

The background is a gradient from dark purple at the top to deep blue at the bottom, speckled with small white dots. Overlaid on the left side are several concentric circles and arcs, some with degree markings (40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) and arrows, suggesting a circular or orbital theme.

INTRODUCTION TO EXTREME PROGRAMMING (XP)

BRYAN NEHL

@KØEMT

THE AGILE MANIFESTO

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions *over* processes and tools
Working software *over* comprehensive documentation
Customer collaboration *over* contract negotiation
Responding to change *over* following a plan

That is, while there is value in the items on the right, we value the items on the left more.

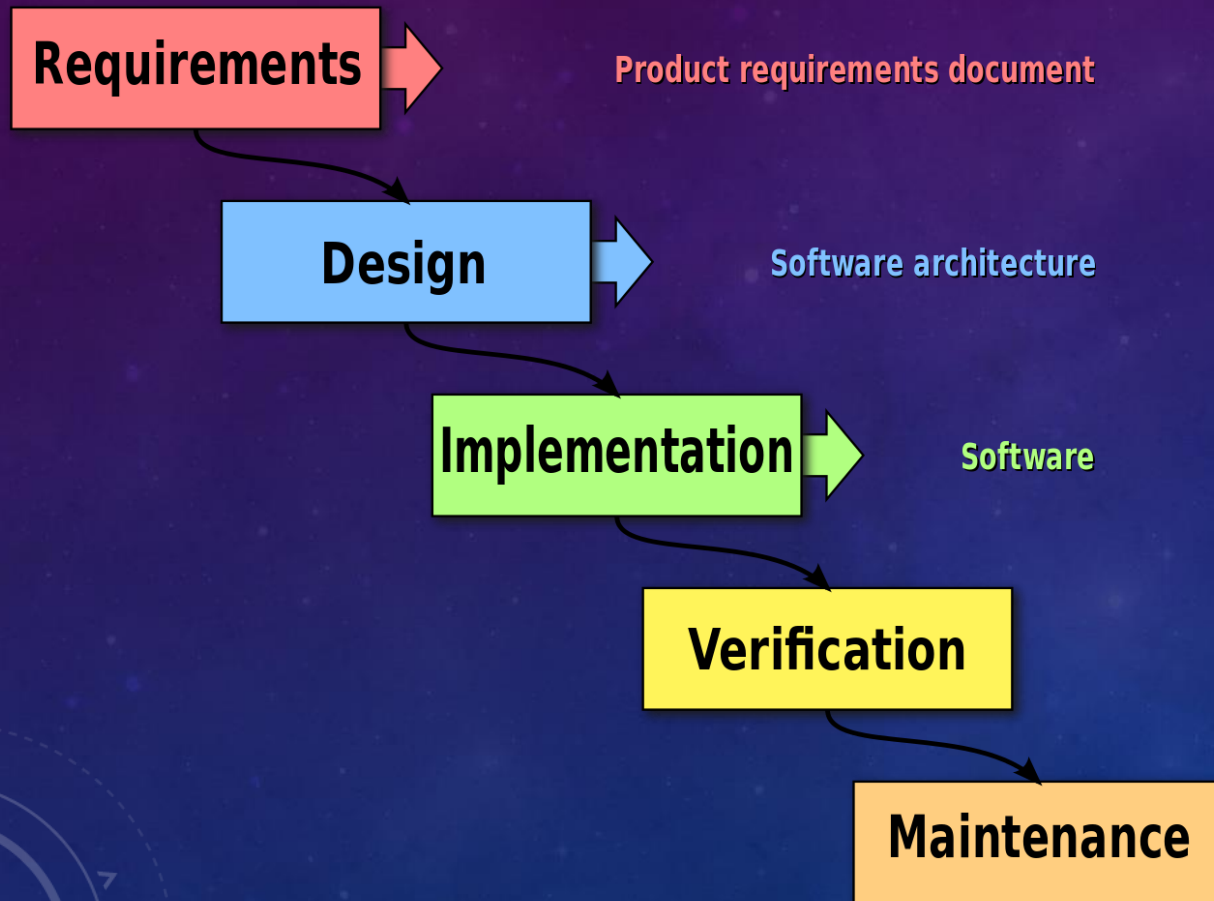
from <http://agilemanifesto.org/>

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler
James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick
Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas

Agile and XP

The background is a deep blue gradient with a subtle pattern of white stars and nebulae. Overlaid on this are several faint, white, semi-transparent circular gauges or dials. One large gauge is prominent in the upper right corner, featuring concentric circles and radial markings. Another smaller gauge is visible in the lower right, and a partial one is in the bottom left. These elements suggest a theme of progress, measurement, or technology.

THE DARK TIMES



ADOPTING XP: WHY?

- Have Production/Process critical applications?
- Knowledge silos?
- Want reduced defect rates?
- Want deployed/released software?
- Changing Requirements?
- Customer Satisfaction?
- Developer Satisfaction?



EXTREME PROGRAMMING



- The first Extreme Programming project was started **March 6, 1996.**
- **Kent Beck – Project Leader**
- Ron Jeffries
- Don Wells
- Martin Fowler
- Chet Hendrickson

EXTREME PROGRAMMING 1E VS 2E

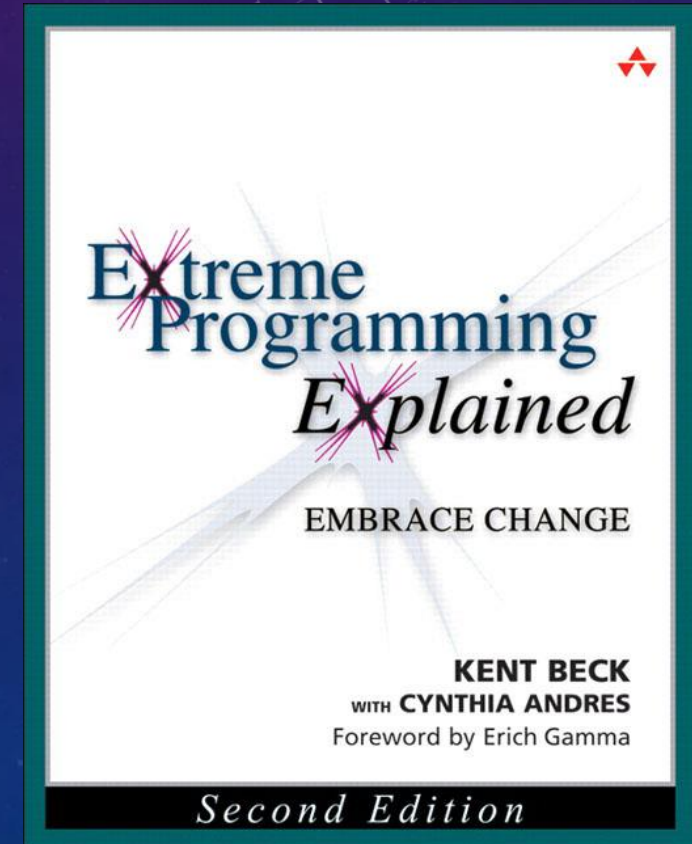
1e

- October 1999
- 12 practices
- Coding Standard
- Metaphor



2e

- November 2004
- the 5 values
- Principles
- Corollary practices



VALUES: COMMUNICATION

- Maximize communication within team
- With customers
- Documents – easily readable & up to date
- Common Vocabulary

VALUES: SIMPLICITY

- Simple but not simplistic
- YAGNI

VALUES: **FEEDBACK**

- People
- Systems
- Team

VALUES: RESPECT

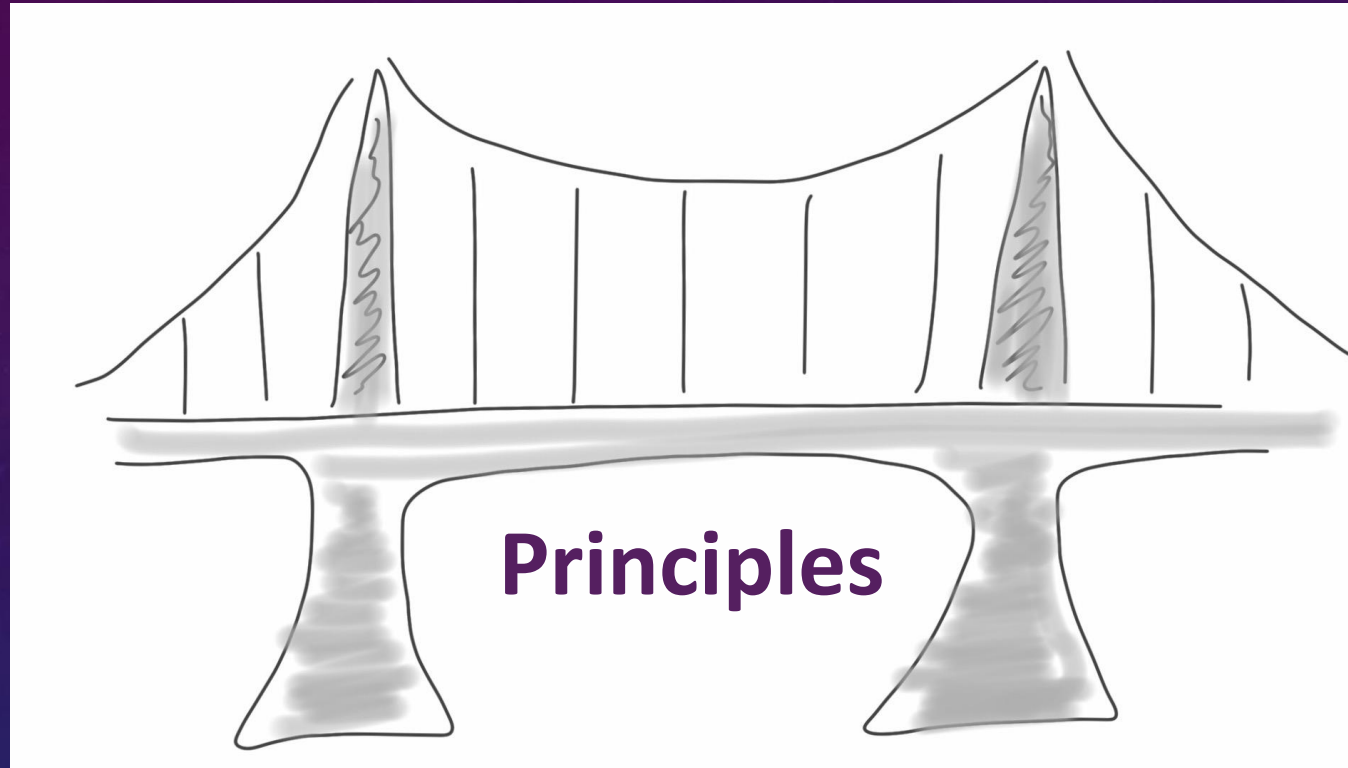
- Self
- Others
- Others work

VALUES: **COURAGE**

- In combination with other values is powerful

14 PRINCIPLES

Values

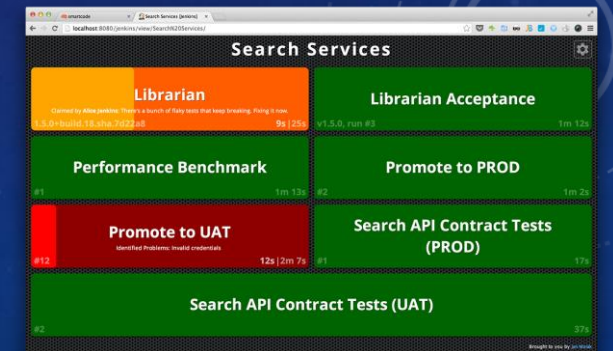


Practices

- Humanity
- Economics
- Mutual Benefit
- Self-similarity
- Improvement
- Diversity
- Reflection
- Flow
- Opportunity
- Redundancy
- Failure
- Quality
- Baby Steps
- Accepted Responsibility

TEAM AND HUMAN FACTORS PRACTICES

- Sit Together
- Whole Team
- Informative Workspace
- Energized Work – sustainable pace
- Pair Programming



THE TEAM ROOM

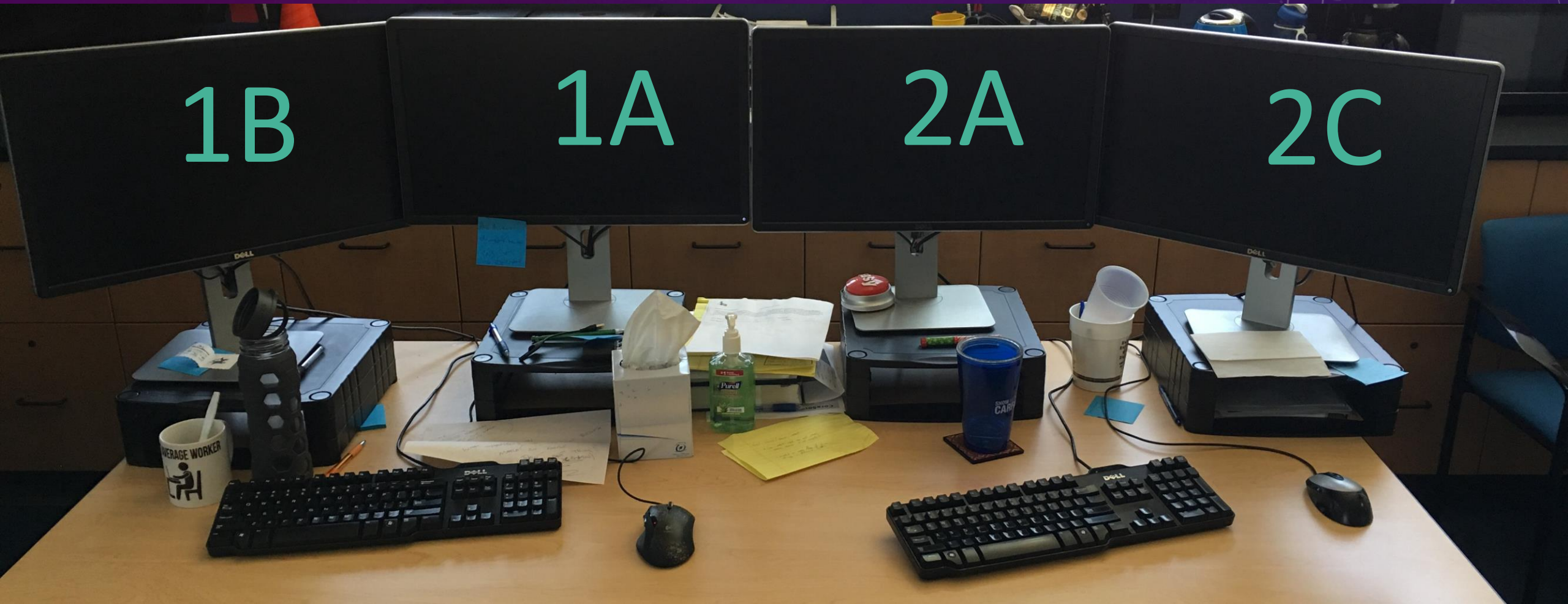


<http://xp123.com/xplor/room-gallery/>

PAIRING STATIONS



PAIRING STATIONS



PAIRING STATIONS



REQUIREMENTS ANALYSIS AND PLANNING PRACTICES

- **Stories**
 - Cards
 - Role
 - Feature
 - Acceptance criteria
 - Sizing
 - Conversation

DOCUMENTATION

"We're doing XP"

is ***not*** a reason to skip
documentation.

REQUIREMENTS ANALYSIS AND PLANNING PRACTICES

- Weekly Cycle
 - Yesterday's weather
- Quarterly Cycle
 - Theme
 - Process improvement
 - Big picture
- Slack
- Flow based management

DESIGN PRACTICES

- Incremental Design
 - As you code
 - EDUF

DESIGN PRACTICES

- **Test-First Programming**
 - What is it?
 - Simple test
 - Simple code (DTSTTCPW)
 - Refactor
 - repeat
 - Arrange-Act-Assert
 - TETTCPB



RED – **GREEN** – **REFACTOR**

DESIGN PRACTICES

Test-First Programming addresses:

- Scope creep / cowboy coding
- Coupling and cohesion -- testability
- Trust (the code & tests)
- Rhythm – focus
 - Red-Green-Refactor

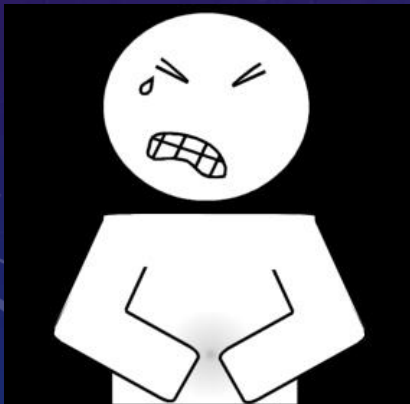
CODING AND RELEASE PRACTICES

- Continuous Integration
 - Git
- Ten Minute Build
- Continuous Deployment
 - Automation Servers

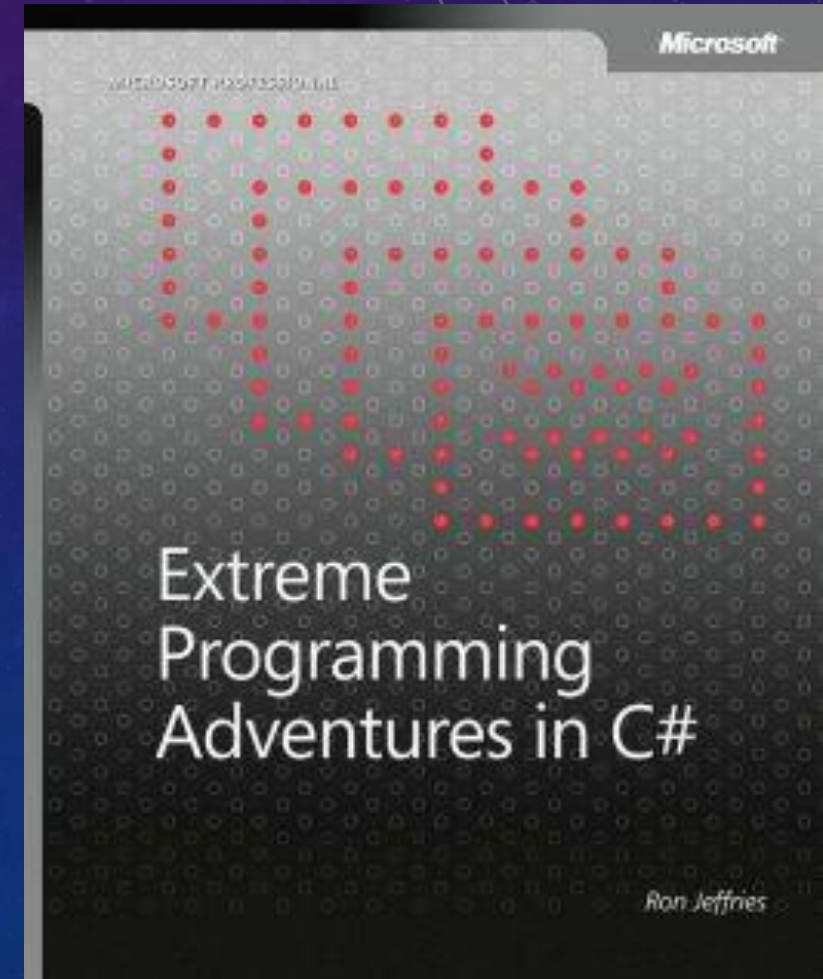
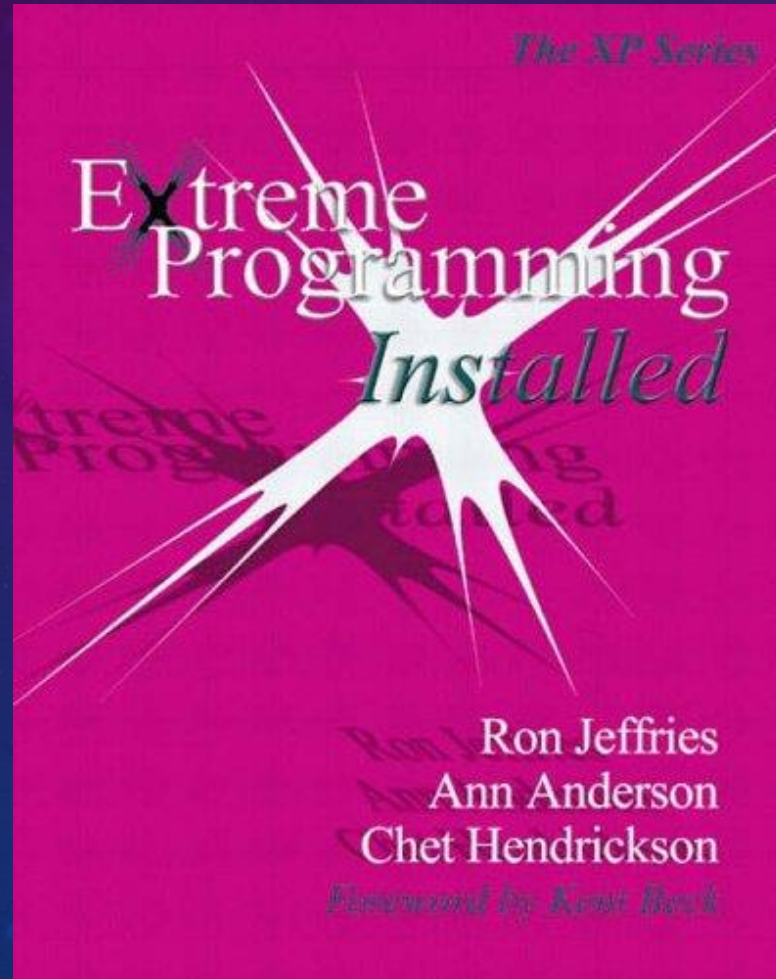
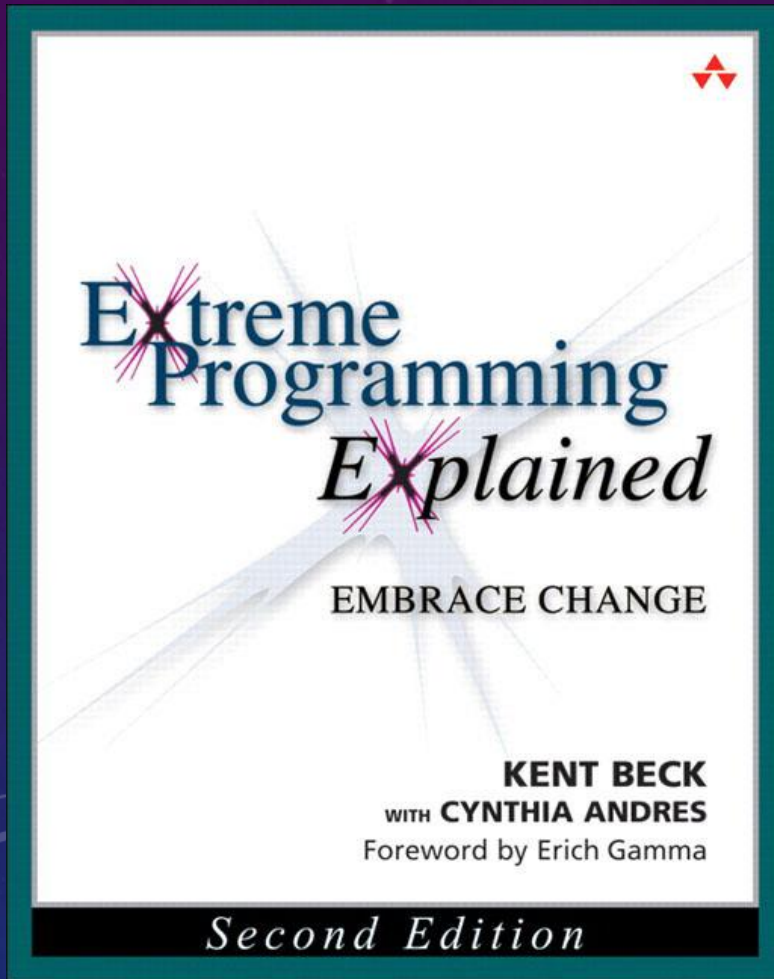


Jenkins

ADOPTING XP: HOW?



WHERE DO I GO FROM HERE?



WEB RESOURCES

1. <http://www.extremeprogramming.org/>
2. <http://www.extremeprogramming.org/more.html>
3. <http://c2.com/cgi/wiki?ExtremeProgramming>
4. <http://ronjeffries.com/xprog/what-is-extreme-programming/>
5. <http://xp123.com/xplor/>
6. <http://www.xp123.com/xplor/xp0202/xp-one-page.PDF>



finished



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<https://github.com/k0emt/Presentations>