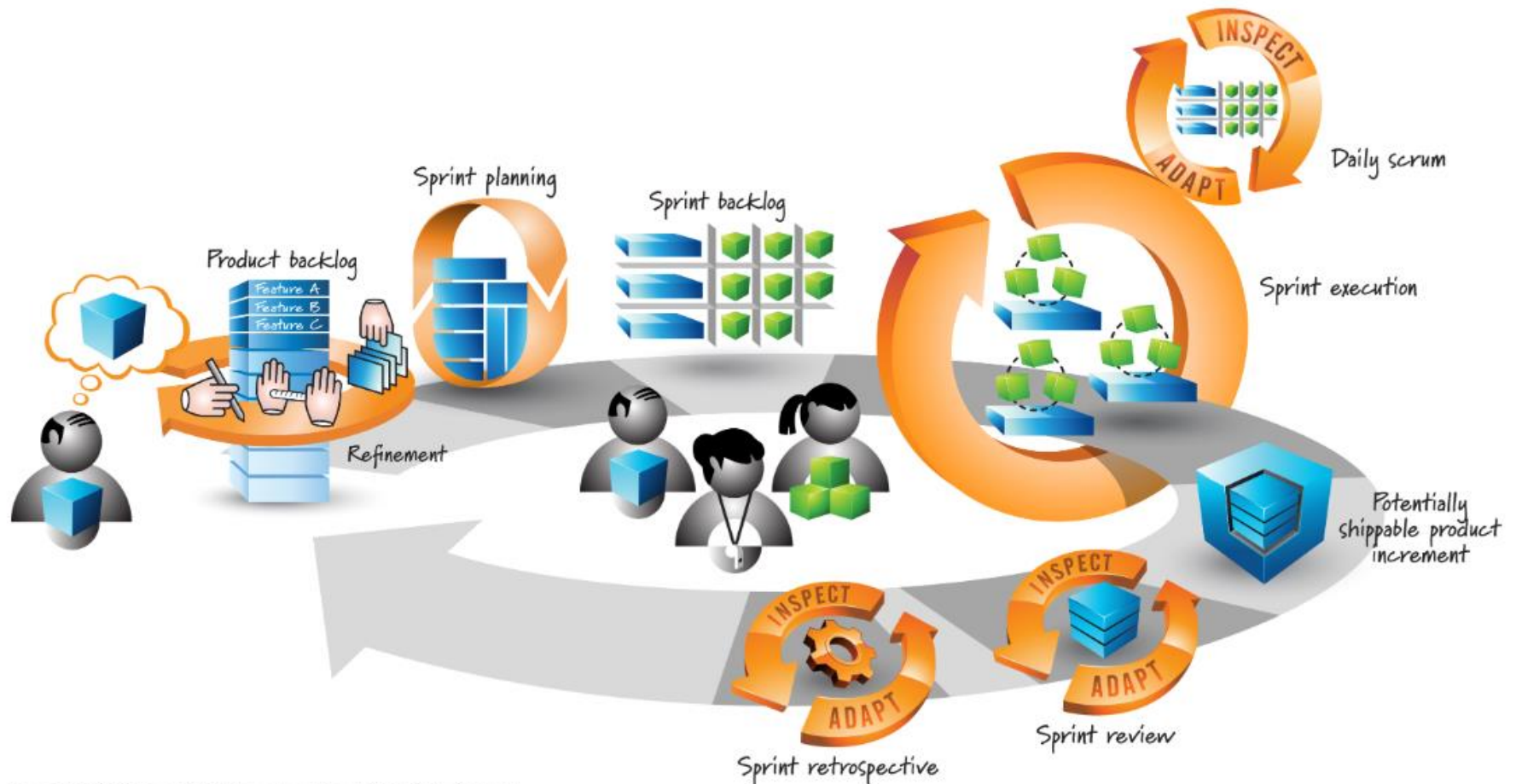in process tasks
29%

not started task
1    7%

all
21%

none
0%

# Agenda

- Sprint: An Overview

- User Story

- Acceptance Criteria

# Scrum

## *Sprint*

# Why is Scrum like this?



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# Sprint Timeline

1



D.S.    D.S.    D.S.

| MON | TUE | WED | THU | FRI | SAT | SUN |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Sprint Planning

Product Backlog Grooming

for future sprints

D.S.    D.S.    D.S.    D.S.    D.S.

| MON | TUE | WED | THU | FRI | SAT | SUN |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |

Product Backlog Grooming

Sprint Review
Sprint Retro
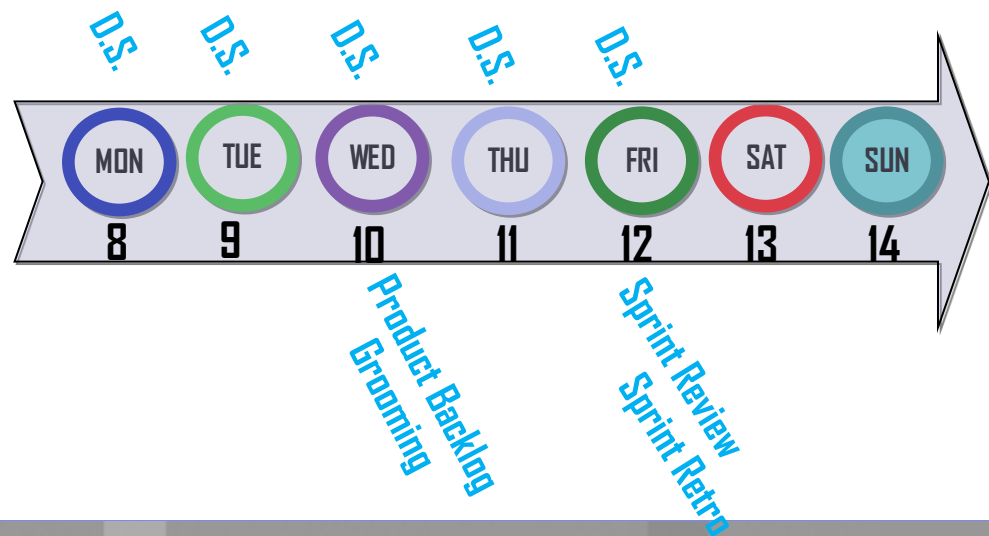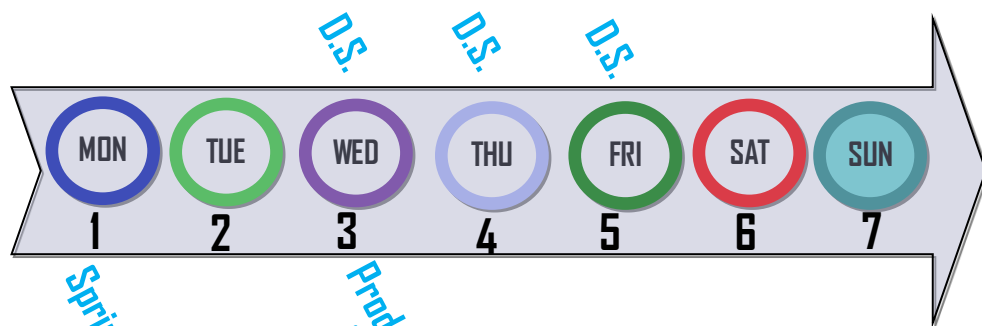
# Backlog

## *User Story*

# Product Backlog

```
Product Backlog ─┬─ Features
                 ├─ Defects
                 ├─ Technical Works
                 └─ Knowledge Acquisition
```
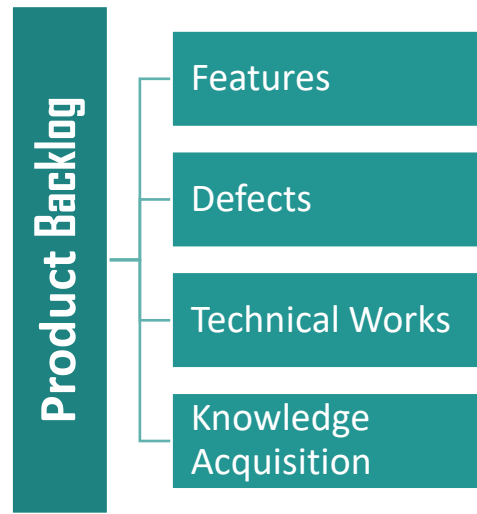
1. **Features**: Most PBI are features and they are often written as **user stories**

2. **Defects (Bugs)**: They need to be repaired.

3. **Technical works**: They are technical improvements for example "upgrade to the latest version of the SQLServer DBMS."

4. **Knowledge acquisitions (Spikes)**: Some works we do to learn more for example "Create a prototype or proof of concept of two architectures for video streaming and run three tests to determine which would be a better approach for our product."

# User Story

- **User stories** are short, simple descriptions of a feature told from the perspective of the person who desires the new capability, usually a user or customer of the system.

- A simple template for user story:
  - As a < type of user >, I want < some goal > so that < some reason >.

- Another view:
  - As a (**who wants to accomplish something**)
  - I want to (**what they want to accomplish**)
  - So that (**why they want to accomplish that thing**)

- Who, What, Why
  - What is missed?

# Fast Food: User Story and Task

# Example (Mike Cohn, Scrum Alliance)

- As a bank customer, I want to withdraw money from an ATM so that I'm not constrained by opening hours or lines at the teller's

- Scrum Alliance website:
  - ▸ As a site visitor, I can read current news on the home page so that I stay current on agile news.

  - ▸ As a site admin, I can delete any course or event, so I can remove things that will no longer occur.

  - ▸ As a site member, I can search for profiles based on a few fields (class attended, location, name) so I can find others I might want to connect with.

# Your Turn: Pizza (Order pizza)

- As a customer I want to … so that …

# Your Turn: Meetup Application

# Acceptance Criteria

- The external quality characteristics specified by the product owner from a business or stakeholder perspective. Acceptance criteria define desired behavior and are used to determine whether a product backlog item has been successfully developed.

- The exit criteria that a component or a system must satisfy in order to be accepted by a user, customer, or other authorized entity (IEEE 610).

# Acceptance Criteria

- Story
  - ▶ Title:
    - Strong password
  - ▶ Description:
    - As a user, I am required to enter a strong password when creating my account so that I follow the company's security policy.
  - ▶ Acceptance criteria:
    - Must have at least 8 characters
    - Must contain at least 1 digit
    - Must contain at least 1 uppercase letter
    - Must contain at least 1 lowercase letter
    - Must contain at least 1 symbol
  - ▶

# User Story in Azure DevOps

PRODUCT BACKLOG ITEM 1*

**1   Strong password**

Unassigned                    0 comments    Add tag

| | | | |
|---|---|---|---|
| State | New | Area | agile-4-devs |
| Reason | New backlog item | Iteration | agile-4-devs\Sprint 1 |

**Description**

As a user, I am required to enter a strong password when creating my account so that I follow the company's security policy.

**Acceptance Criteria**

- Must have at least 8 characters
- Must contain at least 1 digit
- Must contain at least 1 uppercase letter
- Must contain at least 1 lowercase letter
- Must contain at least 1 symbol

**B**  *I*  U  ☰  ☷  ab ∨  A ∨  🙂  ←☰  →☰  ab  aA ∨  </>  @  #  ⅋  A  🖼  🔗  🔗

# Acceptance Criteria

- Story
  - ▸ Title:
    - Strong password

  - ▸ Description:
    - As a user, I can log in through a social media account so that I don't need to remember my username and password.

  - ▸ Acceptance criteria:
    - Can log in through Facebook
    - Can log in through LinkedIn
    - Can log in through Twitter

# Your Turn: Pizza (Order pizza)

- As a customer I want to … so that …

# Your Turn: Meetup Application

# Thanks

- Faezeh Eshragh
- Reza Moghaddas Jafari
- Hossein Nassiri
- Reza Rahmati
- Mohammad Nadi