Story-driven development

Useful requirements, engaged customers, and data-driven projects

Carl Erickson, PhD
Not-so-simple analogy

Development tasks
Simple design
Unit tests

Customer stories
Simple features
Acceptance tests

1. Customer dependency
2. Testing difficulty
Major Benefit #1

Requirements

When you need them

In small chunks

Actionable, unambiguous, useful

With an opportunity to learn-as-you-go
Major Benefit #2

Predictability

Stories can be estimated (small chunks)

Project velocity can be measured

Rhythm is established
Major Benefit #3

Feature management

Keeping it simple

Staying focused

Putting a cost on features

Letting the customer steer
Tool Support for SDD

• Coordination/Collaboration
  – Common documents
  – Messages (emailed, archived)
  – To-do lists

• Iteration Planning and Tracking
  – Estimates, status, budget, velocity
  – Predictions

• Time Tracking
  – Estimates, status, budget
  – Billing
Collaborate better in 2006 with Basecamp

Join over 100,000 people like you who’ve discovered Basecamp - the smarter, easier, more elegant way to get your internal and client projects done

“It’s so simple you can’t do anything wrong. Addictively easy to use.”

-Robert D Hof, BusinessWeek Silicon Valley Bureau Chief (more buzz...)

What is Basecamp?
Basecamp is a unique project collaboration tool. Projects don’t fail from a lack of charts, graphs, or reports, they fail from a lack of communication and collaboration. Basecamp makes it simple to communicate and collaborate on projects.

It’s elegant, easy, and web-based. You don’t need to download, install, or configure anything (no IT department required!). All you need is a web browser and an internet connection. And don’t worry, your data is safe with us.

How can Basecamp help us?
Basecamp makes it easy to centralize group communication with co-workers and clients.

- Assign to-dos and tasks
- Post messages and gather feedback
- Simple scheduling and permissions
- Share files internally or with clients
- Track people's time

Who uses Basecamp?

Basecamp is all about getting projects done.
eXPlainPMT-20060114.0 Released

Posted by John Wilger 8 days ago

Just added the latest release to RubyForge. There aren't really any major changes to the functionality in this release—it mostly consists of some refactoring of the code and a few minor bug fixes (more related to display than data).

Posted in Release Announcements | no comments | no trackbacks

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eXPlainPMT 20051231.0 Released

Posted by John Wilger 24 days ago

I just released version 20051231.0 on Rubyforge. You will, of course, notice that the version numbering semantics have changed with this release. From now on, the version number will reflect the date of the day after the end of an iteration, and we will be making a release after each iteration (every 14 days). The '.0' at the end will represent a patch level. Although most releases will be "dot-zero", the patch level is there in case I need to make a quick interim release to fix a critical defect.

This release is the first to make use of the new graphic design created by Luke Redpath. There are still some tweaks that need to be made here and there, but I think it looks pretty nice overall. Other changes with this release include:

- Fixed an error when submitting form to move stories between iterations and/or backlog and no stories are selected
Dynamometer Project

- 9 months
- 5 pairs of developers (3 @ AO, 2 @ BP)
- C#/.NET GUI client - C++/QNX server
## Story Cards in Project Backlog

### New Story Card
### Show Cancelled Stories

Move Selected Story Cards to: **1/20/2006**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Points</th>
<th>Category</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC179</td>
<td>Add robot braking to manual transmission following drive curve</td>
<td>13</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC195</td>
<td>DriveCurveParser handles shift table file params in drive curve files</td>
<td>5</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC198</td>
<td>Improve speed control loop's shifting strategy</td>
<td>7</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC162</td>
<td>Apply real force scaling in Shifter::shiftToGear()</td>
<td>2</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC196</td>
<td>DCE installs new shift table object into vehicle config</td>
<td>2</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC19</td>
<td>Provide control tool kit</td>
<td>12</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC24</td>
<td>Controller can learn about a vehicle</td>
<td>1</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC25</td>
<td>Support keyboy</td>
<td>1</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
<tr>
<td>SC20</td>
<td>Support automatic transmission</td>
<td>1</td>
<td>Story</td>
<td>Defined</td>
<td>Edit, Delete</td>
</tr>
</tbody>
</table>
Dyno Controller

1/20/2006 - 1/26/2006

Summary | Report

- Budget: 45 points
- Planned: 41 points
- Available: 4 points
- Completed: 12 points
- Worked: 7 points
- Remaining: 29 points
- Time Remaining: 2 days

Story Cards

<table>
<thead>
<tr>
<th>Scid</th>
<th>Title</th>
<th>Points</th>
<th>Worked</th>
<th>Category</th>
<th>Status</th>
<th>Owner</th>
<th>Prioritize</th>
<th>Print Selected Stories</th>
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</thead>
<tbody>
<tr>
<td>SC233</td>
<td>DCP doesn't choke on shift table references (3rd column)</td>
<td>1</td>
<td>1</td>
<td>Story</td>
<td>Complete</td>
<td>None (take)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC234</td>
<td>Learning design for controller</td>
<td>12</td>
<td>0</td>
<td>Story</td>
<td>Defined</td>
<td>None (take)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC235</td>
<td>Robot services provided to support learning</td>
<td>8</td>
<td>3</td>
<td>Story</td>
<td>Complete</td>
<td>None (take)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC237</td>
<td>Access to learned data by controller processes/objects</td>
<td>8</td>
<td>0</td>
<td>Story</td>
<td>Defined</td>
<td>None (take)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Burn Down Chart
Generated on: October 11, 2005
Burn Down Chart
Generated on: January 6, 2006

Project Burndown

Points

~41

Points

0 5 10 15 20 25 30 35 40 45

Iteration

- Project Work
- Remaining Work
- Completed Story Points
- Completion Date
Burn Down Chart
Generated on: February 13, 2006

Project Burndown

Points

Points

Iteration

Iteration

Project Work • Remaining Work • Completed Story Points • Completion Date
Burn Down Chart
Generated on: January 3, 2006

Project Burndown

- Points
- Iteration

Legend:
- Project Work
- Remaining Work
- Completed Story Points
- Completion Date

Story: A small, well-defined task. Projects are generally composed of many stories.

Point: A unit of measure used by a developer to estimate the effort necessary to complete a story.

Project Work: The sum, in points, of all stories in the project.

Completed Story: The sum of the points of all stories completed during the iteration.
Time Tracking
+
Project Status
Atomic PunchIt II™

Punch - Password - Sales - Admin - Reports - Invoicing - Logout

You are logged in as: erickson

Select A Project $ All Projects
(no stories) $ Add Story $ Edit Story

Start: Stop: [Calendar]

Previous Period
Mon Jan 16th 2006 - Sun Jan 29th 2006

Tue 01/24/2006

<table>
<thead>
<tr>
<th>Start</th>
<th>Stop</th>
<th>Project</th>
<th>Notes</th>
<th>Ops</th>
</tr>
</thead>
</table>
| 12.5  | 17   | Repeo Robot     | Programming
Learner integration with Robot. System test. | Edit | Delete |
| 9.25  | 11.5 | Atomic Kiosk    | Project Management
brain synch | Edit | Delete |
| 8.25  | 9.25 | Atomic Marketing| Speaking | Edit | Delete |
| 7.5   | 8.25 | Atomic Personal Time | Speaking | Edit | Delete |

Mon 01/23/2006

<table>
<thead>
<tr>
<th>Start</th>
<th>Stop</th>
<th>Project</th>
<th>Notes</th>
<th>Ops</th>
</tr>
</thead>
</table>
| 6     | 7.5  | Atomic Marketing| Speaking
XPwm Jan meeting: SDD slides | Edit | Delete |
### X-Rite Vericolor TCD - Story Summary Report - Phase 6

**Edit - View Project Report**

*Jan 24th 2006*

<table>
<thead>
<tr>
<th>Lo Est</th>
<th>Hi Est</th>
<th>Worked</th>
<th>Story</th>
<th>Remain Est</th>
<th>% Done</th>
<th>Projected Hours Remain</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>8</td>
<td>20.25</td>
<td>Calibration Timestamp Bug</td>
<td>(12.25)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>64</td>
<td>46.75</td>
<td>Firmware download</td>
<td>17.25</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>1.75</td>
<td>Log File Copying</td>
<td>2.25</td>
<td>100</td>
<td>0</td>
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<tr>
<td>2</td>
<td>4</td>
<td>4.75</td>
<td>Project Management</td>
<td>(0.75)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>2.75</td>
<td>Restore Factory Defaults</td>
<td>1.25</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lo Est</th>
<th>Hi Est</th>
<th>Worked</th>
<th>Story</th>
<th>Remain Est</th>
<th>% Done</th>
<th>Projected Hours Remain</th>
</tr>
</thead>
</table>

### Phase 6 vs Project Totals

<table>
<thead>
<tr>
<th></th>
<th>Phase 6</th>
<th>Project Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Estimate:</td>
<td>84</td>
<td>285</td>
</tr>
<tr>
<td>Total Worked:</td>
<td>76.25</td>
<td>224.75</td>
</tr>
<tr>
<td>Remaining in Estimate:</td>
<td>7.75</td>
<td>60.25</td>
</tr>
<tr>
<td>Projected Remaining:</td>
<td>0</td>
<td>61</td>
</tr>
<tr>
<td>Completion:</td>
<td>100%</td>
<td>78.6%</td>
</tr>
</tbody>
</table>
But wait, there’s more!

Automating acceptance tests gets you…

Executable requirements (even more unambiguous)

Inexpensive for developers to run

Regression testing ability

Release process confidence

A few more bugs
References

Basecamp
www.basecamphq.com

ExplainPMT
www.explainpmt.com

Atomic Object
atomicobject.com

XPwm
xpwestmichigan.org