

A detailed illustration of Link from The Legend of Zelda: Breath of the Wild, riding a brown horse. Link is wearing his signature green tunic and hat, and is holding a sword. The horse is in a rearing position. The background is a solid light gray.

Foundations of Interactive Game Design

09: Development Cycles

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Today's Plan

- Game Design Methods
- Dev Cycles (dependent upon design method)
- Quiz

Apr 22
03:30 PM

Thim Lecture 3

**Strategic &
Twitch Skill**

Apr 23

Apr 24
03:30 PM

Thim Lecture 3

Chance & Skill

Apr 25

Apr 26
03:30 PM

Thim Lecture 3

**Sound Design. Guest Speaker:
Dren McDonald**

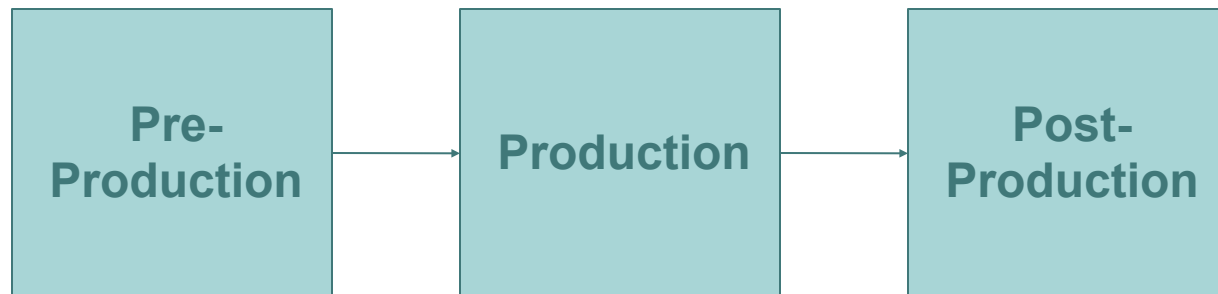


Game Design Methods

(Also called “methodologies” if you’re into that big vocab thing. You could even go with “Game Design Utilization Methodologies”, but then you’d just sound like an idiot.)

What is a Game Design Method?

- A means for bringing something through the three stages of production





Different Methods

- Pre-Production Methods
 - Cerny Method (Pre-production)
- Full Production Methods
 - Traditional
 - Vertical Slice
 - Waterfall
 - Agile
 - Iterative
 - Organic
- Post Production Methods
 - Cut Features
 - Push the Schedule
 - FTS



Traditional

- Preproduction
 - Write an initial design doc
 - Maybe do a prototype or proof of concept
 - Initial docs continue and get polished
- Production
 - Game design docs polished
 - First playable
 - Alpha
 - Beta
 - Submission Candidate (to 1st party)
- Post-Production – **a lie!**
 - Polish and ship

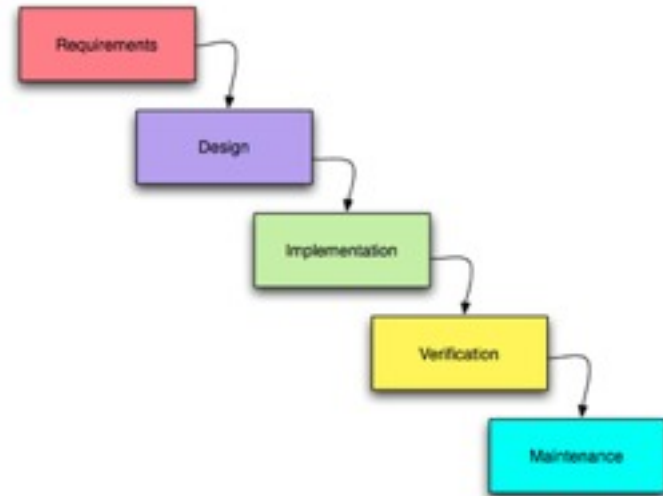


Traditional

- Post-Production – the truth!
 - What actually happens?
 - “Feature creep” - the adding of features from the team or the publisher which adds to the schedule without pushing the date.
 - Feature correction
 - Took longer than anticipated
 - Gameplay sucks!
 - Technology was flawed!

Waterfall Method

- One thing follows another in a logical flow
- Completely sequential



Cerny Method

- Mark Cerny
- Current lead architect of PS4
- Started at Atari in 1982
- First success at Marble Madness
- Other big titles:
 - Jak and Daxter
 - Ratchet & Clank
 - Crash Bandicoot





Cerny Method

- Key: There may or may not be a game out of this.
- Based on publishable first playable.
- Based on dumping of four key *myths* of game development:
 - It is possible to plan and schedule the creation of your game.
 - Working productively means throwing out nothing
 - Cutting edge technology is important, so build your technology first
 - Frequent project review is essential to good management.



Cerny Method

- You are not making a game. You are making a *game design*.
- Focus on three C's: character, control and camera
- Small prototype team trying to create some nugget of fun.
- If fun? Replicate.
- If not? Kill.

Cerny Method

- Advocates taking chances
 - build without knowledge of moveset
 - build without knowledge of tech limits
 - don't know the context of what you're working on
 - etc...





Vertical Slice

- Core game design completed
- Teams focus on a “vertical slice” of the game (combat, shooting, driving mechanic)
- Cross-disciplinary teams
- Polish until complete
- Reinforces iterative process
- Companies sometimes use “strike teams”



Agile

- Based on Agile Manifesto
 - Individuals and interactions over processes and tools
 - Working software over comprehensive documentation
 - Customer collaboration over contract negotiation
 - Responding to change over following a plan



Agile

- Team = “scrum”
- Daily, standing meetings
- Development occurs in sprints
- No crunch (in theory)



Iterative

- Rapid prototyping
- Can be a part of many methods or stand on its own
- Waterfall often forced into iterative



Organic

- Start a game and go...
 - Miyamoto
 - Will Wright
 - Sid Meier
 - Indie Games



OMG We Will Not Ship on Time!

- Forced “Cerny”
- Cut Features
- Push the Schedule
- ... or...



FTS

Disclaimer Slide #1

- I did not make this up.
- This is a real term in use by some the industry.
- This is a real technique used by a great many in the industry.
- Do not use this term at your next interview.



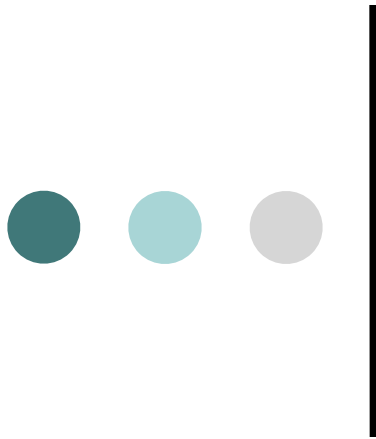
FTS

- F*ck the Schedule
- Used in post production
- Polish what you have
- Mutiny the producer

● ● ● | Firefighters / Fixers

- The people you see when you fail.





Dev Cycles

Regardless of the design methodology used, games go through traditional development cycles, often as defined in their contract.



Basic Cycle

- Milestones (they are all milestones)
 - Pitch
 - Proof of Concept
 - Sometimes called Tech Prototype
 - Alpha
 - Beta
 - Submission Candidate 1, 2, 3
 - Gold / Live / Launch
 - DLC



Pitch

- Core statement/summary
- Feature analysis
- Team analysis
- Market analysis
- Time/cost breakdown



Proposal

- Core statement/summary
- Feature analysis
- Team analysis
- Market analysis
- Milestones: Time/cost/task breakdown
 - Contract is based on milestones



Proof of Concept

- Actual proof: Each game has some innovative thing. This is a playable proof that you can, in fact, do that innovative thing.
- Team history: Too complicated for quick proof (major graphical innovation). Prior proof of team xp.
- Art proof: The new XCom showed gameplay fully rendered by artists.





Alpha (First Playable)

- All systems are playable in the game.
 - Systems would have been identified in contract.
- Game is likely unbalanced mess
- Game may have unpolished everything.
- All UI in, but not polished.
- Should be a stable build.

Alpha

- Demonstrate Combat
- Demonstrate Grenade Selection / Use
- Demonstrate Ammo Purchase / Use
- Demonstrate Ability to Rescue Hostages
- Demonstrate Mission Screen
- Demonstrate Mission Completion
- Build Rodgers' Field
- Build Forson Prison
- Demonstrate Ability to Go In and Out of Sublevels
- Demonstrate Level Gain
- Revise Story / Missions
- Revised GDD
- Revised TDD
- Revised Schedule





Beta

- Content complete.
- All levels, assets, etc are in game.
- Never try to hide something from the publisher.

Beta

- Elite Level 4-Week Milestone
- Design and Build The Plantation
- Design and Build The Distillery
- Design Jordan's Cove
- Design and Implement Virals
- Design Gear Score
- Design Gadget Timer
- Design Friend Visit / Post Launch
- Rebalance Everything Ever
- Revise Existing Levels
- Enemy Changes
- Ammo Changes
- Revised Tutorial
- 10% Peak Traffic
- Achievements
- Cody's Art Show





Launch

- Game is finished
- Submission candidate to 1st party is usually done to test the waters
- ZBC = Zero bug count