CS314 Software Engineering
Sprint Planning

Dave Matthews

Sprint Planning

• Time-boxed event - maximum 8 hours for 1 month sprint
• Answers two questions:
  – What can be delivered in the increment this sprint?
  – How will the work to deliver the increment be achieved?
What can be delivered?

- Product Owner discusses the objective that the sprint should achieve and backlog items that would achieve it.
- Scrum Team collaborates on understanding the work.
- Development Team selects Product Backlog items to forecast the functionality to be developed during the sprint.
- Scrum Team crafts a Sprint Goal

How will the work get done?

- Development Team decides how it will build the functionality into a “Done” product increment.
- Enough work is planned for Development to forecast what it believes it can do in the upcoming sprint.
- Work planned for the first days of the sprint is decomposed by the end of the meeting, often to units of one day or less.
- Development Team self organizes to undertake the work.
Sprint Planning

- Product Owner can help to clarify Product Backlog items and make trade-offs.
- Development Team may renegotiate selected Product Backlog items if it has too much or too little work.
- By the end of Sprint Planning, Development Team should be able to explain how it intends to work as a self-organizing team to accomplish the Sprint Goal and create the anticipated Increment.

Sprint Goal

- An objective set during the Sprint Planning meeting.
- Selected Backlog Items deliver one coherent function.
- Provides guidance to development team on why it is building the increment.
- Gives flexibility regarding the functionality implemented for the sprint.
- Causes Development Team to work together rather than on separate initiatives.
Estimation

• Estimates are guesses
  – The larger the project, the less accurate the estimate
  – The farther from completion, the less accurate the estimate

• When paired with historical data they become more useful
  – burndown charts - are you on track to achieve your goal
  – velocity charts - how fast are you progressing

• Story points versus time estimates
  – story points are unit-less, sized in relation to other tasks
  – independent of person doing the work

Planning Poker

• Discuss a backlog item
• Estimate the size using cards
  – relative to each other / hours to do
• If large range, discuss further to understand why
• Done when estimates are similar (not identical)
• Breakdown tasks with estimates > 5
## Story Board

<table>
<thead>
<tr>
<th>New Issues</th>
<th>Icebox</th>
<th>Backlog</th>
<th>In Progress</th>
<th>Done/Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• new epics with issues • new issues</td>
<td>• add estimate • add milestone • add labels • add assignee?</td>
<td>• add assignee</td>
<td>• add release</td>
<td></td>
</tr>
</tbody>
</table>

- Add start and end dates to milestones

## Burndown Charts

- Monitor your team's progress during the sprint.
- Based on your initial sprint planning and refinement.
Burndown Charts requirements

- Milestone with Start and Due dates
  - Sprint 3, Oct 2, Oct 19
- Epics
  - associated with milestones
  - no estimates
- Issues
  - associated with milestones
  - estimates

Sprint 3 - no estimates
Sprint 3 - Epics with large estimates

Sprint 3
Sprint 3

Burdendown report

Weekends | Ideal | Completed
---------|-------|--------

Today

49 Total Story Points
- Completed | 49 Remaining

18 Total Issues
- Completed | 18 Remaining