The Holy Grail of Multiplayer Level Design

Levels for Competitive and Casual Play

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UBM

About me

- Unreal Tournament Modder
- Hi-Rez Studios Level Designer

Definitions

- Competitive - professional tournaments
- Casual - recreational play

Definitions

- Competitive - professional tournaments
- Casual - recreational play

But also:

- The *motivations* of competitive play
- The *motivations* of casual play

Definitions continued

- Competitive - professional tournaments
- Casual - recreational play

The Holy Grail - a way to serve both

Greatest Multiplayer Maps of All Time?

CTF-Face

“Facing Worlds”

UT99

DM17
“Longest Yard”
Quake 3: Arena

“Blood Gulch”

Halo: Combat Evolved

Properties of G.O.A.T. maps

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- Big, Open Environments

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- Conflict through simplicity

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- Big, Open Environments
- Iconic themes
- Sandbox of play
- Conflict through simplicity
- **Not played competitively?**

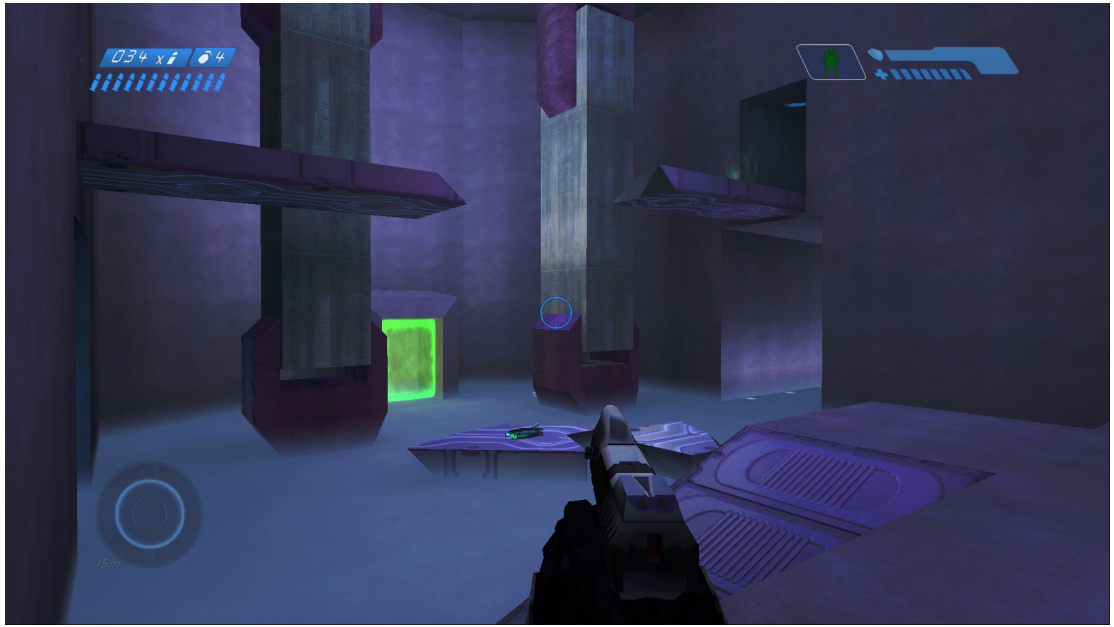
Competitive counterparts?

DM-Malevolence
UT99

“Lost World”
Quake 3 Arena

"Chill Out"

Halo: Combat Evolved



Properties of competitive maps

- Big, Open Environments
- Iconic themes
- Sandbox of play
- Conflict through simplicity
- Not played competitively?

Properties of competitive maps

- ~~Big, Open Environments~~ complex interior spaces
- Iconic themes
- Sandbox of play
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Properties of competitive maps

- ~~Big, Open Environments~~ complex interior spaces
- ~~Iconic themes~~ clean, minimalist themes
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- ~~Big, Open Environments~~ complex interior spaces
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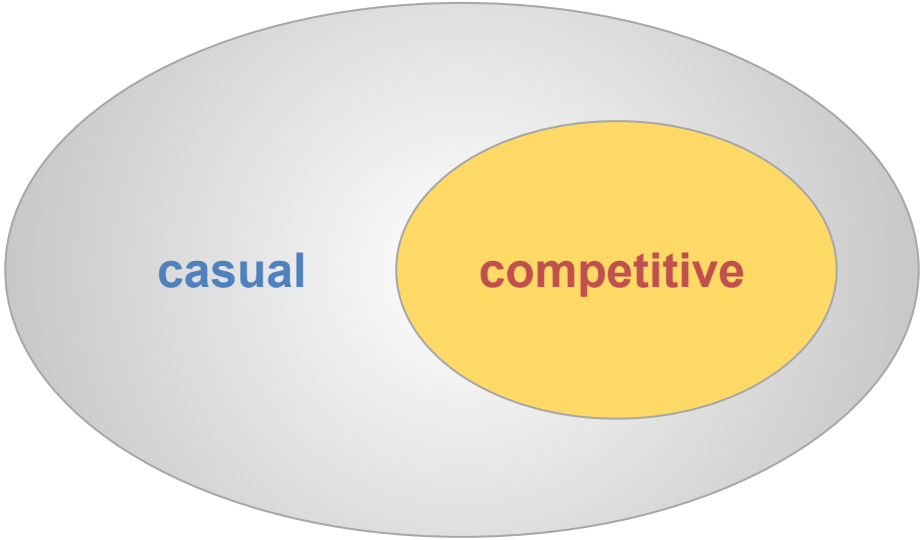
- ~~Sandbox of play~~ focus on core mechanics
- ~~Conflict through simplicity~~ item-based tactics
- ~~Not played competitively?~~ Not played casually?

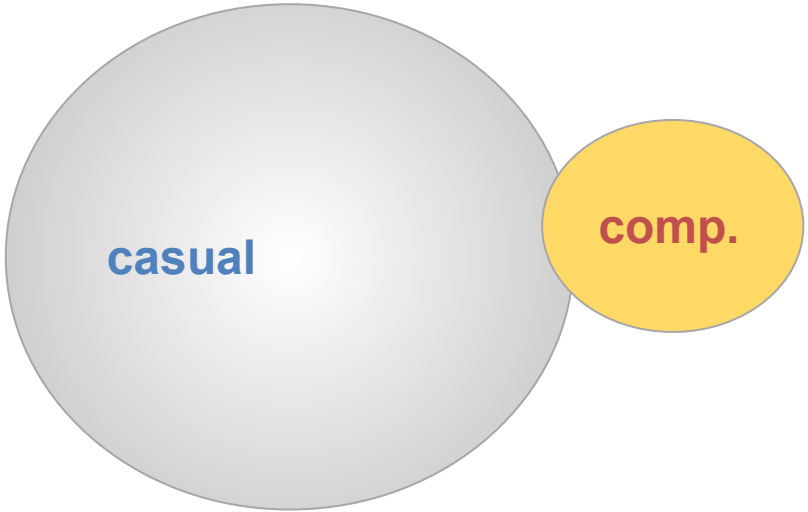
What's going on here?!

Overlap of Audiences*



Fighting games

Overlap of Audiences*



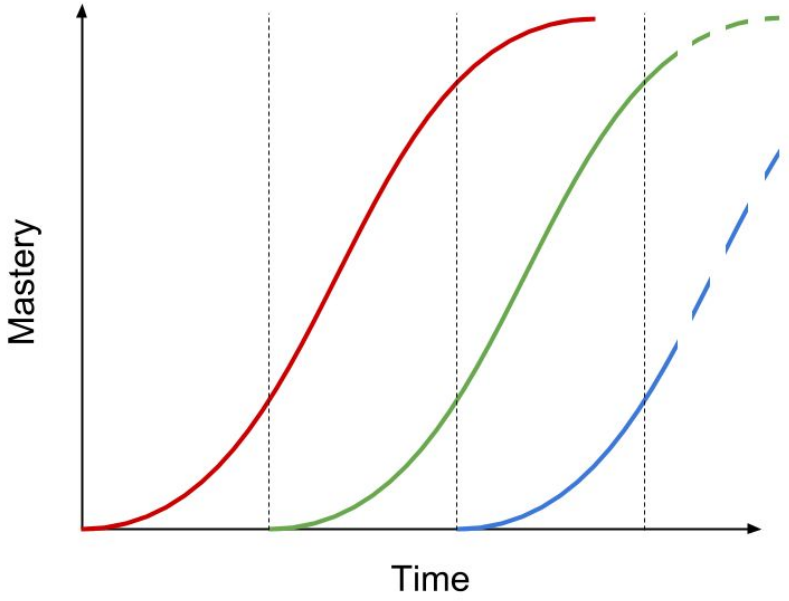
*Varies per game!

Not just digital games

Layers of Skill (in an FPS)

1. Mechanics
2. Tactics
3. Strategy

Parallel skills



Psychological Models

- Self-Determination Theory
  - Competence
  - Autonomy
  - Relatedness

Psychological Models

- Self-Determination Theory
  - Competence → mastery
  - Autonomy → choice
  - Relatedness → teamwork

Ways to support casual play

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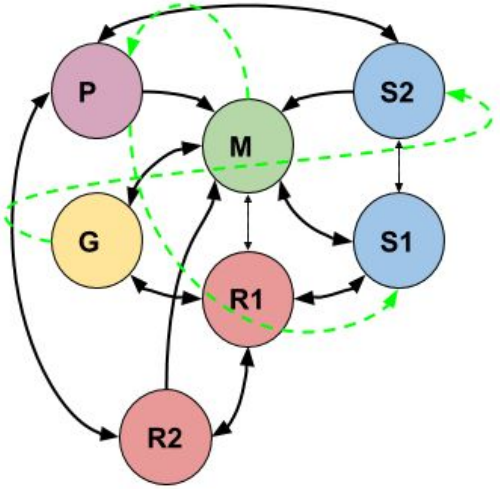
- Rebounds and chaos

Ways to support casual play

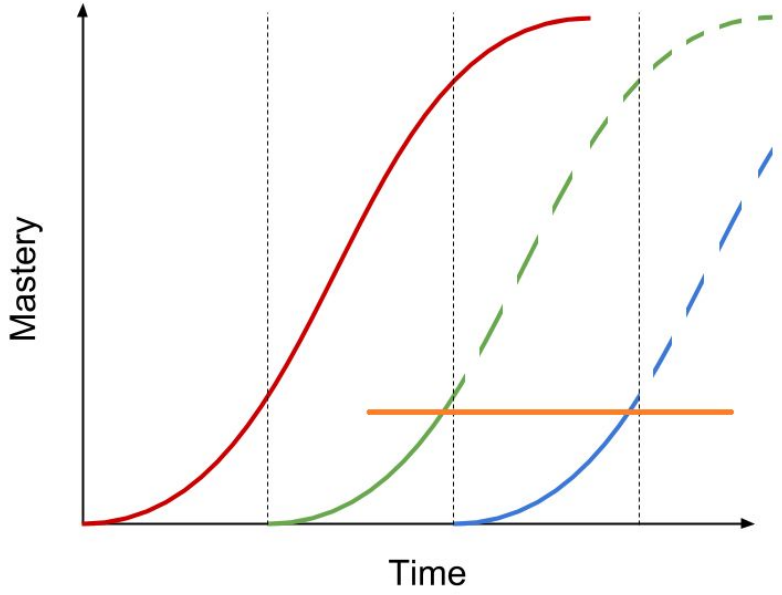
- Rebounds and chaos
- Easy to learn



Hard to learn!

Ways to support casual play

- Rebounds and chaos
- Easy to learn
- Limited tactics



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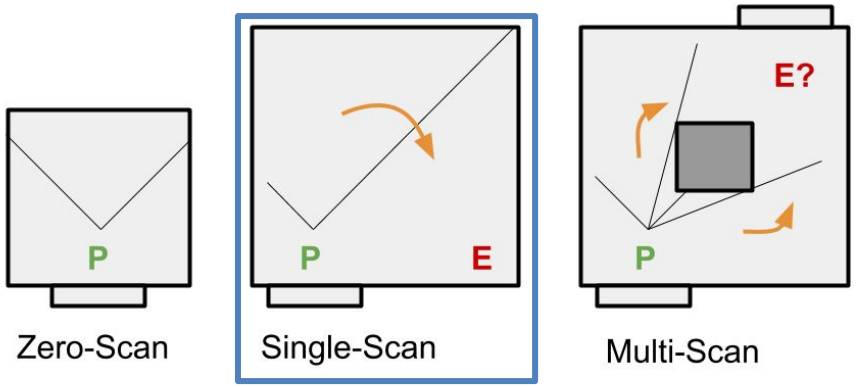
- Limited tactics
- Sandbox play

Ways to support casual play

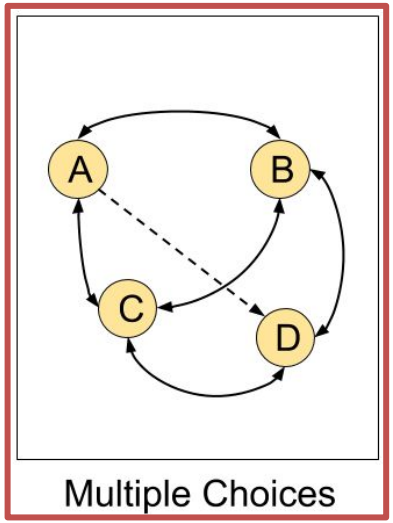
- Rebounds and chaos
- Easy to learn
- Limited tactics
- Sandbox play
- Single-scan arenas



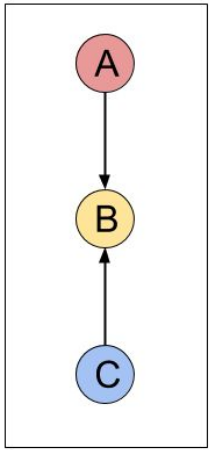
Ways to support competitive play

Ways to support competitive play

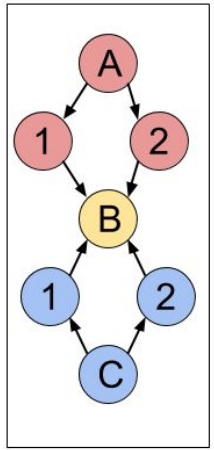
- Multiple valid options



Multiple Choices



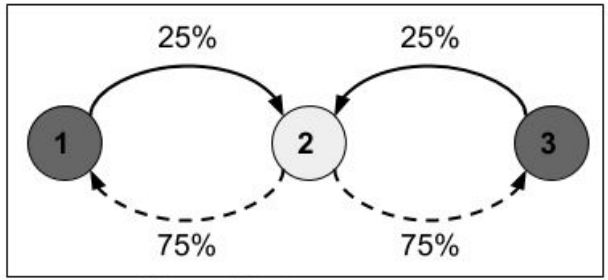
No Choice



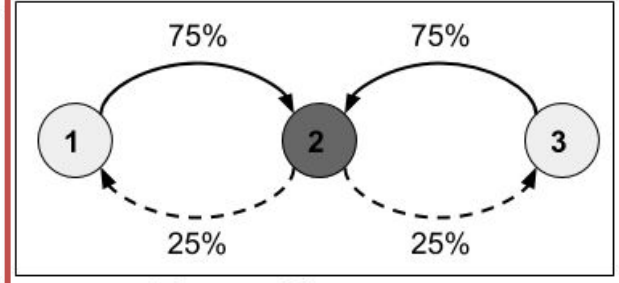
False Choice

Ways to support competitive play

- Multiple valid options
- Resilient options



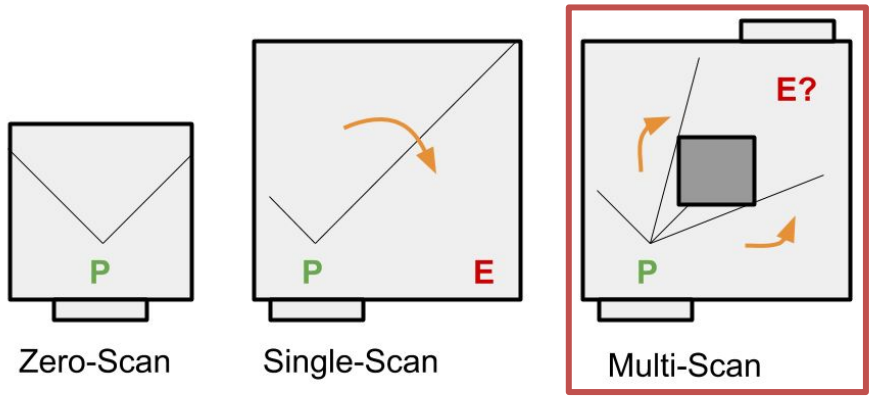
Hard Recovery



Easy Recovery

Ways to support competitive play

- Multiple valid options
- Resilient options
- Multi-scan arenas



Holy Grail maps

DE_Dust2
Counter Strike

“Lockout”, Halo 2

“Campgrounds”
Quake 3 Arena

Properties of Holy Grail maps

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- Intermediate complexity

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- Intermediate complexity
- Readability-focused environment art

Properties of Holy Grail maps

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- Readability-focused environment art
- ???

Why call them Holy Grail maps?

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- Holy Grail grants eternal youth!

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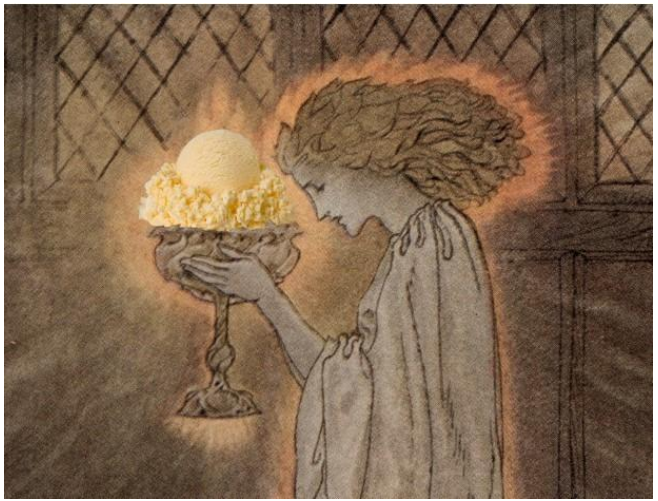
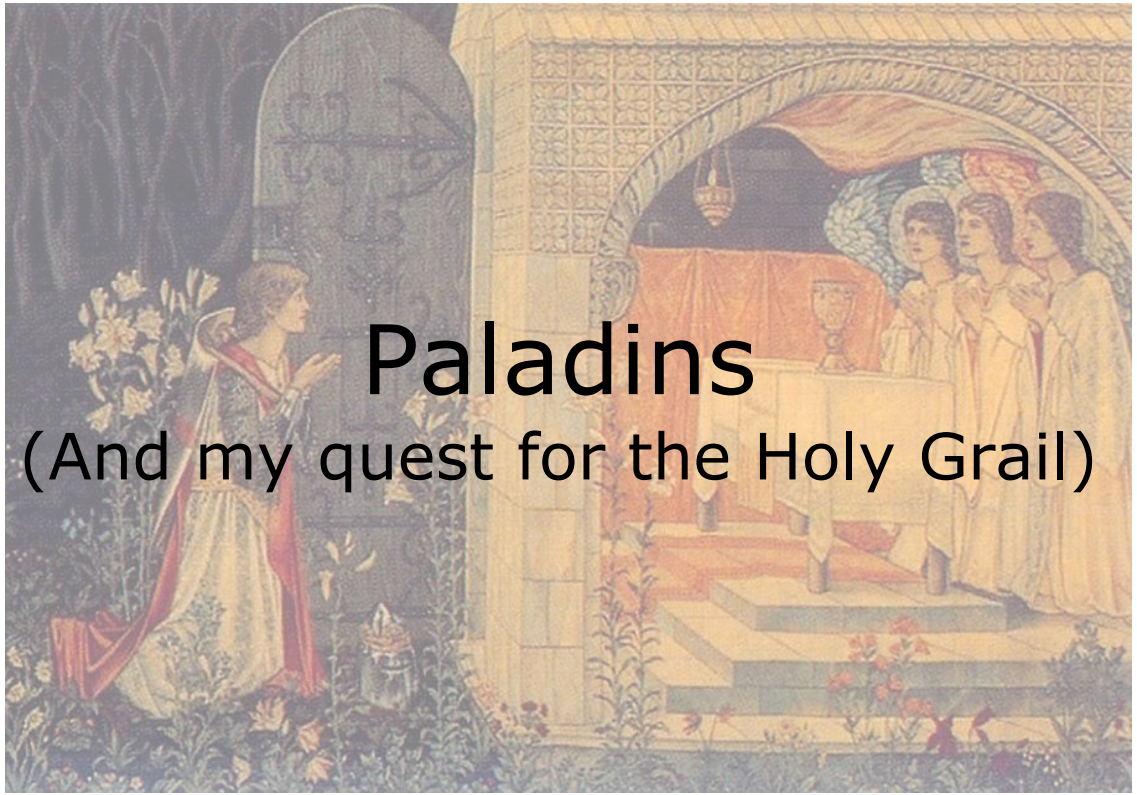
- Holy Grail isn't real...

Why call them Holy Grail maps?

- Holy Grail grants eternal youth!
- Holy Grail isn't real…
- The ultimate vanilla?





Paladins
(And my quest for the Holy Grail)

Paladins

- Team FPS
- Classes
- Objectives
- Champions
- F2P

Paladins history

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- First Person MOBA → Class-based FPS

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- High TTK → Medium TTK (time-to-kill)

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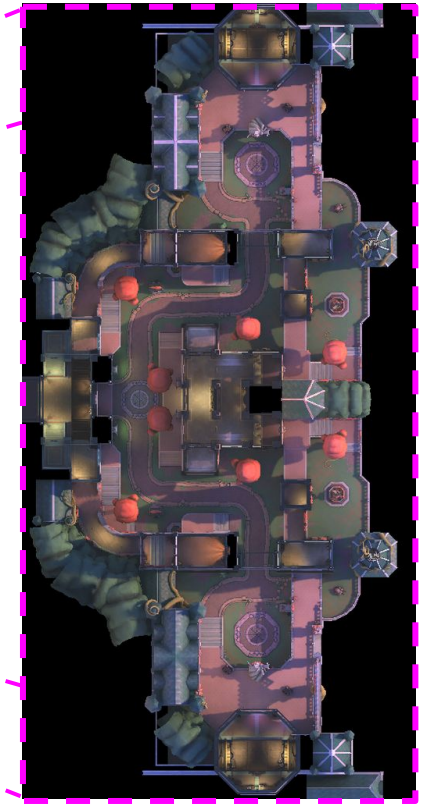
Paladins history

- First Person MOBA → Class-based FPS
- High TTK → Medium TTK (time-to-kill)
- Chaotic → Deterministic
- Sprawling maps → Tight maps



Principles of a Paladins Level

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- Strategic variety

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- Simplicity

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- Centered on core mechanics

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- What you see is what you get

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- Centered on core mechanics
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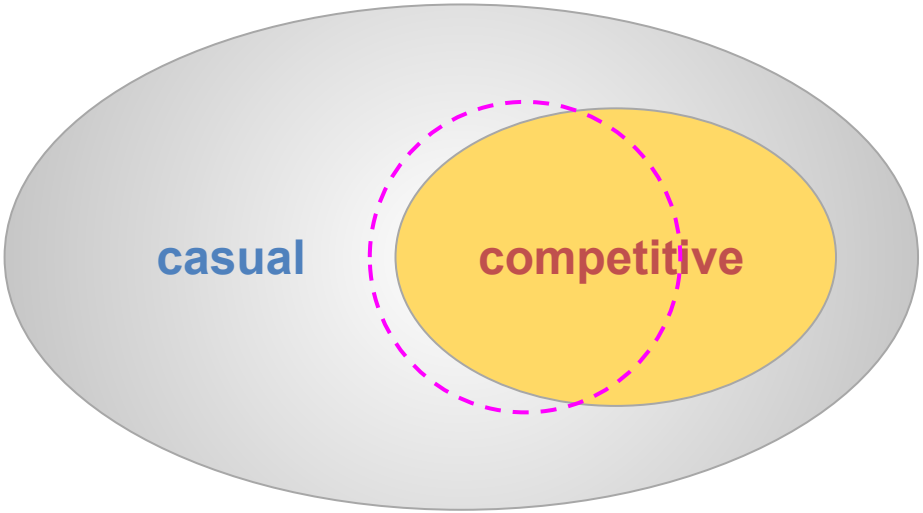
- What you see is what you get

Results of these iterations:

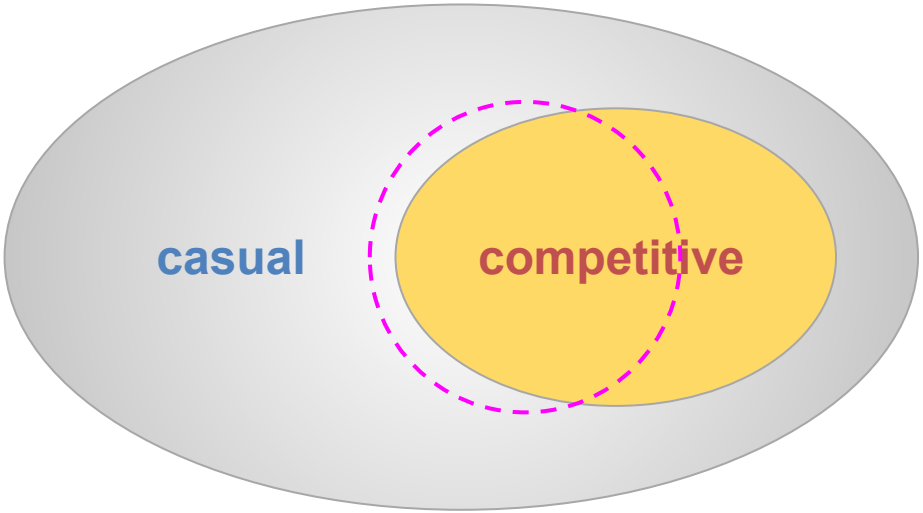
- The team felt better about the maps
- Metrics were up
- Healthier competitive scene
- But player feedback was neutral/positive

Results of these iterations:



What we thought we did

Results of these iterations:



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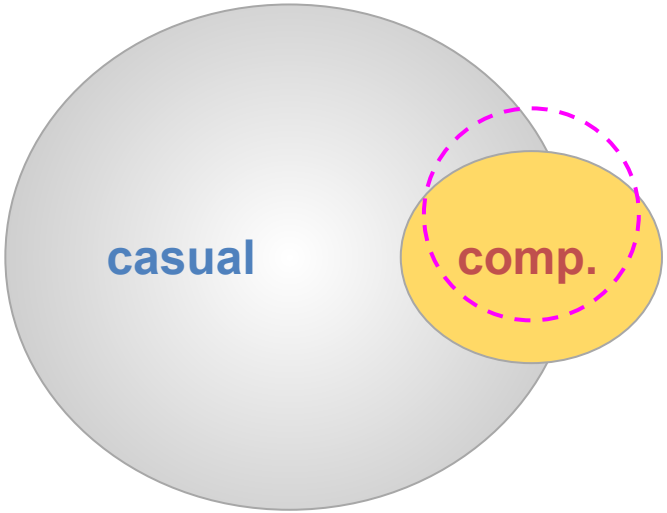

What we actually did?

What (some) players want

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- Bigger maps, more variety

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- Stronger themes

What (some) players want

- Bigger maps, more variety
- Asymmetry
- Stronger themes
- Map dynamics

Test Queue

1/4
2:40
0/4
1:57
PAYLOAD
PUSH PAYLOAD 2¢
PUSH PAYLOAD 2¢
PUSH PAYLOAD 2¢
5400/5400
2
STREAK
64
461 ¢

Test Queue

- Better understand our audience

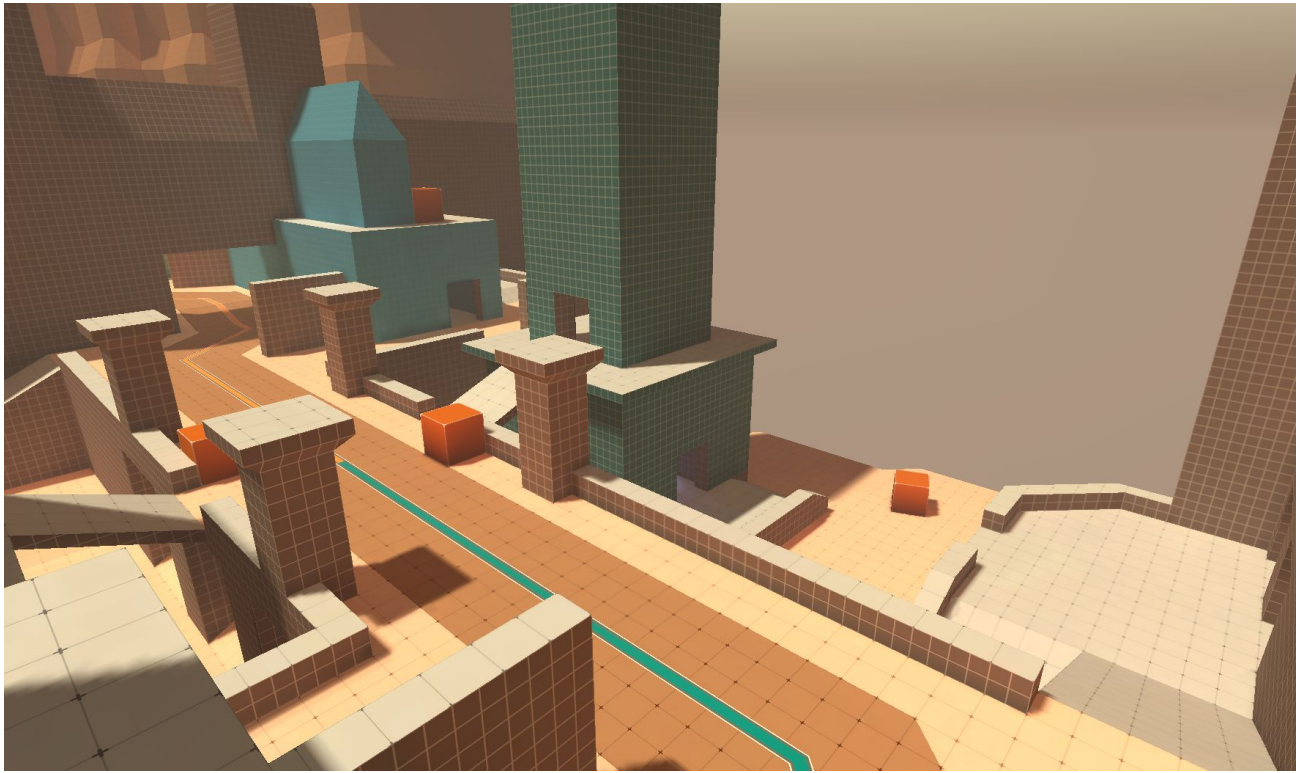
Test Queue

- Better understand our audience
- Test specific experiments

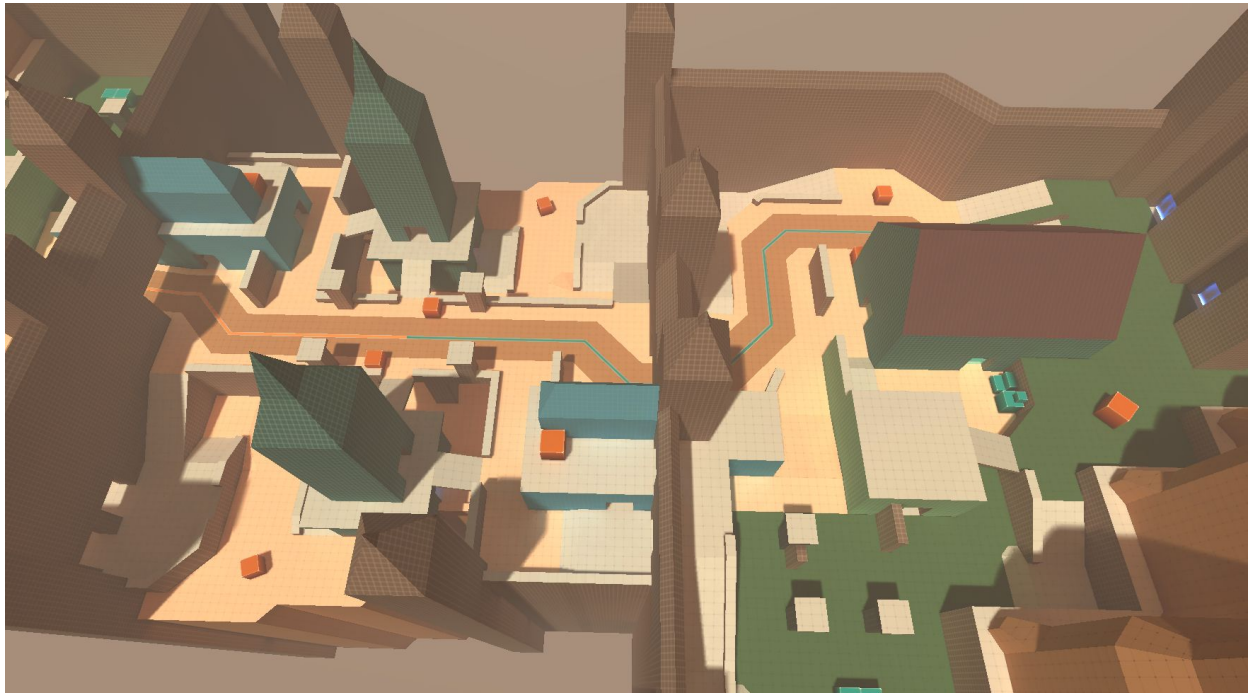
Test Queue

- Better understand our audience
- Test specific experiments
- Reduce risk of creating lukewarm maps, “false grails”

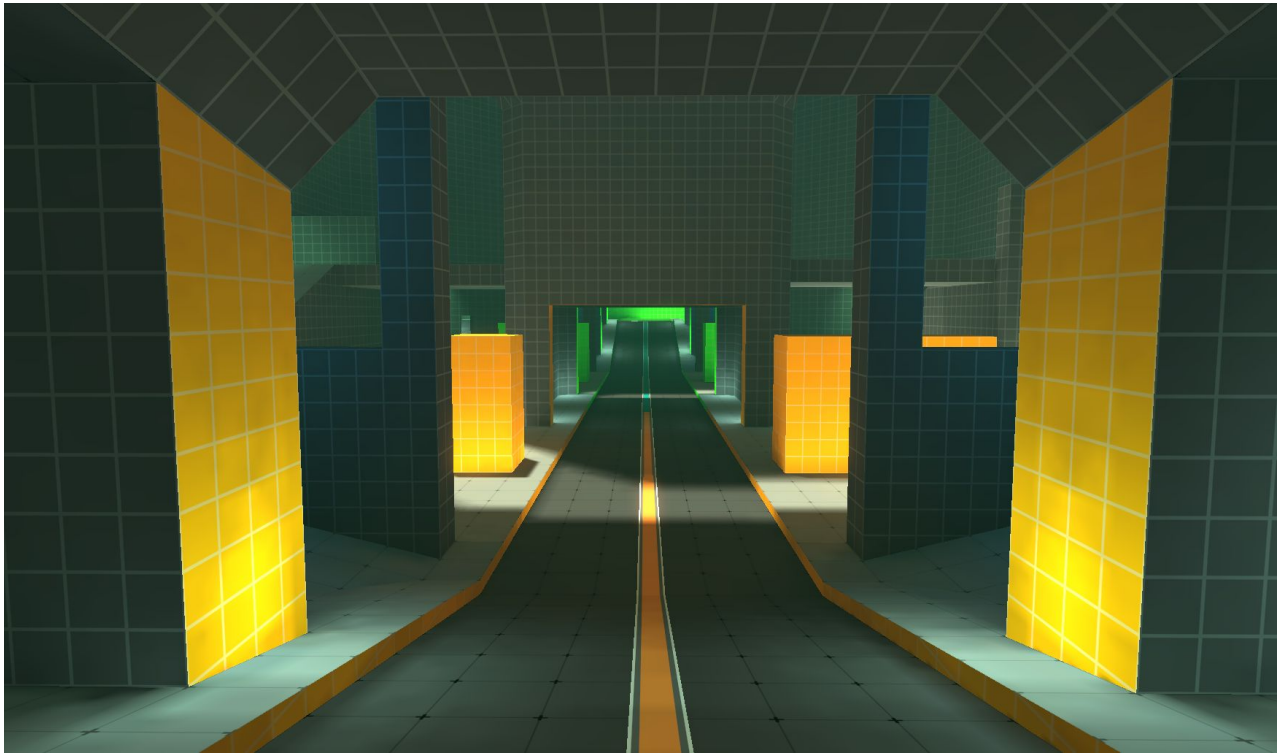
"Sandbridge"



"Sandbridge"



"Sewer"



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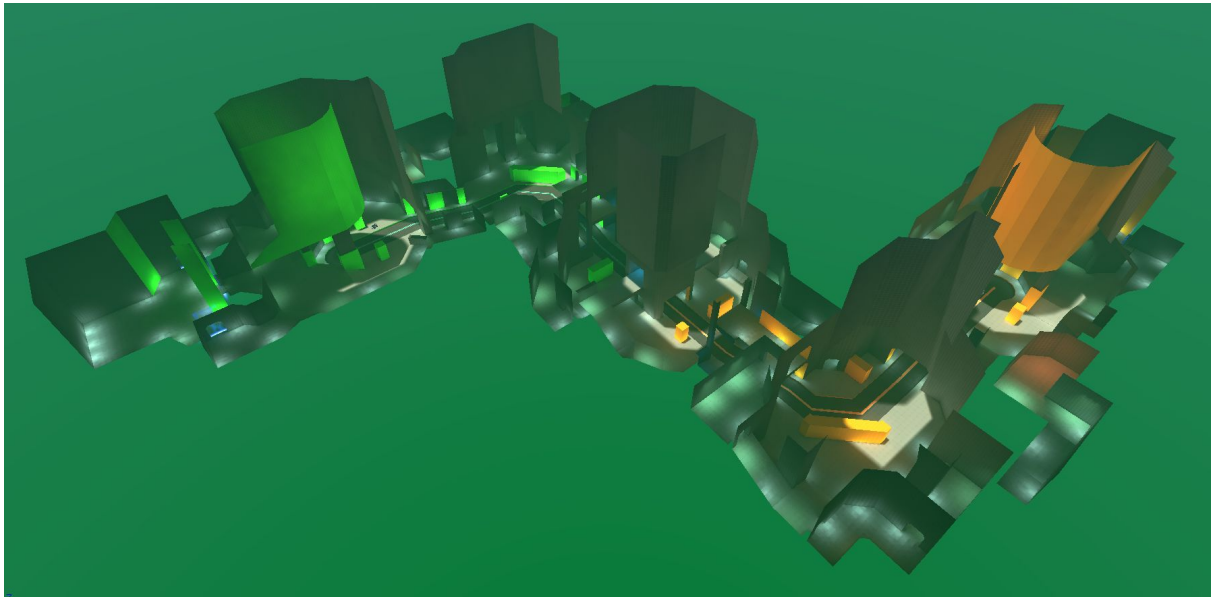

"Splitstone Quarry"

What's next?

The audience check:

The audience check:

- Who all are we designing this for?

The audience check:

- Who all are we designing this for?
- What are their needs?

The audience check:

- Who all are we designing this for?
- What are their needs?
- How does our design serve those needs?

The audience check:

- Who all are we designing this for?
- What are their needs?
- How does our design serve those needs?
- What steps can we take to answer these questions?

Thanks!

Further Reading:

- Glued to Games
- Art of Failure
- David Sirlin GDC 2009
- Matthias Worch GDC 2014
- Jason Vandenberghe GDC 2013