A Gentle Introduction to Extreme Programming

Brian Button
Master of Quality Development
Agile Solutions Group
http://www.agilesolutionsgroup.com
bbutton@agilestl.com

I Believe...

- In People over Process

- In having an actual user as part of my team

- That things will change, no matter how much I wish they wouldn't

- That working code is more valuable than documentation, especially early in a project

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Very Different from Most Companies

- Traditional process
  - Decide what to build (requirements and analysis)
  - Decide how to build it (design)
  - Build it (coding)
  - Test it (testing)
- Called the Waterfall Methodology

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Consequences

- No user feedback until very late in the project

- Requirements changes expensive

- Progress unmeasurable until late in the project

- Usually late, so have to make up time somewhere towards the end

  – Testing always seems to get the short stick

- No deliverable value until end of project

- Ugly Cost of Change Curve

Today's World

- IT budgets and sizes are shrinking

- Nearly immediate ROI demanded for projects

- Projects are more complex, teams are smaller

- Rapidly changing business needs

New Methodology

- Encourages change as business changes

- Promotes early and incremental delivery of value
  - Working software early

- Focuses on business value rather than technical challenges

- Measurable, quantifiable progress

Agile Software Development

- Agile Alliance formed to address this need

- Industry heavyweights gathered to create lightweight processes

- They formulated 4 Agile Values
  - People over process
  - Customer involvement over contract negotiation
  - Working code over comprehensive documentation
  - Adapting to change over following a plan

The Agile Methods

- And each of them created their own methodology
    - Crystal – Alistair Cockburn
    - ASD – Jim Highsmith
    - FDD – Peter Coad
    - Scrum – Ken Schwaber and Mike Beedle
    - Extreme Programming – Kent Beck
- All have same 4 values in common
    - Differ in other ways

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Extreme Programming (XP)

- Most popular Agile Method

- XP is a discipline of software development based on the 4 values of Courage, Communication, Simplicity, and Feedback

  - Bounds all activities on XP team

- It works by putting the Whole Team together, giving them a set of simple Practices, with enough feedback to understand where they are, and the freedom to tailor the process as needed.

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The End!!

- That's all there is to it!
- Thanks for listening :)

When to use it?

- XP is particularly well suited to:
  - Small to medium size, co-located teams
    - 1-20 people total
  - Requirements are uncertain or changing rapidly
  - Development may take place at a reasonable pace

What is XP?

- Highly disciplined methodology for delivering software

  – You must plan often

  – You must have Whole Team in constant communication

  – You must create software that is easily changeable

  – You must share responsibility and ownership of system among Whole Team

  – Etc...

Sounds pretty simple...

- Simple systems of rules often lead to complex behavior...
  - Since you must plan often and incrementally...
  - You must create software incrementally as well, so...
  - You can't design it up front, so...
  - You have to design it incrementally as well, so
  - It has to be easily changeable, so...
  - Its gotta be simple, testable, readable, shared, so ...

The 12 Practices of XP

- Provide a road to agility, but are not agile themselves

- Detailed practices that govern how people act on an XP team

- Not required, but strongly suggested
  - Spirit and values much more important
  - Tough lesson to learn

Results – Business Side

- Delighted customers
  - Less pressure to get it right the first time
  - Right end product for current needs **NOW**
  - **Much** higher quality
  - More predictable pace of development
  - Intermediate results that might be saleable

Results – Programmer Side

- Happy programmers
  - Freed from unnecessary process overhead
  - Immediate answers to requirements questions
  - Work as part of a team
  - Daily, quantifiable progress
  - Free to do their best work, all the time

To learn more

- Join XPSTL
  - http://groups.yahoo.com/group/xpstl
- Attend XPSTL meetings
  - 1st Wednesday of month – general meeting
  - 3rd Wednesday of month – coding meeting
- Visit our wiki
  - http://www.xpstl.org

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