## Agile Software Development

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### Agenda

Agile software development

Benefits of scrum

Velocity forecast

Predictability

Story points vs Earned values

How to set priorities

DoD, DoR, working agreement Automating project status and public visibility

### Agile software development



Over 2 decades of maturity / body of knowledge



Success requires discipline

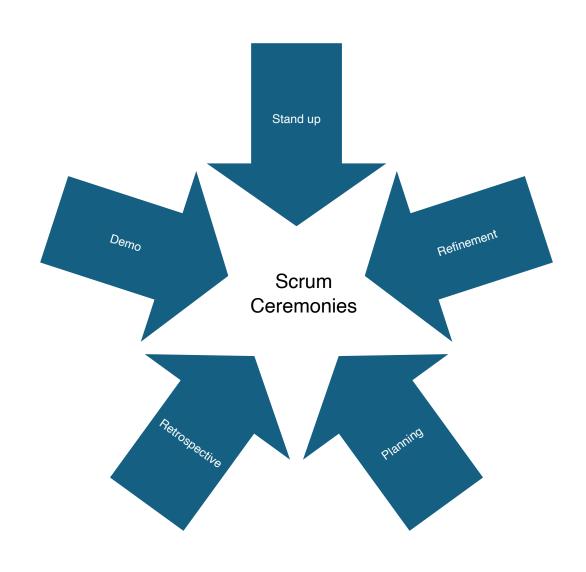


Team must establish a working agreement



Visibility matters

**Process** 



### Story points vs Earned values

#### **Story Points**

- Resource consumption
  - How much of our upcoming sprint needs to be reserved for this ticket?
- Time + Uncertainties (risks, dependencies, unknowns, lack of requirements, etc)

#### **Earned Values**

- PM / Business stakeholders / Clients must provide the value
- "How much would I pay you to do this work?" (earned value points)
- Incentivizing completion

#### **Priorities: Story Points x Earned Values**

- Stories with high EV x low story points = Easy Win!
- High story points x low EV = might be a poor use of resources

### What is a Spike?



QUESTIONS TO ANSWER IN A TIME BOXED PERIOD



SPIKE SHOULD BE TIME BOXED TO HOURS OR DAYS



IF THE OWNER RUNS OUT OF TIME, REPORT BACK TO THE TEAM



ALLOTMENT IN THE SPIKE RAN OUT? IF MORE INVESTIGATION IS NEEDED, CREATE A FOLLOW UP SPIKE TICKET AND REFINE THEM



SPIKE MUST HAVE SPECIFIED QUESTIONS



ACCEPTANCE CRITERIA MUST INCLUDE WHAT KIND OF ARTIFACT IS A NECESSARY (VIDEO, DEMO, CONFLUENCE PAGE, SAMPLE CODE, ETC)

### Velocity forecast



Velocity is a historical average of how many points we complete per sprint



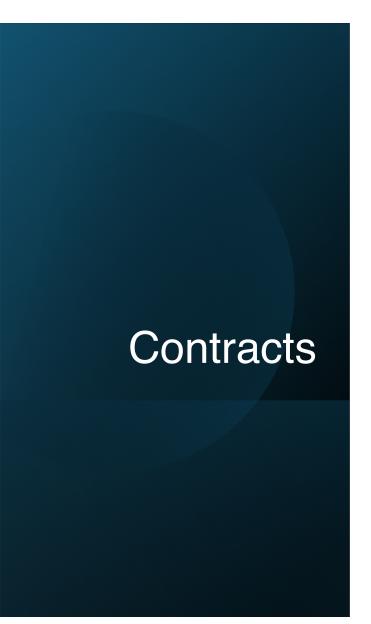
Discipline matters

Garbage In, Garbage Out After story is refined, brought into the sprint, the estimate can't be changed Stories must meet acceptance criteria before being closed



Review in retrospective

"This story carried over 3 sprints. What can we learn from this?"







**Action Item** 





Completion



Speak Up

Feel

empowered to

speak up to

amend the

contract during

the refinement

Story is immediately actionable

- Acceptance criteria well defined
- Dependencies are clarified
- Sufficient requirements

Sprint Commitment

each sprint

We as a team sign up for the committed Criteria (DoD) amount of work to complete

Delivery

How much of our commitment did we complete?

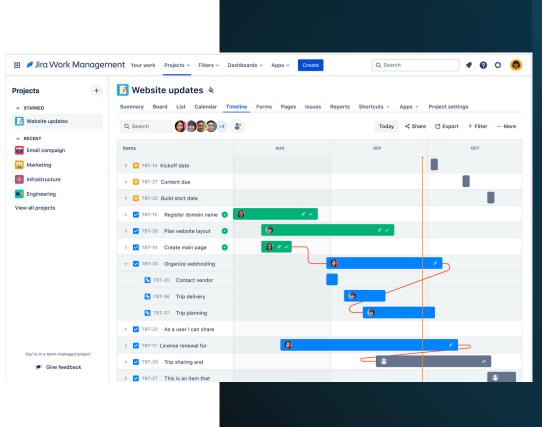
# Example of DoR & DoD

- DoR
  - Requirements
  - Earned Value (priority)
  - Acceptance Criteria
  - Essential Steps
  - Dependencies
    - Data
    - External
    - Architectural
    - Knowledge
  - Environment
  - Scope
  - ..

- DoD
  - Story
    - Code
    - PR
    - Subsequent PR
    - Documentation
    - Knowledge sharing
    - Container Update
    - Production run
  - Spike
    - Answer all questions listed in the ticket
    - If follow up needed, create stories
  - Bug
    - ...

### **Automation**

- Jira Timeline
- Automating project status and public visibility
  - Saves Dev time
  - Good bye status check questions
  - One stop for everything
    - No need to duplicate contents through Miro, Lucid, Excel spreadsheets or Meetings





Q&A