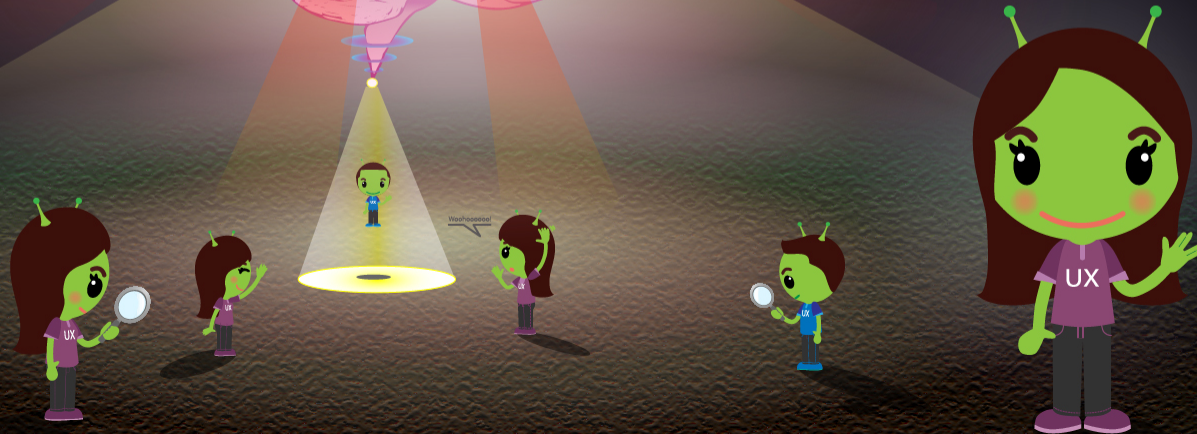


The UX of *Fortnite*

Celia Hodent, PhD.
Game **UX Consultant**



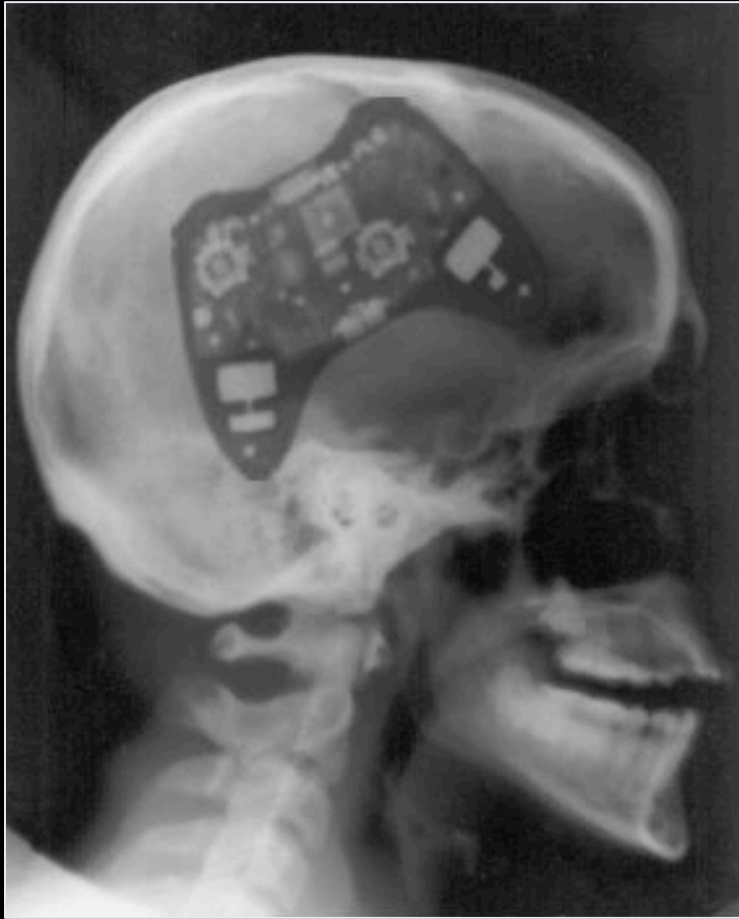
@CeliaHodent





FORTNITE



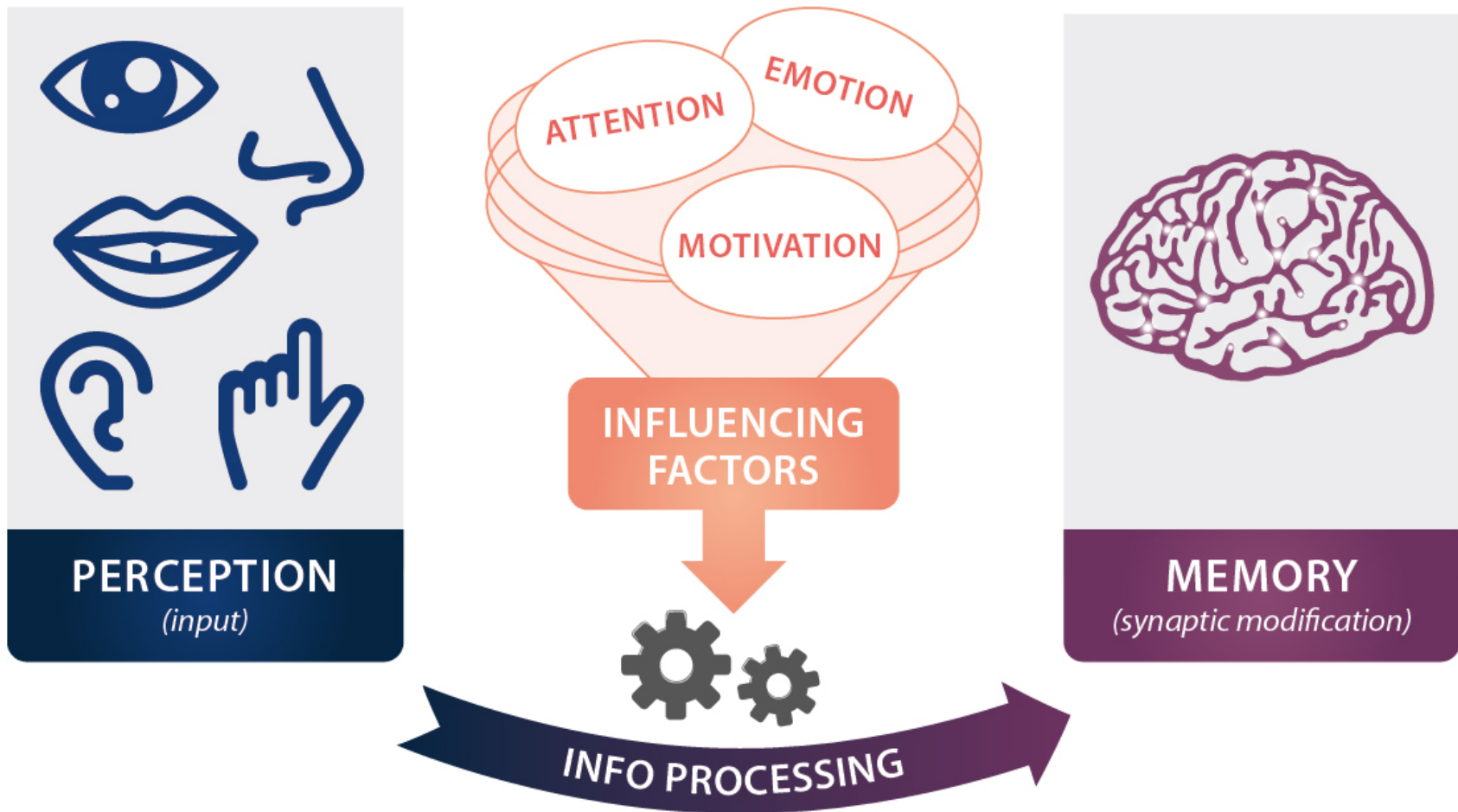


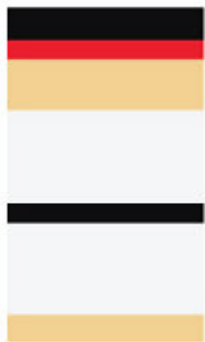
**Cognitive
Science**

Game UX

**Scientific
Method**

Cognitive Science





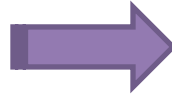
Street Fighter II characters as minimalized by artist **Ashley Browning**

Our PERCEPTION is subjective

Form Follows Function (affordance/signifier)



Fortnite 2013



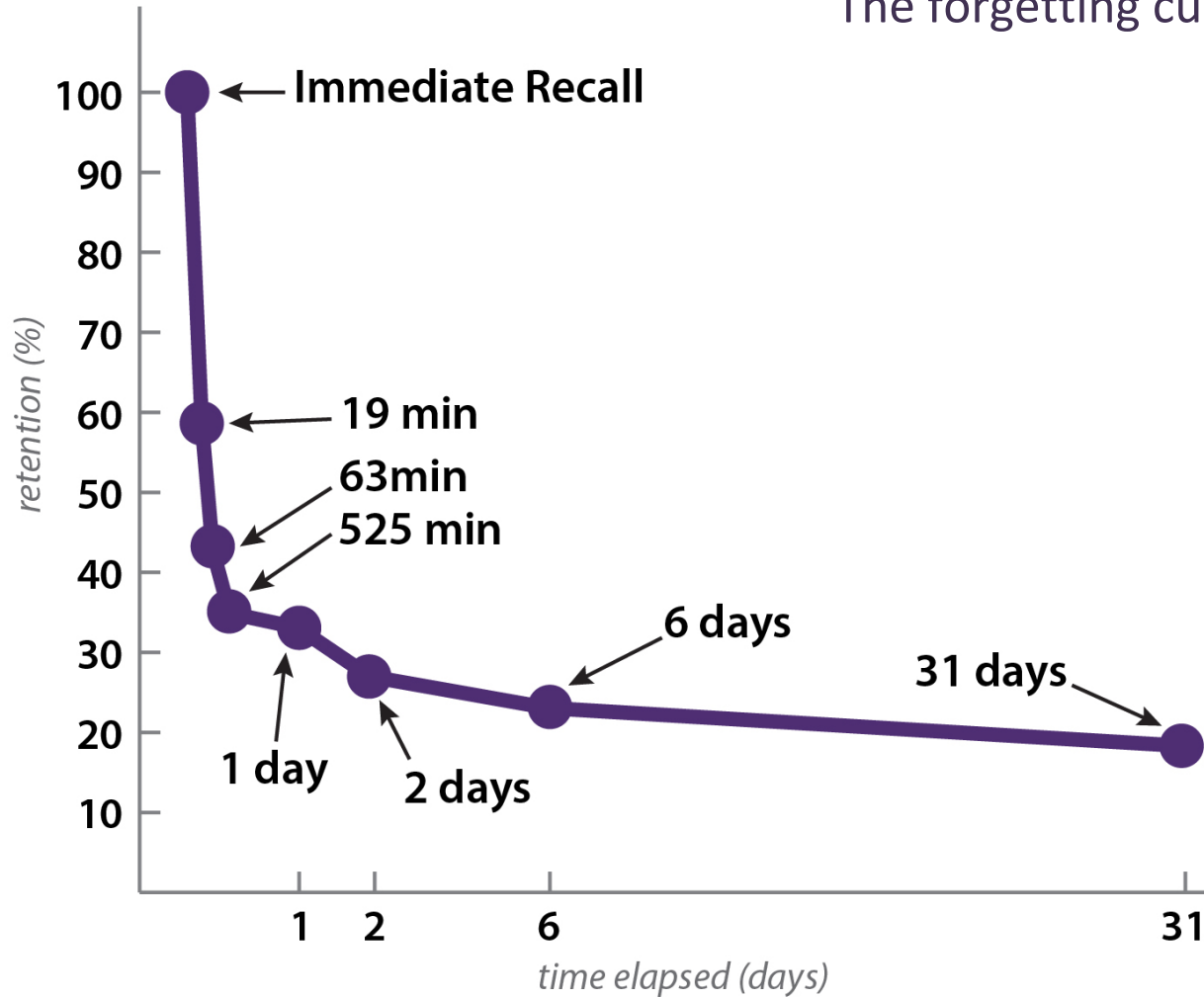
Try to visualize in your mind
The Thinker (Le Penseur, Auguste Rodin).

Can you remember on which leg(s)
lay which arm(s)?



Le Penseur.
© Musée Rodin
Photo : Jean de Calan

The forgetting curve (Ebbinghaus, 1885)



Our MEMORY is fallible

Reduce memory load



Fortnite

Pick a card:



I bet I can guess which card you picked and make it disappear!



I've changed all the cards 😊

→ “change blindness”

Our ATTENTION is scarce

Avoid multitasking



Fortnite
(Sept 2014)

**We can hardly pay attention to tutorial texts
when busy killing zombies ...**



Multitask

PERCEPTION
=
SUBJECTIVE

ATTENTION
=
SCARCE

MEMORY
=
FALLIBLE



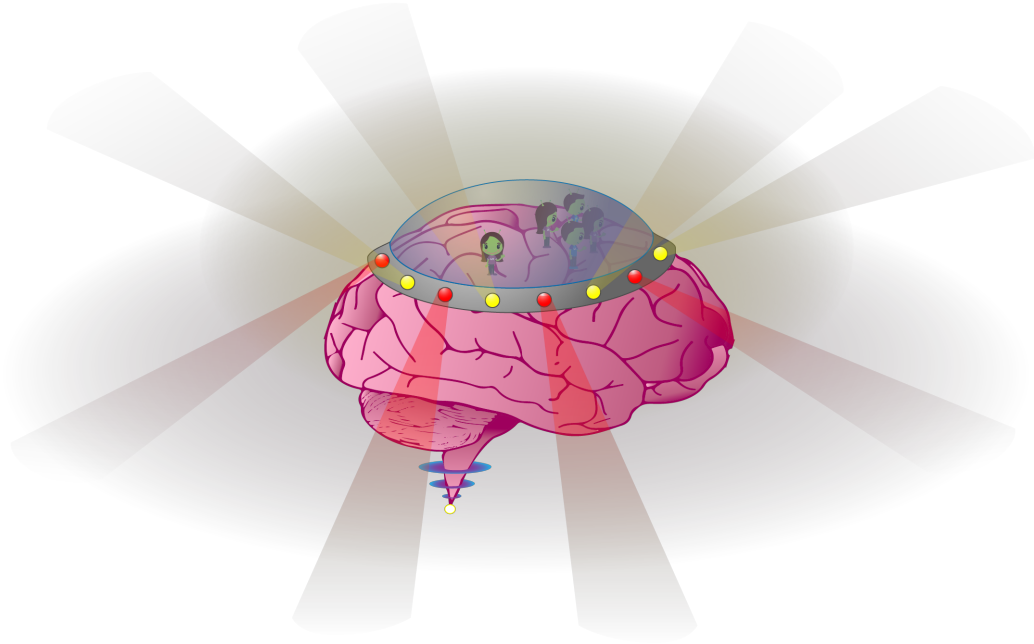
Cognitive
Science

Game UX

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Game UX

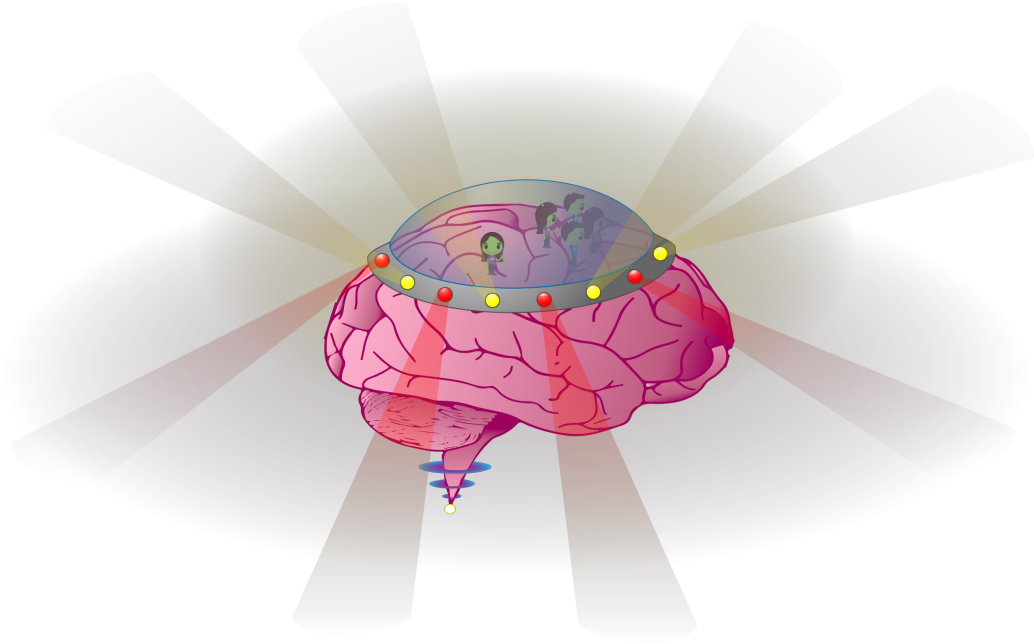
Game UX = Usability + Engage-ability



- ☐ Signs & Feedback
- ☐ Clarity
- ☐ Form Follows Function
- ☐ Consistency
- ☐ Minimum Workload
- ☐ Error Prevention / Recovery
- ☐ Flexibility

USABILITY

Game UX = Usability + Engage-ability



☐ Motivation

*competence, autonomy, relatedness
meaning, rewards, implicit motives*

☐ Emotion

game feel, presence, surprises

☐ Game flow

difficulty curve, pacing, learning curve

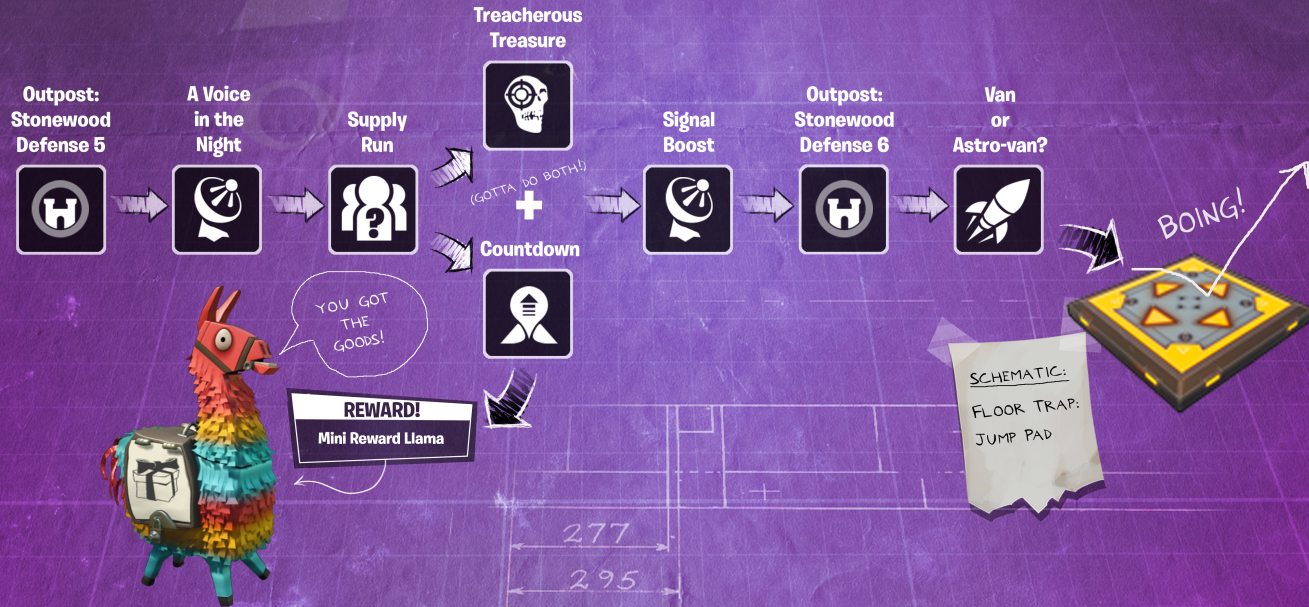
ENGAGE-ABILITY

Extrinsic motivation

STONEWOOD

Very High Threat

FORTNITE QUEST MAP



Intrinsic motivation: Self-Determination Theory (SDT)

Competence

- Sense of progression

Autonomy

- Meaningful choices
- Self-expression

Relatedness

- Cooperation
- Competition

Emotion: Game feel



Fortnite
(Closed Alpha)

Game flow

Difficulty curve



Challenge

Pacing



Rhythm of stress + pressure

Learning curve



Onboarding



Fortnite (Closed Alpha)

Cognitive
Science

Game UX

Scientific
Method



Scientific Method



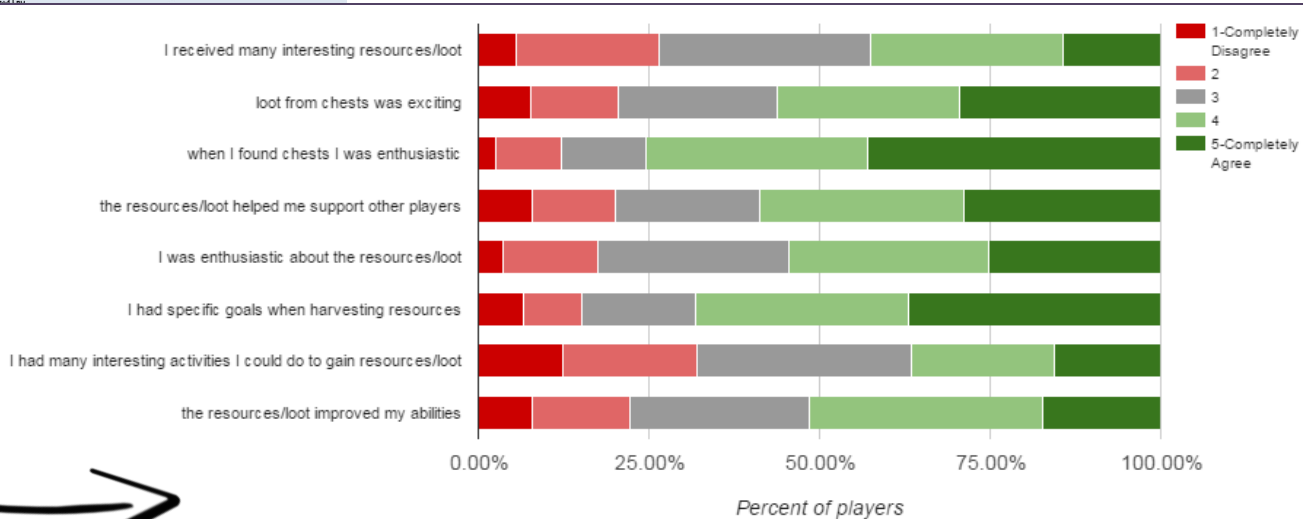
EPIC
USER EXPERIENCE



You found a weakness: find WHY it's happening

A	B	C	D	E	F	G	H
ResourceID	Weight	MinCD	MaxCD	IPC	Require	LastPickedCall	ItemName
Veri#PKG.Rafine#Total	1			1		Veri#Loot_Metal	
Veri#PKG.RareOndense	1.2			0		Veri#Helper_Ranged	
Veri#PKG.RareOndense	0.95			0		Veri#Helper_Melee	
Veri#PKG.RareOndense	1			0		Veri#Loot_CraftingSupply	
Veri#PKG.RareOndense	2.8			0		Veri#Helper_Ranged	
Veri#PKG.RareOndense	2.8			0		Veri#Helper_Melee	
Veri#PKG.RareOndense	8			0		Veri#Loot_CraftingSupply	
Veri#PKG.OndenseChert3	1		4	1			AnnaLight
Veri#PKG.OndenseChert3	1		1	0		Veri#Loot_RacketR.Oro.Tot	
Veri#PKG.OndenseChert2	1	6	7	1		AnnaLight	
Veri#PKG.OndenseChert2	1	2	2	0		OB_Trap_Floor_Spiky	
Veri#PKG.OndenseChert2	1	10	10	3		Resource_Metal	
Veri#PKG.OndenseChert2	1	20	20	2		Resource_Stone	
Veri#PKG.OndenseChert2	1	1		4		Veri#Loot_EssenceOfHeaven.C.Oro.Tot	
Veri#PKG.OndenseChert1	1	7	7	0		AnnaLight	
Veri#PKG.OndenseChert1	1	20	20	2		Resource_Stone	
Veri#PKG.OndenseChert1	1	20	20	1		Resource_Wood	
Veri#PKG.Hanged2	0.0			0		Veri#Helper_RangedLoot	
Veri#PKG.Hanged2	0.14			0		Veri#Helper_Jackpot	
Veri#PKG.Hanged2	1.5			0		Veri#Loot_AnnamHug	
Veri#PKG.Hanged2	1.5			0		Veri#Loot_CraftingSupply	
Veri#PKG.Hanged2	3			0		Veri#Loot_Trap	
Veri#PKG.Hanged2	0.3			0		Veri#Helper_RangedLoot	
Veri#PKG.Hanged2	0.168			0		Veri#Helper_Jackpot	
Veri#PKG.Hanged2	1.5			0		Veri#Loot_AnnamHug	
Veri#PKG.Hanged2	2			0		Veri#Loot_CraftingSupply	
Veri#PKG.Hanged2	4			0		Veri#Loot_Trap	
Veri#PKG.Hanged1	0.25			0		Veri#Helper_RangedLoot	
Veri#PKG.Hanged1	0.1			0		Veri#Helper_J	
Veri#PKG.Hanged1	0.69			1		Veri#Loot_H	
Veri#PKG.Hanged1	1			0		Veri#Loot_Craft	
Veri#PKG.Hanged1	2			0		Veri#Loot_Trap	
Veri#PKG.Loot_Peas	0.35			0		Veri#Loot_H	
Veri#PKG.Loot_Peas	0.043			0		Veri#Helper_J	
Veri#PKG.Loot_Peas	1.6			0		Veri#Loot_Annam	
Veri#PKG.Loot_Peas	1.5			0		Veri#Loot_Craft	
Veri#PKG.Loot_Peas	1			0		Veri#Loot_Food	
Veri#PKG.Loot_Peas	1			10	1		
Veri#PKG.Loot_Peas	1			1	25	5	
Veri#PKG.Loot_Peas	1			75	4		
Veri#PKG.Loot_Peas	1			350	3		
Veri#PKG.Loot_Peas	1			1	6		
Veri#PKG.Loot_Peas	1			1	0		
Veri#PKG.Kitchen	0.077			0		Veri#Helper_J	
Veri#PKG.Kitchen	0.9			0		Veri#Helper_H	
Veri#PKG.Kitchen	3			0		Veri#Loot_Annam	
Veri#PKG.Kitchen	1			0		Veri#Loot_Craft	
Veri#PKG.Kitchen	3			0		Veri#Loot_Food	
Veri#PKG.Industrial	0.66			0		Veri#Helper_J	
Veri#PKG.Industrial	1.5			0		Veri#Loot_Annam	
Veri#PKG.Industrial	2			0		Veri#Loot_Craft	
Veri#PKG.Industrial	1			0		Veri#Loot_Craft	
Veri#PKG.Industrial	1.5			0		Veri#Loot_Trap	
Veri#PKG.GoutLau	1			0		Veri#Helper_H	

Player perception



Find out why: feeling “grindy”



Fortnite
(Closed Alpha)

USER EXPERIENCE

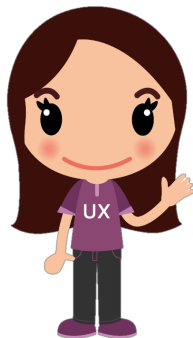
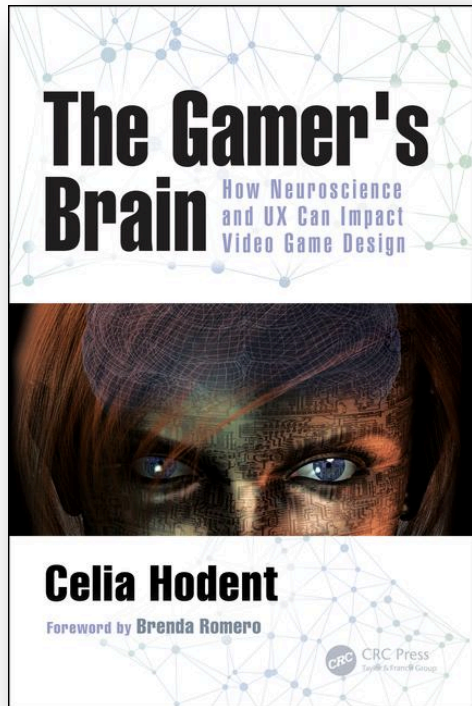
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ENGAGE-ABILITY

THANKS!



@CeliaHodent

Blog: celiahodent.com

Game UX Summit

→ Check videos on my YouTube channel
(youtube.com/c/CeliaHodent)