Advanced Scrum and agile development

Clinton Keith
Clinton Keith

- 24 years of development experience
- 15 years of game development experience
- 5 years of agile development experience in the game industry
- Introduced agile to the industry in March 2005

Agile coach and trainer

- 24 years of development experience
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Certified Scrum Trainer
Agenda

- 3 minute tour
- Challenges & Solutions
- Summary
- Q&A
A 3 minute tour of Scrum
Scrum

Sprint goal
- Jump

Sprint backlog
- Crouch
- Fly
- Swim

24 hours

Sprint 2-4 weeks

Product backlog
- Fly

Incrementally improved game
Putting it all together

Daily Scrum Meeting

Product Backlog

Sprint Backlog

24 Hours

Sprint 2-4 Weeks

Incrementally Improved Game

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The Scrum project community

The team
- Programmer
- Designer
- Artist
- Programmer
- Designer
- Tester
- Animator

Scrum Master
Anyone (not an authority role)

Product Owner
- Internal director
- Publisher producer
The Roadmap

Stage 1
- Apprentice
- 3-12 months
- Daily Scrums
- Iterations
- “Done”

Stage 2
- Journeyman
- 12-24 months
- Faster integrations
- Better testing
- Release planning

Stage 3
- Master
- Never ends
- Self organization
- Continuous improvement
Project Leadership

Directed Management

Facilitative / Coaching

Time
• 3 minute tour
• Challenges & Solutions
• Summary
• Q&A
Switching from a push system to a pull system

- What is a “pull system”?
- “Pushing” tasks through Scrum
- The challenge of pull systems.
- Defining done
Scrum is a pull system

<table>
<thead>
<tr>
<th>Sprint goal</th>
<th>Not started</th>
<th>In progress</th>
<th>Done</th>
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Why a pull system?

- “Done” is the goal, not task completion
- Creates a “real” pace
  - Minimizes debt
- Allows true velocity to be measured
  - Velocity is a better measure than progress against a schedule
  - Focuses on what is “on the screen”, not progress against a schedule
  - Reality vs “the plan”
Burning down hours?

Work tracked in days not hours?

Tracking story points completed?
“Pushing” tasks through Scrum

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Pushing tasks in Scrum

- Task completion is the goal
- Goals often left incomplete
  - Bugs
  - Missing, yet unstated, requirements
- Velocity is slower
  - Collisions at the end of the sprint
  - More multi-tasking
- Symptoms
  - Mini-crunch every sprint
  - Very few iterations on the sprint goal
  - Not much polish
The challenge with pull systems

- Over reliance on tools
  - Daily scrums are not status reporting meetings

- “Over managing” the team
  - Let the team manage the tasks (i.e. the path to achieving the goal).
  - Help them make the right decisions

- Teams not taking ownership or making commitments
  - Common for teams new to Scrum

- Defining “done”
Defining Done

- Concept
- Design
- Coded
- Playable
- Polish
- Performance
- Magazine demo
- Online
- Shippable

Extend the scope of done as far as possible.
Shared service teams
Shared service teams

Game 1 backlog

Shared Services backlog

Game 2 backlog

Game 3 backlog

Product owner = CTO
Product = studio

= external shared services work

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The product owner
The product owner

- Represents the customers
- One voice, even if not one person
- Usually an
  - Internal Director
  - Publisher Producer
    - Supplement with someone onsite
- Main responsibility is knowing what to build and in what sequence
Communicating vision
Parts on the garage floor

Leads to iterative and incremental death marches
Documentation has its place

Best Wishes Suzanne
Under Neat that
We will Miss you
Agile phases for game development
Agile is phase-less

...is game development?
Not Quite
## Preproduction vs Production

<table>
<thead>
<tr>
<th>Questions or Statements</th>
<th>Preproduction</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>What and how?</td>
<td></td>
<td>Build it!</td>
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</table>

<table>
<thead>
<tr>
<th>State of mind</th>
<th>Preproduction</th>
<th>Production</th>
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<tbody>
<tr>
<td>Collaboration</td>
<td></td>
<td>Flow</td>
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</table>

<table>
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<th>Goals</th>
<th>Preproduction</th>
<th>Production</th>
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<tbody>
<tr>
<td>Correctness</td>
<td></td>
<td>Efficiency</td>
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### Which process?

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What is Lean?

- Agile development methodology that is not as well known as Scrum.
- Focused on complex flow of work and pull systems to represent that flow.
- Are better suited to more predictable work-flow.
The problem using Scrum for production

Scrum does not represent multi-step workflow transparently.

Team fails to achieve goal....
all work-in-progress (WIP)
The problem using Scrum for production

Cross-discipline teams cannot share the work evenly

End of sprint

Model → Model?

Discipline pools can help, but they promote local optimization, which works against flow
If the work is repeatable...

It should flow
Time-boxing Art

A time-box is a fixed length of time given to produce results. The results are variable.

“When forced to work within a strict framework the imagination is taxed to its utmost-and will produce richest ideas. Given total freedom the work is likely to sprawl.”

- TS Eliot
Finding the right timebox

Value to Customer vs Cost

Timebox should keep us here
Kanban Board

<table>
<thead>
<tr>
<th>Concept and Outline</th>
<th>Low Rez &amp; Layout</th>
<th>High Rez</th>
<th>Audio</th>
<th>Gameplay</th>
<th>Tuning pass</th>
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<tbody>
<tr>
<td>Billy</td>
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<td>R.J</td>
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<td>Andrea</td>
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Real world experiences

- Scrum teams experience less crunch
  - If they establish a definition of done
  - If they have a shared vision
- Lean is a better fit for production
  - It’s compatible with Scrum
- Success is not determined by agile
  - Vision
  - Talent
  - Teamwork
  - Leadership
Agile Game Development book

- Fall 2009 release
- ISBN 0321618521
- Currently in 2nd draft
- Want feedback
  - See me after
Conclusion

• For more information
  • www.AgileGameDevelopment.com
  • www.ClintonKeith.com
    • Onsite workshops
    • Public classes
    • Coaching
    • Info up front

• Questions?
Conclusion

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  - www.AgileGameDevelopment.com
  - www.ClintonKeith.com
- Questions?