Extreme Programming Overview

team interaction

An XP Room

Dynamic pairs write all production code
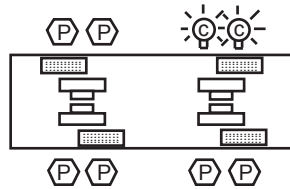
Any pair can change any code

overall schedule

RP It. It. It. Release RP It. It. It. Release . . .

RP=Release Planning (1-3 weeks)
It.= Iteration (fixed length, 1-3 weeks)
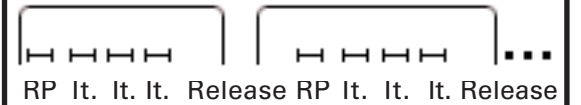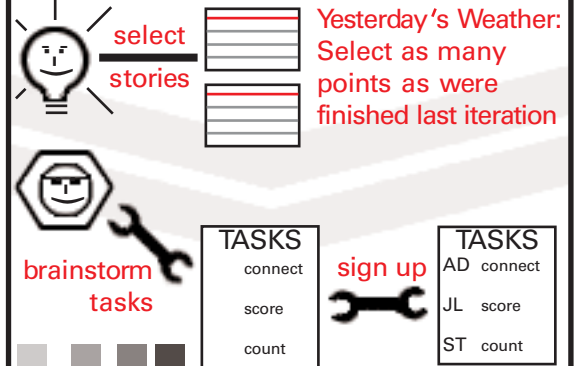Release to users every 1-3 months

Team Practices

- Whole team sits together in one room
- Work at a sustainable pace
- Integrate many times per day
- Share a common vision and vocabulary
- Reflect regularly
- Converge on a coding standard

release planning

customer

Story Cards
- Index Card
- "Headline"

Conversations

Customer Tests
- Tied to stories
- Automated

programmer

estimate points for each card

customer splits if too big

estimate velocity

n points per iteration

Release Plan
It. 1 It. 2 It. 3 It. 4

RELEASE

Customer selects stories, most important first

iteration planning

select stories

Yesterday's Weather: Select as many points as were finished last iteration

brainstorm tasks

sign up

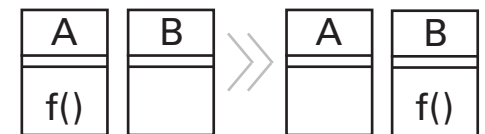| TASKS		TASKS	
connect		AD	connect
score		JL	score
count		ST	count

programming

Design Philosophy

- Design is evolutionary and emergent
- Pay as you go: Build just enough to meet today's requirements
- Keep design as simple as possible (but no simpler)
- High quality is both a side effect and an enabling factor
- The code says everything "once and only once"

Incremental Test-First Programming

Write a test → Implement just enough to pass → Refactor → (repeat)
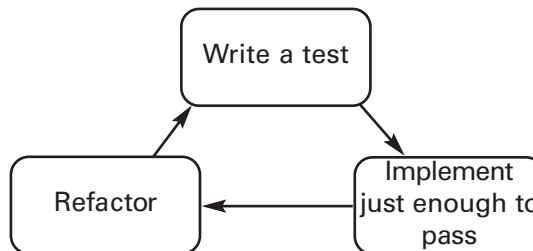
Cycle takes 5-15 minutes

Refactoring
Stepwise design improvement via safe transformations

A	B		A	B
f()				f()

Example: Move Method