# Software Development Lifecycle

CPSC 1181 – O.O.

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# Waterfall (Royce)

1. Systems requirements
2. Software requirements
3. Analysis
4. Program design
5. Coding
6. Testing, and
7. Operation

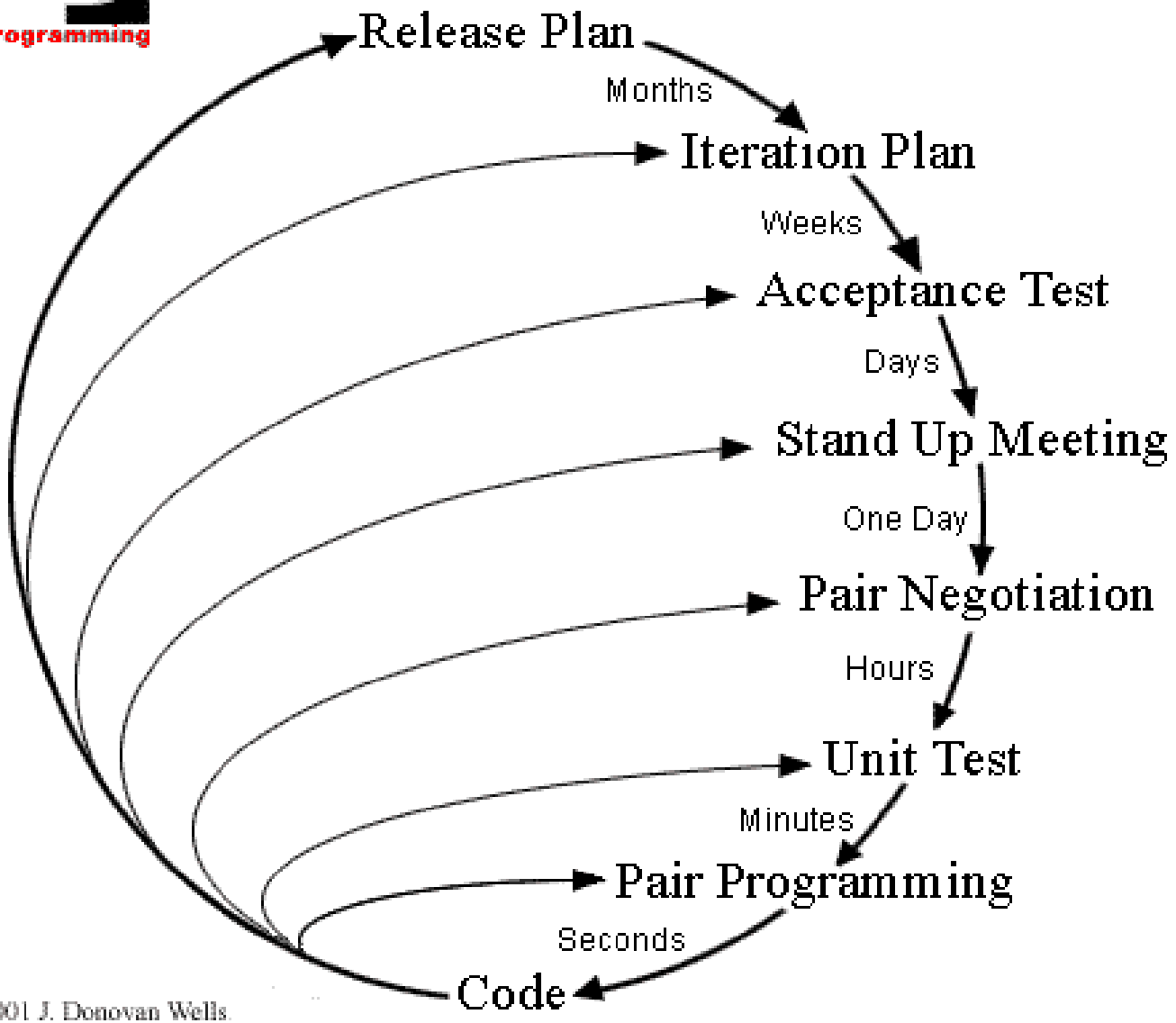
"I believe in this concept, but the implementation described above is risky and invites failure."

Royce, Winston W. "Managing the development of large software systems. "*Proceedings of IEEE WESCON*. Vol. 26. No. 8. 1970.

# SCRUM PROCESS

# Planning/Feedback Loops

Zoom Out

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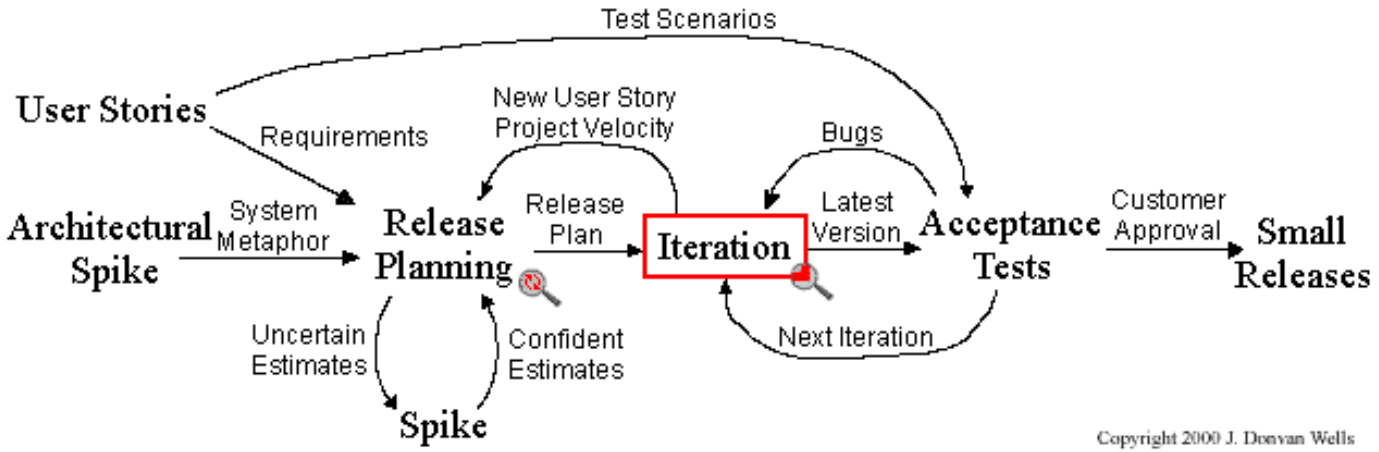
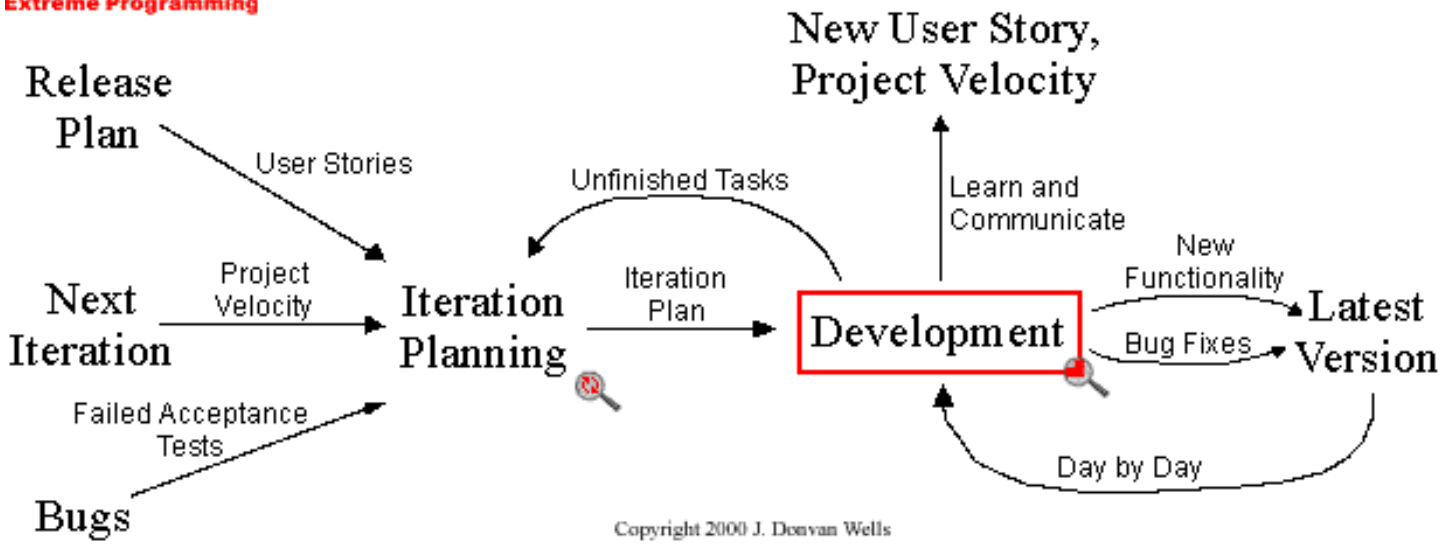
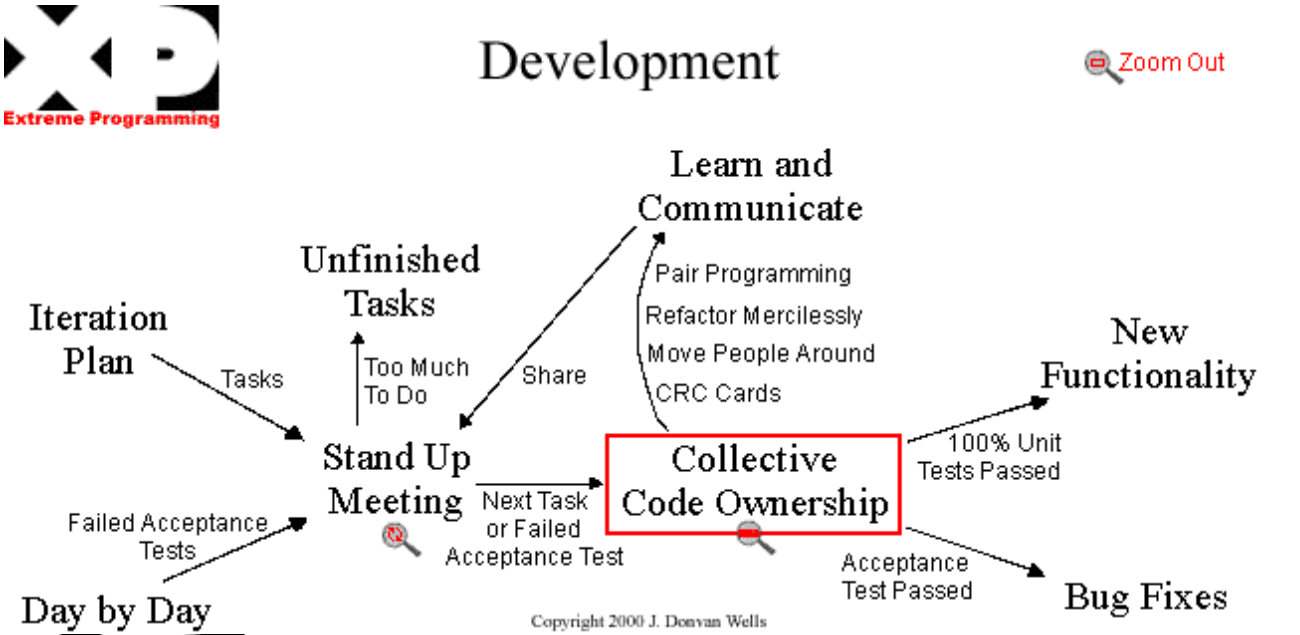
# Extreme Programming Project

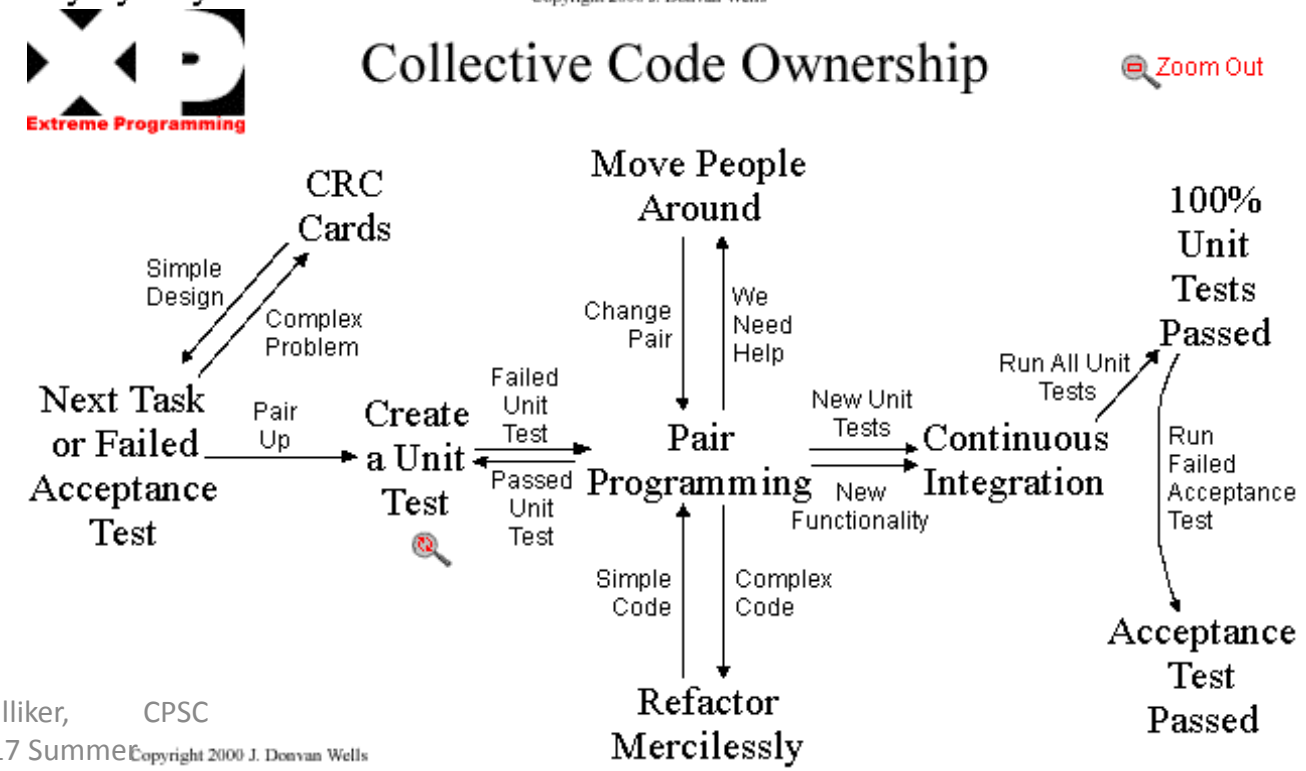



# Iteration

Zoom Out




Extreme Programming
Development
Zoom Out
Learn and Communicate
Unfinished Tasks
Pair Programming
Refactor Mercilessly
Move People Around
CRC Cards
Iteration Plan
Tasks
Too Much To Do
Share
New Functionality
Stand Up Meeting
Next Task or Failed Acceptance Test
Collective Code Ownership
100% Unit Tests Passed
Failed Acceptance Tests
Acceptance Test Passed
Bug Fixes
Day by Day
Copyright 2000 J. Donvan Wells


Extreme Programming
Collective Code Ownership
Zoom Out
CRC Cards
Move People Around
100% Unit Tests Passed
Simple Design
Complex Problem
Change Pair
We Need Help
Run All Unit Tests
Next Task or Failed Acceptance Test
Pair Up
Create a Unit Test
Failed Unit Test
Passed Unit Test
Pair Programming
New Unit Tests
New Functionality
Continuous Integration
Run Failed Acceptance Test
Simple Code
Complex Code
Acceptance Test Passed
Refactor Mercilessly
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