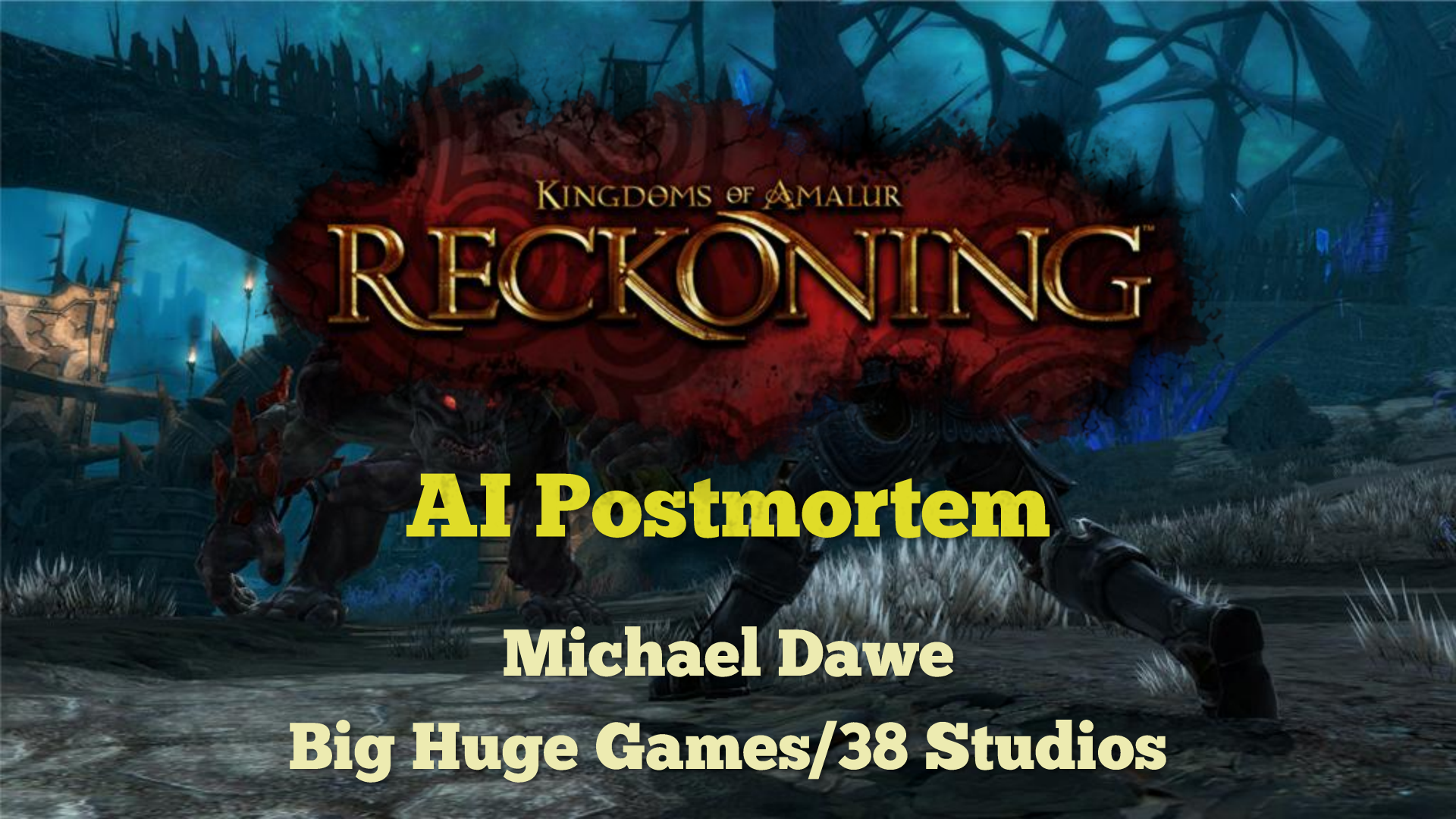


AI Postmortem

Michael Dawe

Big Huge Games/38 Studios

What Reckoning is

...and what Reckoning isn't

Problem: Game is Way Too Big™

IAmA RPG Game Design Vis

www.reddit.com/r/IAmA/comments/p7y12/iama_rpg_game_design_visionary_ken_rolston_for/

equirement for a huge open-world RPG]. 1 of 1

load more comments (1 reply)

[–] **Peleliu** 3 points 21 hours ago*

When it comes to games (rpgs specifically) I need a story that will keep me sucked in the game, like a damn good book. Is the story in KoA, deep and at a good length? vs, say, skyrim which has a short "main" story, lets say, 5 quests, and just tons of other stuff. tl;dr: is the main story long and good?

permalink

[–] **KRolston** [S] 7 points 21 hours ago

The main quest is "Way Too Long™" [that's a technical term, and an absolute requirement for a huge open-world RPG].

But for me, it is even more important that the setting and themes are Way Too Big™. Because I need a world with millions of stories... for all sorts of player styles and tastes... lots to choose from.

And with main quests, you really only get one... and that's not enough choice for me.

Actually, I think of faction quests as alternative main quests, and they can be more varied and tailored to varied styles and tastes.

permalink **parent**

AI Challenges for Reckoning

- NPC Scheduling
- Designer/Programmer interface
- Difficulty & Player Perception

NPC SCHEDULING

NPC Scheduling Requirements

- NPCs must act independently
- Schedules must be conditionalized
- Designer specified/controlled

Schedule Editor

ScheduleEditor

Priority	Name	Start Time	End Time	GORD Location	Conditions	Patrol route	Escort target	Allowed activities
5	MQ03 - At Corpse	0	2359	MQ03_Fateweaver_Corpse		""	""	
7	MQ03 - Ambush Vignette	0	2359	MQ03_Alyn_Dellach_GORD		""	""	
9	MQ03 - Alyn-Agarth Talk	0	2359	MQ03_Alyn_in_Theatre		""	""	
11	MQ03 - Leave Theatre	0	2359	MQ03_Alyn_Exit_Theatre_Temp		""	""	
13	MQ03 - Meet In Dellach	0	2359	MQ03_Alyn_in_Theatre		""	""	
14	MQ03 - Stay In Dellach	0	2359	MQ03_Alyn_in_Theatre		""	""	
15	MQ05 - Talk with Glianal	0	2359	MQ05_Alyn_Ballads_Talk		""	""	
16	MQ05 - Wait at Ballads	0	2359	MQ05_Alyn_Ballads_Wait		""	""	
20	MQ05 - Greet in Haybi	0	2359	MQ05_Alyn_Escort_Start		""	""	

- Agarth_Fateweaving
- Alchemy
- Antelope_Drink
- BanditPlanning
- Bartend
- Begging
- Blacksmithing
- Blessing
- BoggartChant
- Butcher
- Camp_Cooking
- Carcass
- Cheering
- Corpse
- CowerInFear
- Dancing
- Entertain
- Farming
- Fateweaving
- Fishing
- Guard
- HammeringWall
- Huddled
- Investigation
- Kneeling

Conditional Expression

Link	LHS	Cond	RHS
AND	get_stage(QUEST_ID('MQ03'))	==	20
AND	get_Alyn_leave_Fateweaver()	==	0

Behavior
- BehaviorTreeContainer: **Base_Enemy**

Common
- Name: **MQ03 - At Corpse**
- Priority: **5**
- TimeBegin: **0**
- TimeEnd: **2359**

Misc
- ParentSimtype: NPC_MQ_DOK_AlynShir

Movement
- EscortTarget: **""**
- GORDIndex: **MQ03_Fateweaver_Corpse**
- GotoLocationSpeed: **SH("walk")**
- PatrolRoute: **""**
- TeleportImmediately: **True**
- UseActivityOverride: **USE_DEFAULT**

Name

Cancel | Accept

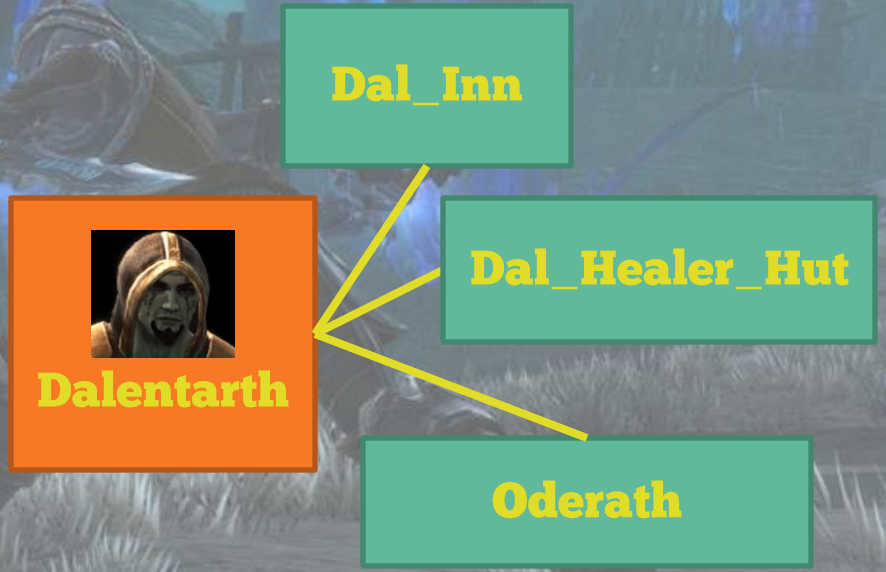
Two kinds of schedules

- Local loaded game objects (400+)
- Global Object References (important quest characters, etc.) (~8,000)

Local object schedules

GOR schedules - First try

- Build map of loaded/connected spaces -> GORs
- Reduced overall work
- Terrible overhead



GOR schedules - Second try

- Build single list, blast through it
- Very important characters process every frame (~30 in whole game)

GOR1
GOR2
GOR3
GOR4

.....

GOR1498
GOR1499
GOR1500

DESIGNER/PROGRAMMER INTERFACE

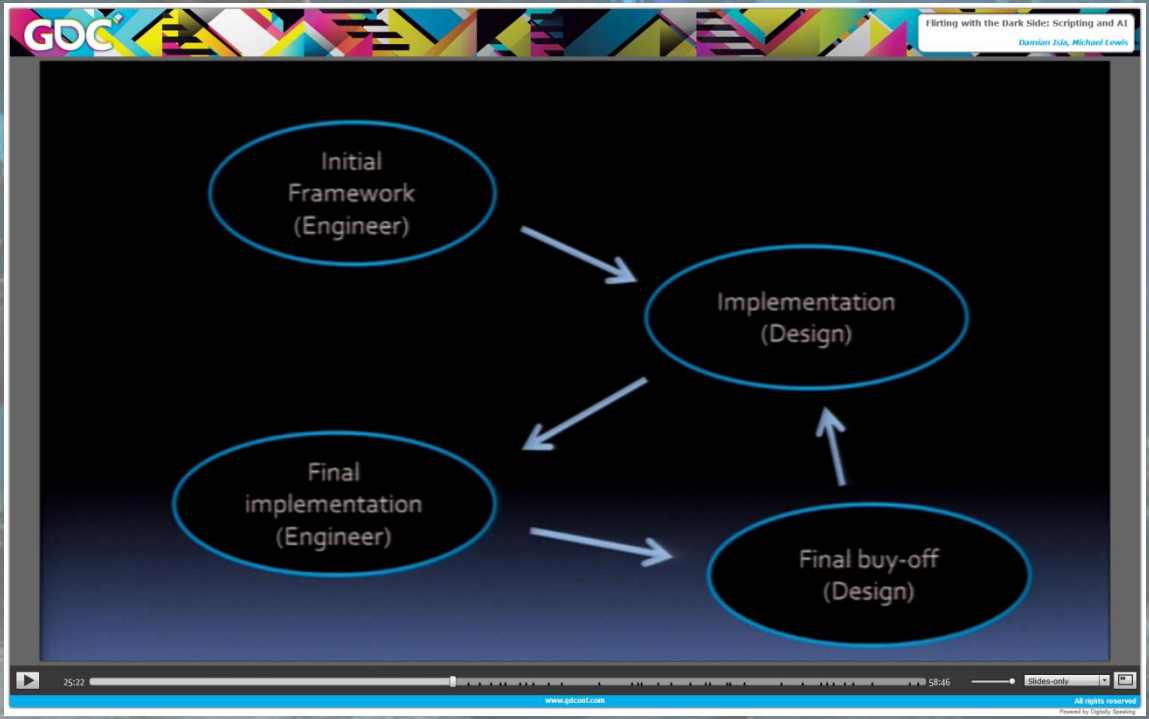
Designers as behavior authors

- Behavior stats
  - ~300 written, 100 shipped, 7 by progs
- Required prog. support every sprint

Things we didn't know

- Given freedom, designers will do everything
  - Really, everything.
    - attach_object_to_rig_node_alias_boss_only() will be used on non-boss objects
      - Then you'll be asked why it doesn't work.
        - » Sigh.
- "Why is wander_behavior causing a 20ms spike?"

Formalize the process



DIFFICULTY

forums.reckoning.amalur.com/search.php?searchid=147226

Search: Search took 0.04 seconds.

Are there any plans to add increased difficulty? Started by naudica, 02-10-2012 11:50 AM	Replies: 0 Views: 53	Last Post: 02-10-2012 11:50 by naudica	Forum: General Gameplay Discussion
Questions for the Reckoning Team Started by Muse, 08-03-2011 10:30 AM 1 2 3 ... 108	Replies: 1,079 Views: 34,929	Last Post: 02-04-2012 05:44 by Muse	Forum: General Discussion
Please remove the lvl cap :(Started by Minsc, 01-25-2012 02:25 PM 1 2 3 5	Replies: 42 Views: 1,616	Last Post: 01-26-2012 01:47 by HORSE	Forum: General Gameplay Discussion
The game is too easy, difficulty needs to get Started by EoT-Rampage, 02-06-2012 06:59 PM 1 2	Replies: 10 Views: 893	Last Post: 02-06-2012 06:57 by EoT-Rampage	Forum: General Gameplay Discussion
Monster Encounters!! Started by Ravenlocke, 07-18-2011 12:29 PM 1 2 3	Replies: 20 Views: 486	Last Post: 07-20-2011 01:12 by Fluent	Forum: Off-Topic Discussion
What difficulty will you be playing on? Started by Protoflare, 01-25-2012 07:34 PM 1 2 3 ... 7	Replies: 66 Views: 1,754	Last Post: 01-28-2012 04:32 by Moejahied	Forum: General Discussion
Am I the only person that thinks difficulty is just Started by SageShini, 02-09-2012 12:09 PM 1 2 3 ... 8	Replies: 73 Views: 2,313	Last Post: 02-10-2012 02:40 by Xendran	Forum: General Gameplay Discussion
Potions are to powerfull according to some Started by swanlee, 02-06-2012 09:05 PM	Replies: 9 Views: 406	Last Post: 02-07-2012 05:07 by MinMaxim	Forum: General Gameplay Discussion
So I only played the demo for 10 minutes Started by Ryne, 01-21-2012 12:30 PM 1 2 3	Replies: 24 Views: 1,116	Last Post: 01-22-2012 12:49 by Ryne	Forum: General Discussion
Suggestions for Devs on Difficulty/Balance Issues. Started by Stateless, 02-08-2012 06:23 PM 1 2	Replies: 15 Views: 295	Last Post: 02-08-2012 08:21 by Stateless	Forum: General Discussion
Difficulty Settings Started by Sybius the Mad, 09-22-2011 12:31 PM 1 2 3	Replies: 20 Views: 556	Last Post: 09-24-2011 08:12 by Kefka_	Forum: General Discussion
Dear 38 Studios re:Possible difficulty change Started by Ghostwraithe27, 02-08-2012 07:43 PM	Replies: 0 Views: 161	Last Post: 02-08-2012 07:43 by Ghostwraithe27	Forum: General Gameplay Discussion
Potions that make you "weak" and Game Started by Koukin, 02-09-2012 09:33 AM	Replies: 2 Views: 138	Last Post: 02-09-2012 09:58 by Koukin	Forum: General Discussion
Items and Difficulty Started by Flickers, 02-09-2012 08:40 PM	Replies: 1 Views: 67	Last Post: 02-09-2012 08:41 by Mastrshok	Forum: General Discussion
Monster Aggro Started by pdunkley, 08-09-2011 02:59 PM 1 2	Replies: 14 Views: 455	Last Post: 08-11-2011 04:58 by Eidos Einherjar	Forum: General Discussion
Sticky: **New Forum Areas** Started by Muse, 02-05-2012 03:18 PM	Replies: 5 Views: 209	Last Post: 02-08-2012 12:14 by IsmeldaLasombra	Forum: Developer-Generated
Dispel mini game Started by vAlex-jedi, 02-10-2012 03:36 AM	Replies: 5 Views: 198	Last Post: 02-10-2012 05:36 by Midgard_Dragon	Forum: General Gameplay Discussion
Difficulty questions Started by gameMaker, 01-26-2012 09:14 PM	Replies: 8 Views: 237	Last Post: 01-27-2012 02:03 by gameMaker	Forum: General Discussion
elite monsters in low level zones.....do you want this in Started by flamechamp, 12-01-2011 12:08 AM 1 2 3 ... 4	Replies: 31 Views: 676	Last Post: 12-05-2011 12:20 by Riqita	Forum: General Discussion
I Said Gooday, Sir! Started by Sparky, 01-18-2012 12:14 AM 1 2 3 ... 8	Replies: 70 Views: 3,815	Last Post: 01-19-2012 09:20 by Muse	Forum: General Discussion
Difficulty Adjustment [Equipment Spoilers]	Replies: 16	Last Post: 02-09-2012 07:19	Forum:

Open World concessions

Combat
Enemies Killed: 27
Attacks Blocked: 1,210
Critical Hits: 129
Damage Dealt: 177,767
Highest Damage: 1,549
Fateshifts Performed: 6
Enemies Fateshifted at Once: 6
Chickens Slain: 2
Advancement
Lifetime Gold Earned: 1,412,313
Lifetime XP Earned: 301,341
Quests Completed: 61
Quests Failed: 1
Lifetime Fate Earned: 4,077

Kingdoms of Amalur: Reckoning

FPS: 50.39 (19.84 ms)
Uptime: 0d: 1h:17m: 0s

Secondary Weapon Crit Chance: 0
Critical Hit Damage Bonus: 0
Health Regeneration (per second): 0
Mana Regeneration (per second): 0
Physical Resistance: 0
Fire Resistance: 0
Ice Resistance: 0
Lightning Resistance: 0
Poison Resistance: 0
Bleeding Resistance: 0

Combat

Enemies Killed: 55
Attacks Blocked: 6
Critical Hits: 0
Damage Dealt: 25,768,042
Highest Damage: 5,113,904
Fateshifts Performed: 0
Enemies Fateshifted at Once: 0
Chickens Slain: 0

Advancement

Back

Stats

Hey, you got action in my RPG

- Beyond Kung-Fu circle
- Adjustable difficulty levels

Belgian AI

Grid Weight: 2

Attack Weight: 10

Belgian AI

Charge: 6
Sweep: 4

Tumble: 5
Claw: 3

Grid Weight: 2

Attack Weight: 1

FPS: 36.19909668 MS: 27.62499809
Space:
dmo_na_combattest
Lvl: 30
GameId: 3196996526
Debug Mode:
Parts
Part Debug Rendering Selection
Activity Part
Ammo Part
Animation Part
Armor Part
Attach To Node Alias Part
Attributes Part
Behavior Part
Blocking Part
Buff Part
Character Customization Item Part
Combat Part
Component Part
Custom Part
Detection Part
Fast Travel Point Part
Formula Part
Harvest Part
Interaction Part
Inventory Part
Item Part
Line of Sight Part
Location Part
Object Selection
(720897) Player
Selected Object Filter
Filter On Object List
Remove Object
Remove All Objects
Rendering Options
Bandit Swordsman
N

It's over!

- More Reckoning tomorrow at 11:15AM

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@mdawe

- Questions?