Today

- Project Taskboards (see slides)

Homework

- Final (Signed) Plan & Feature Checklist due next Wed
- HW7 due
- HW8 out (please read carefully)

Announcements

- Exam 1 next Tues (overview on Thurs)
- Presentations tomorrow!
Exercises ...

Exercise 1: Assume

- 1 week sprint (5 working days)
- 6 stories
- estimates in developer days

(i). How many developers do you think were working on the sprint?

(ii). Draw the burn-down graph (with the ideal burn-down and labeled axes)

(iii). Calculate the team’s velocity (as a %) for the sprint

<table>
<thead>
<tr>
<th>Story</th>
<th>Dev Day Estimate</th>
<th>Sprint Day Completed</th>
<th>Dev Days Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>unfinished</td>
<td>1</td>
</tr>
</tbody>
</table>

Answers:

(i.) 4 developers (∼ 5 days of work each)

(ii.) burn down chart:
(iii.) \( \frac{\text{adjusted estimate}}{\text{actual}} = \frac{15}{20} = 75\% \)
Carrying out sprints ...

Task Boards (Project “Dashboards”)

Example ...
An Alternative Layout

Using the Task Board

Update the task board daily (at least)

- move finished tasks or stories to “done”
- “check out” new tasks or stories
- move “next” stories to swim lanes (main part of board)
- update burn down chart (more later)

For your team

- since not working full time …
- may not make sense to update daily
- but still a good idea to keep track of progress mid-week
How it works -- Day 1

Sprint Goal: Put the sprint goal here!

<table>
<thead>
<tr>
<th>Not checked out</th>
<th>Checked out (tasks)</th>
<th>Done (tasks, stories)</th>
</tr>
</thead>
</table>

Burn Down

Next (stories)

Unplanned items

How it works -- Day 2

Sprint Goal: Put the sprint goal here!

<table>
<thead>
<tr>
<th>Not checked out</th>
<th>Checked out (tasks)</th>
<th>Done (tasks, stories)</th>
</tr>
</thead>
</table>

Burn Down

Next (stories)

Unplanned items
How it works -- After a few more days

The Task Board

Conceptually, task board is **how to think about sprints**

- e.g., contrast this with *Gantt charts*
  - focus on schedule details of entire project
- whereas for *task boards*
  - focus on progress, not schedule
  - only for one sprint (not entire project)

In general, task boards meant to be *flexible/adaptable*

- structure them to work best for your team
- add, remove, change layout
Examples of Task Boards “in the Wild”

Tracking Progress with Burn Down Charts

A burn down chart shows sprint/project progress

- plot new point on graph each work day
- y-axis is estimated effort (e.g., total dev days or sp’s)
- x-axis is number of work days left
Burn Down Charts

No finished tasks, but still on track!

Want to hit this point!

Uh oh! We're not making progress

Want to hit this point!

Finished more tasks...

Want to hit this point!

Uh oh... Wrong direction!!
What happened?

Want to hit this point!
Types of “Swim Lanes”

Possible columns in a task board

- Project backlog
- Sprint backlog
- In Progress
- In Review
- In Test
- Completed