Developing a UX mindset on *Fortnite*

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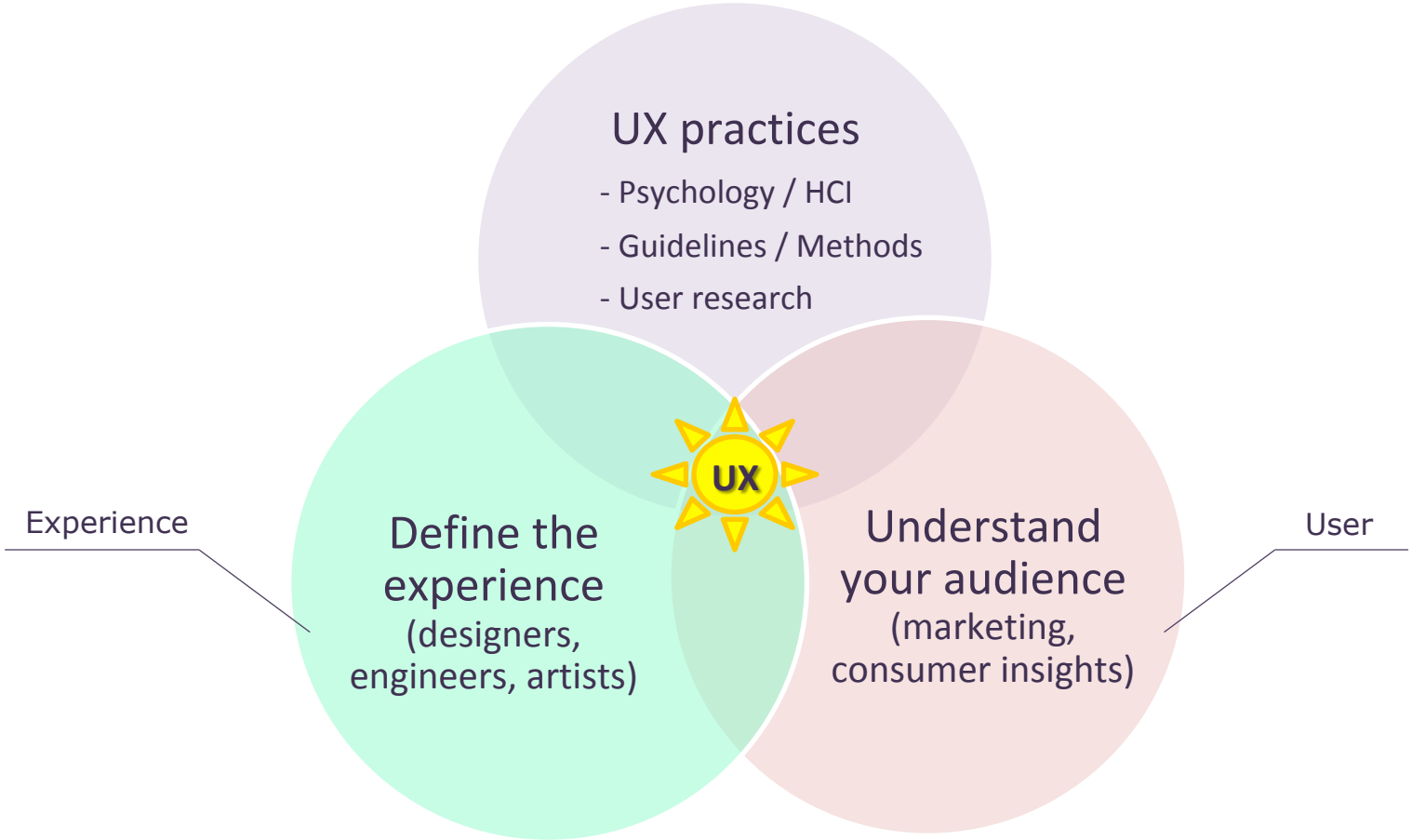
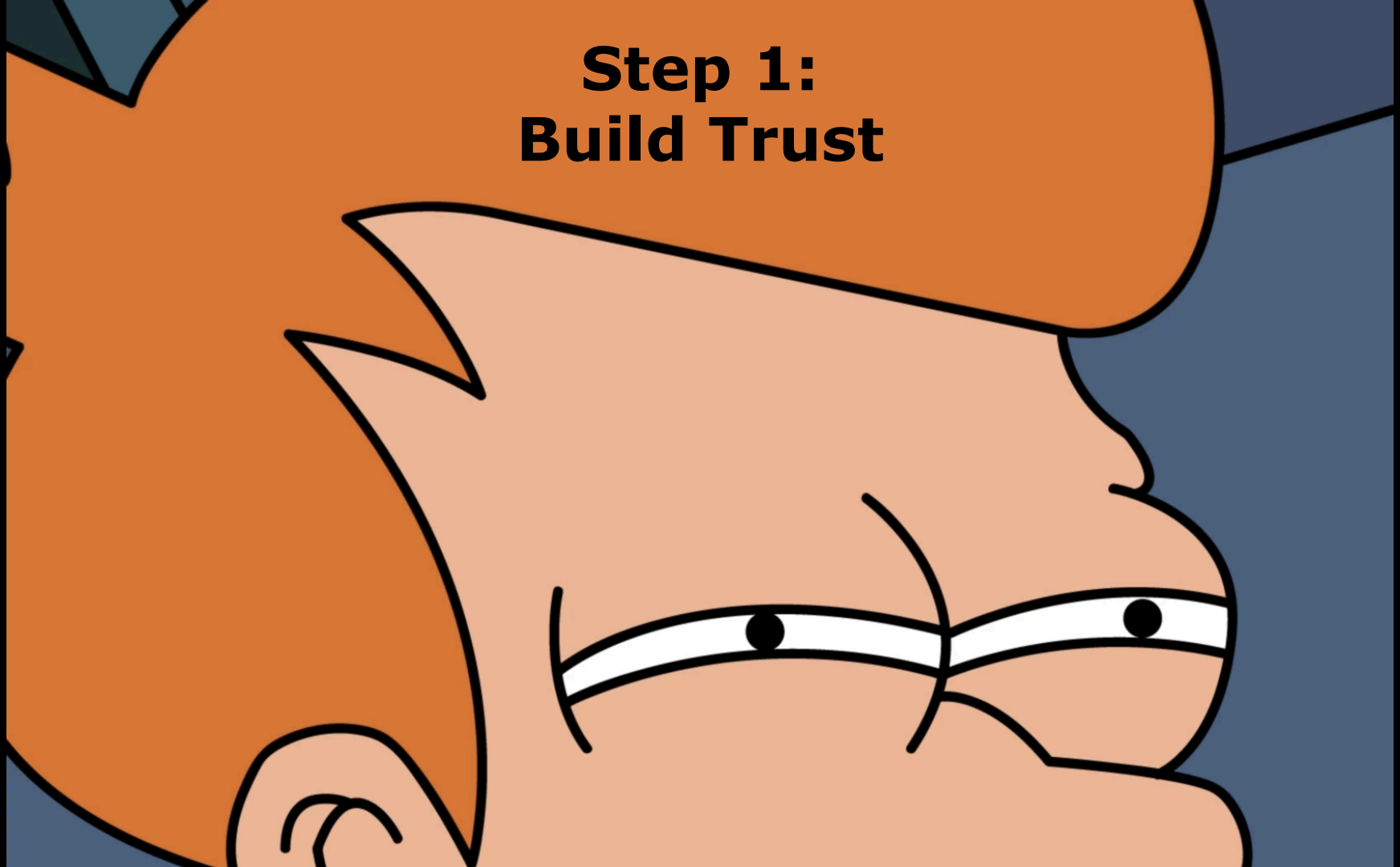
Slides available soon:
celiahodent.com

GAME DEVELOPERS CONFERENCE
MARCH 18–22, 2019 | #GDC19

UX Mindset

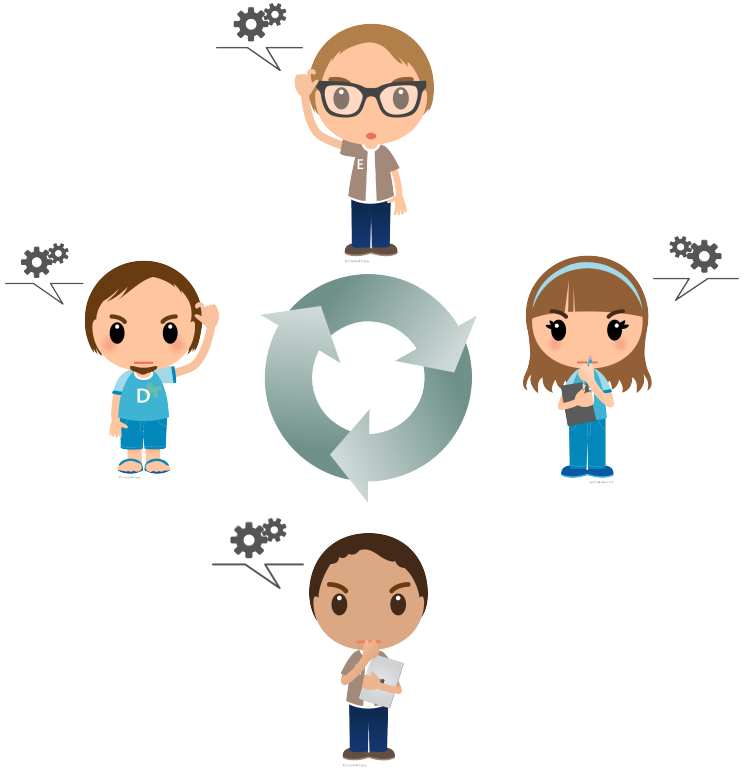

UX practices
- Psychology / HCI
- Guidelines / Methods
- User research
UX
Experience
Define the experience
(designers, engineers, artists)
User
Understand your audience
(marketing, consumer insights)


Step 1:
Build Trust

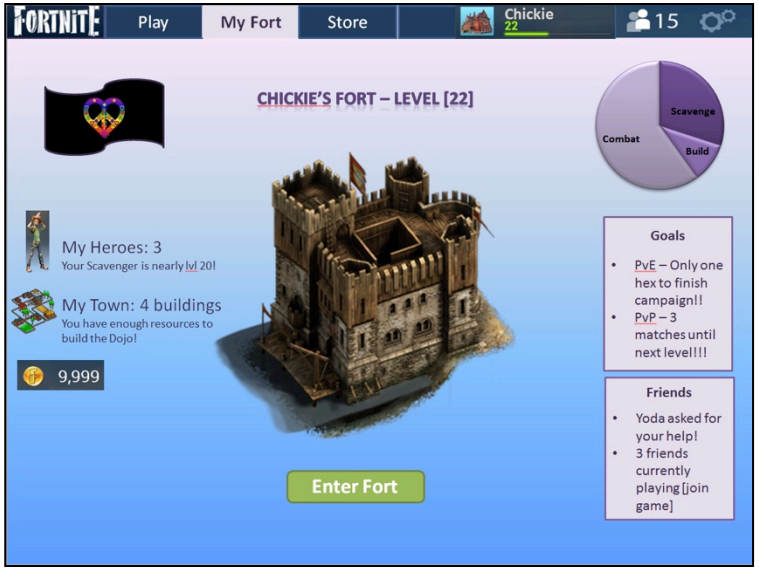
Misconception about UX #1: UX will distort design intentions

Dark Souls

Misconception about UX #2: Let's "UX it" later



Tailored relationship



Concept mock for Fortnite's metagame (late 2013)

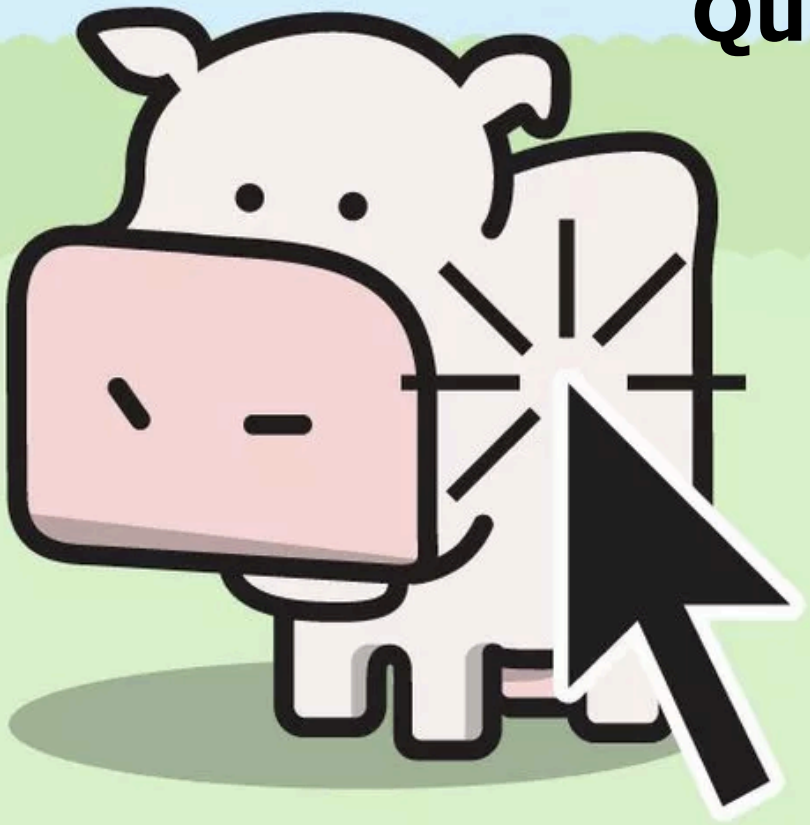
Fortnite alpha – Homebase (march 2016)

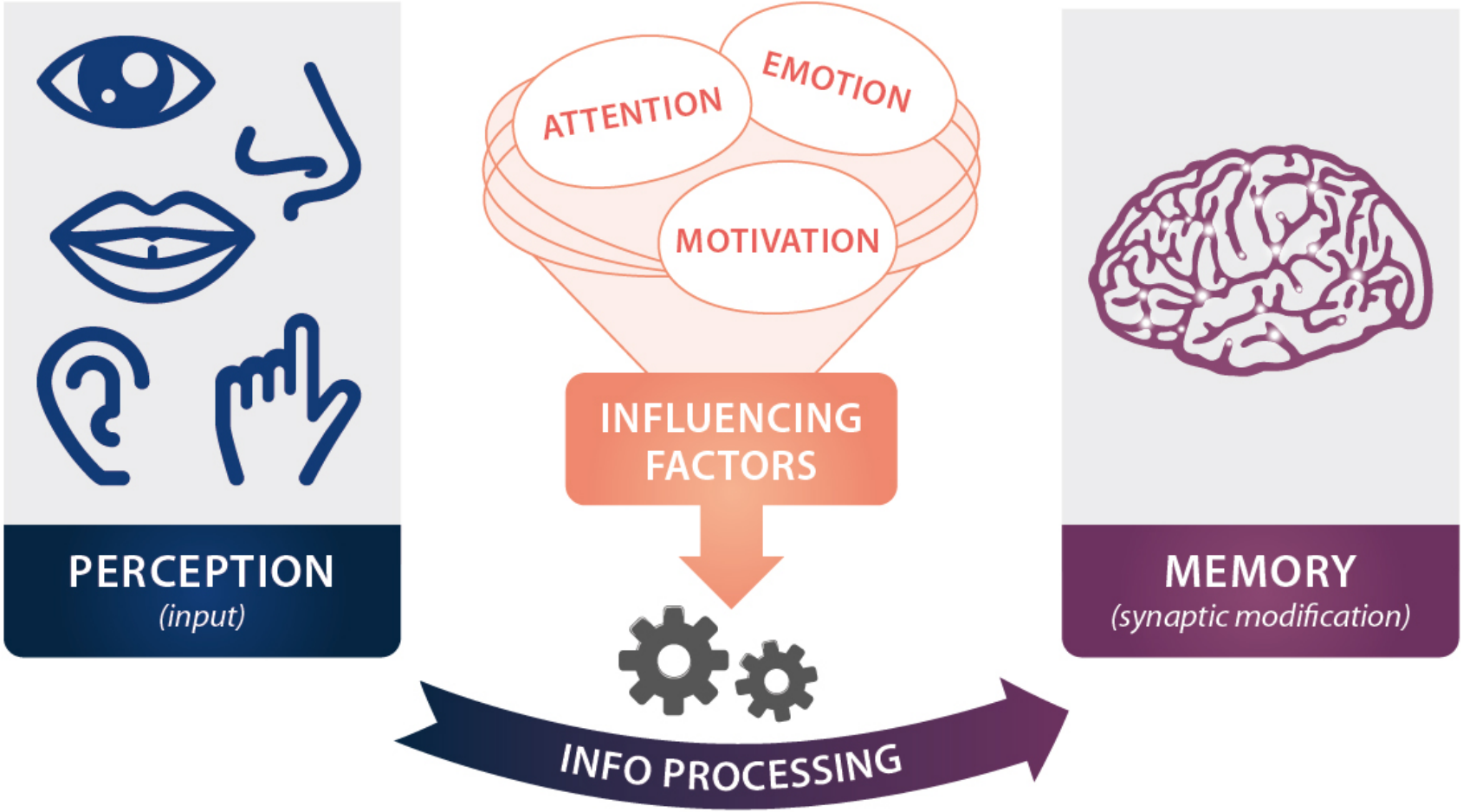
Helping the core team explain/test their vision before implementation.

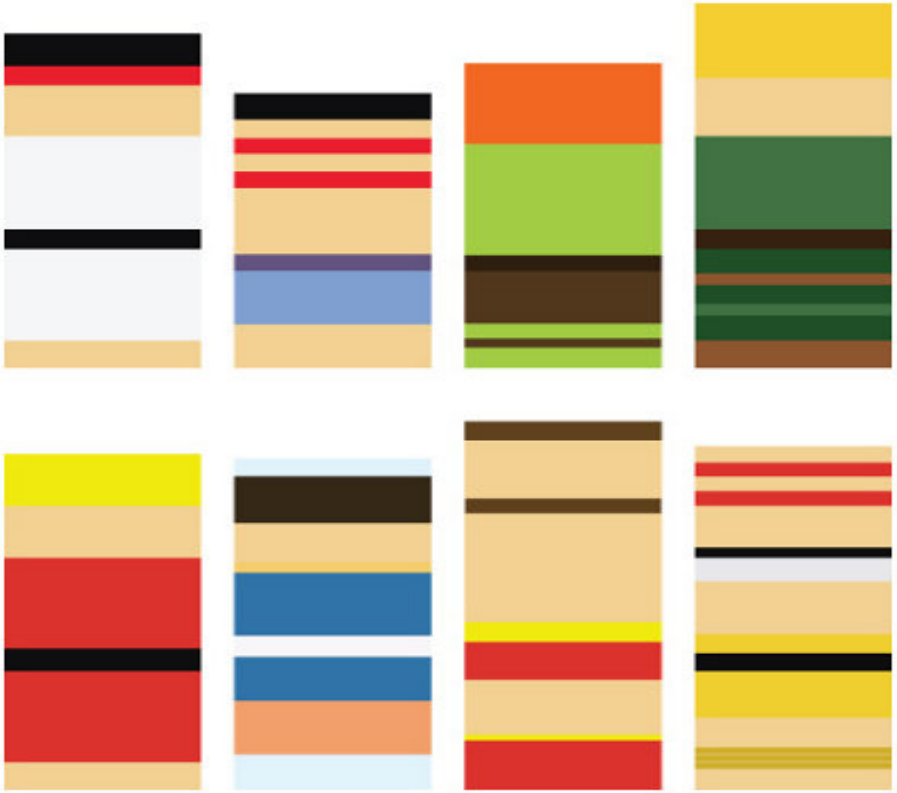
Tailored relationship

Example of a shooting range gym level in *Fortnite* for UX testing (2014).

Step 2:
Quick wins




ATTENTION
EMOTION
MOTIVATION
INFLUENCING FACTORS
PERCEPTION
(input)
MEMORY
(synaptic modification)
INFO PROCESSING

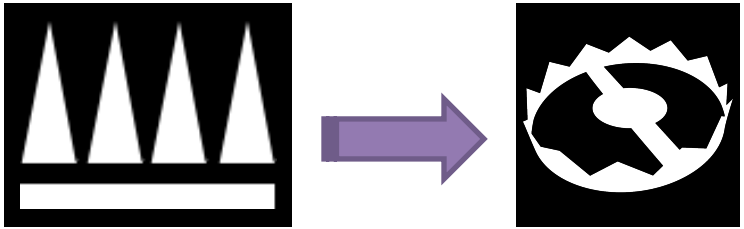


STREET FIGHTER II

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

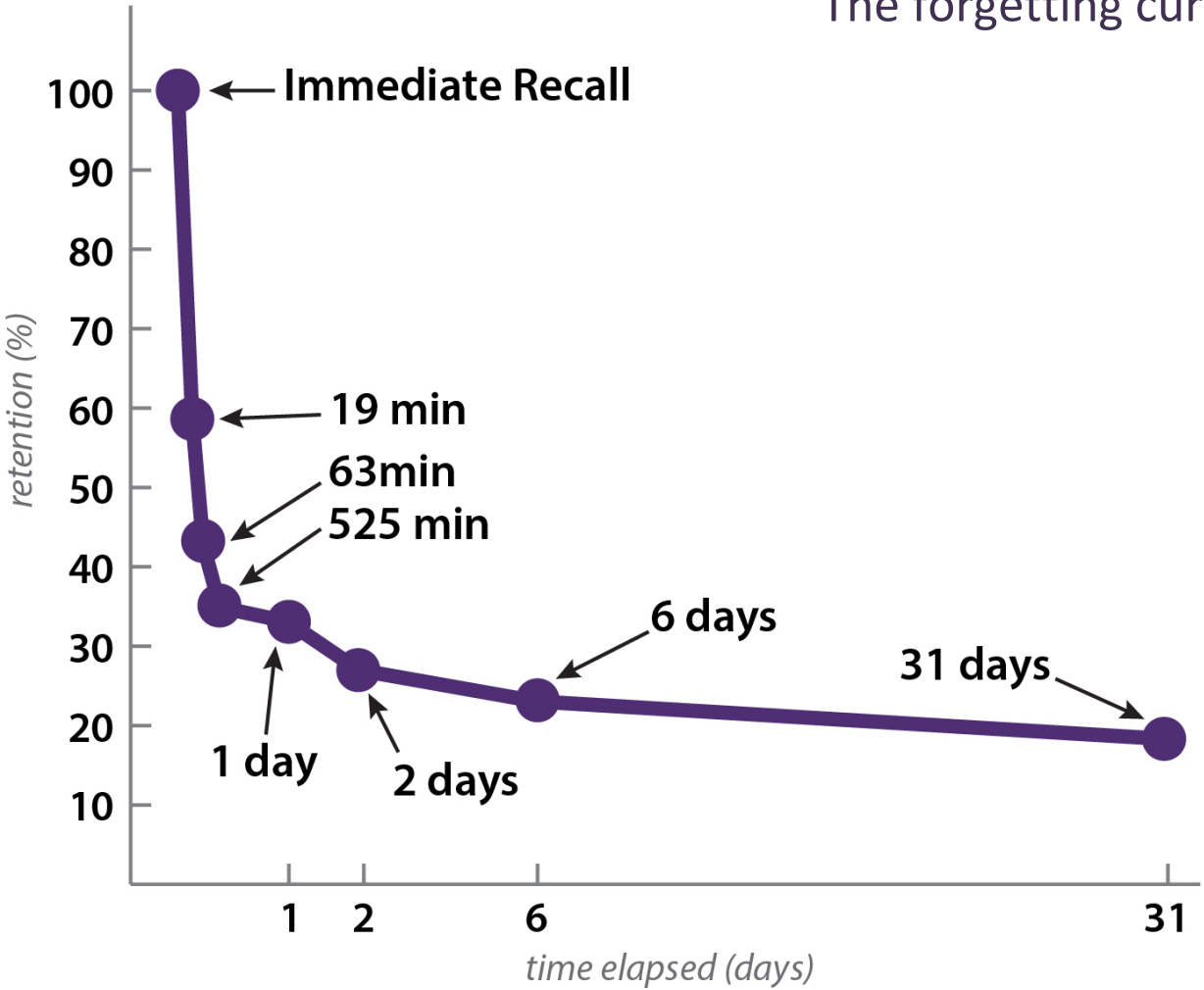
Our PERCEPTION is subjective

Quick win: Form Follows Function



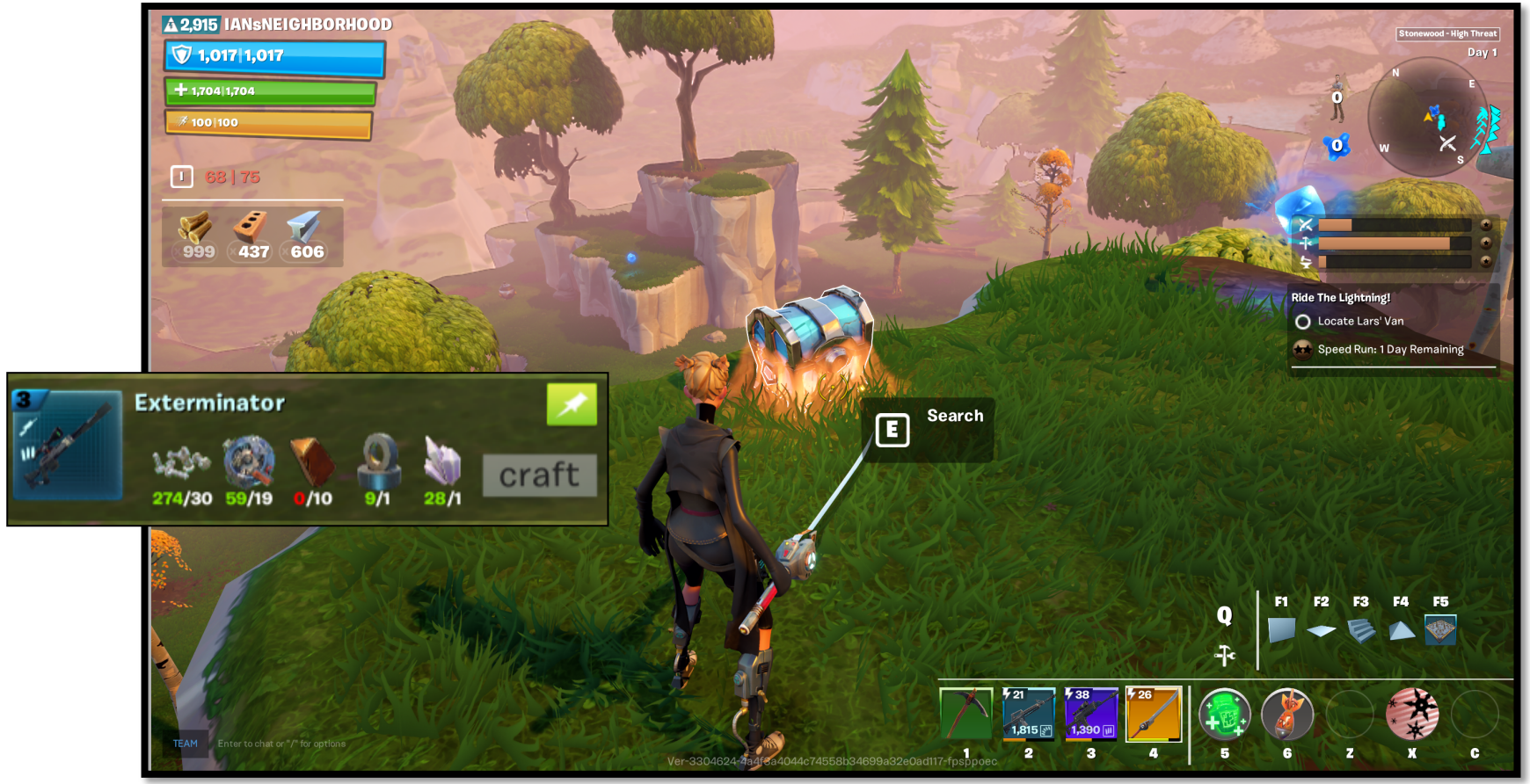
Fortnite 2013

The forgetting curve (Ebbinghaus, 1885)



Our MEMORY is fallible

Quick win: 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

Quick win: Avoid multitasking

Fortnite
(Sept 2014)

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

Cognitive Load Theory

Fortnite: PvP prototype for ux testing

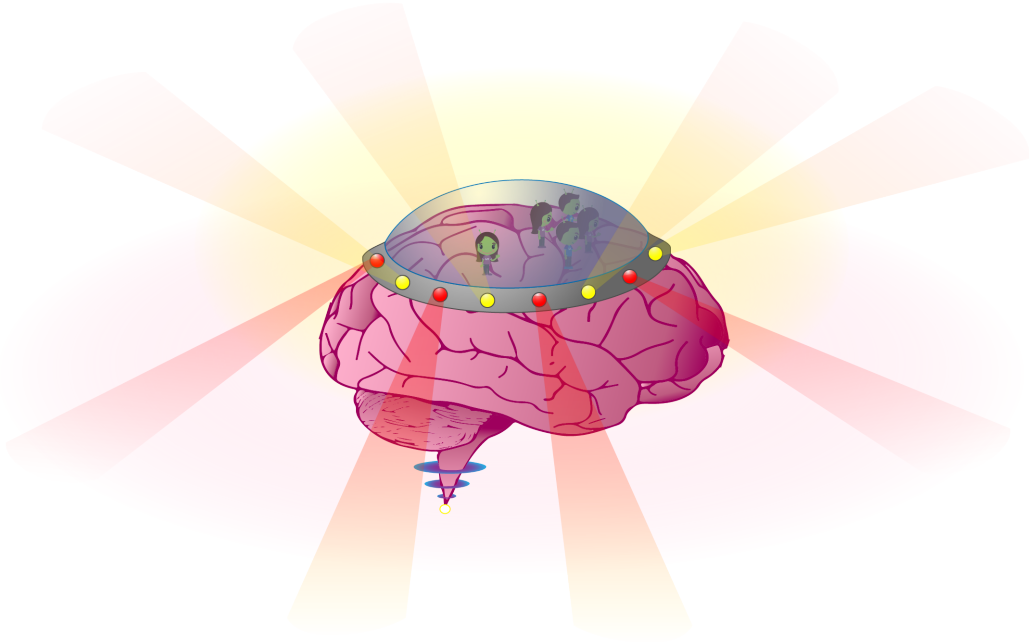
PERCEPTION = SUBJECTIVE

ATTENTION = SCARCE

MEMORY = FALLIBLE

Step 3:
Common Language

GameUX = Usability + Engage-ability



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

USABILITY

Flexibility / Accessibility

gameaccessibilityguidelines.com

BASIC

Easy to implement, wide reaching and apply to almost all game mechanics

INTERMEDIATE

Require some planning and effort but still just good general game design

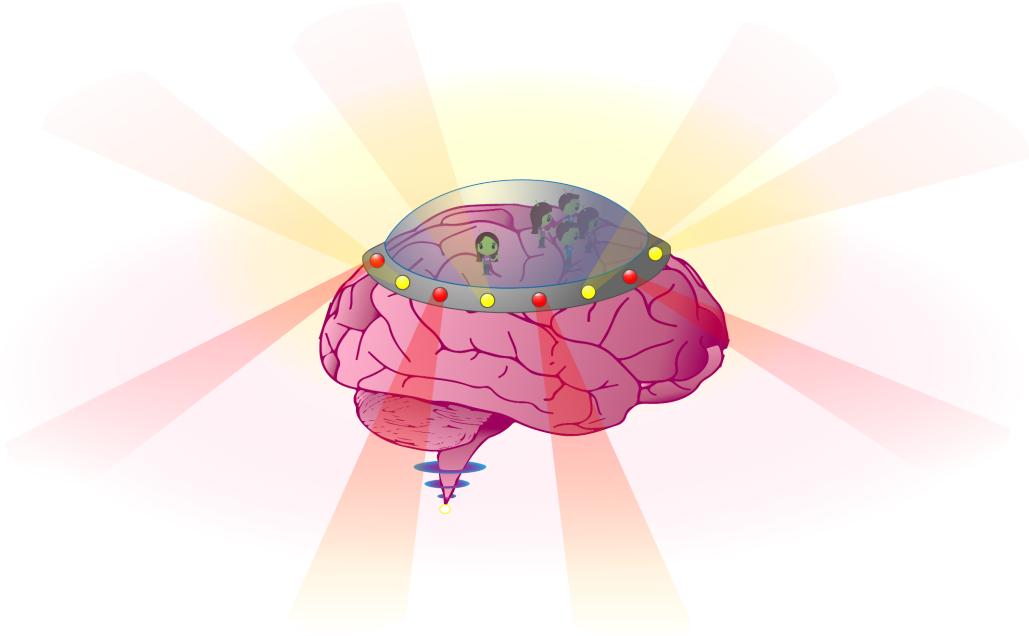
ADVANCED

Complex adaptations for profound impairments and specific niche mechanics

FULL LIST

All three sets of guidelines displayed together as a single categorised list

GameUX = Usability + Engage-ability



❑ Motivation

competence, autonomy, relatedness
meaning, rewards, implicit motives

❑ Emotion

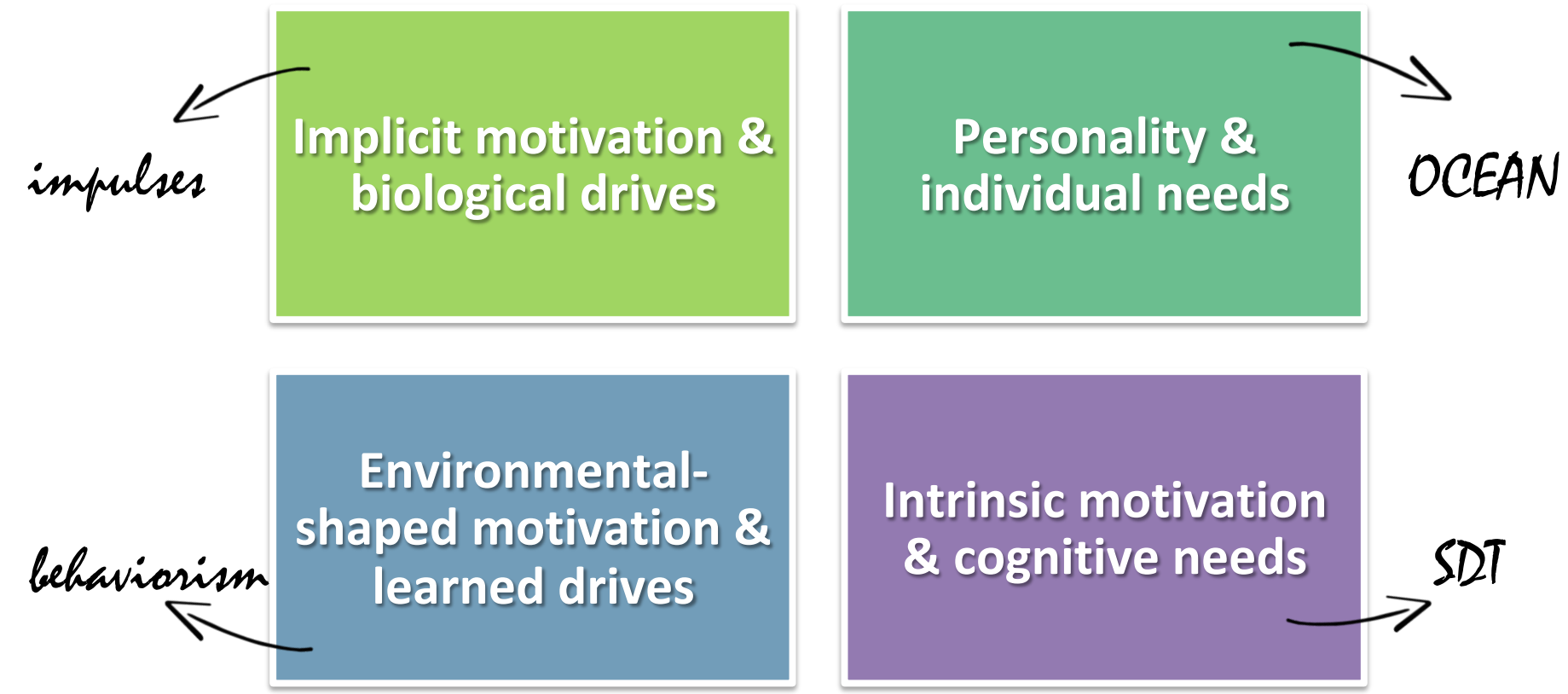
game feel, presence, surprises

❑ Game flow

difficulty curve, pacing, learning curve

ENGAGE-ABILITY

Human Motivation: Mapping attempt (for game dev)

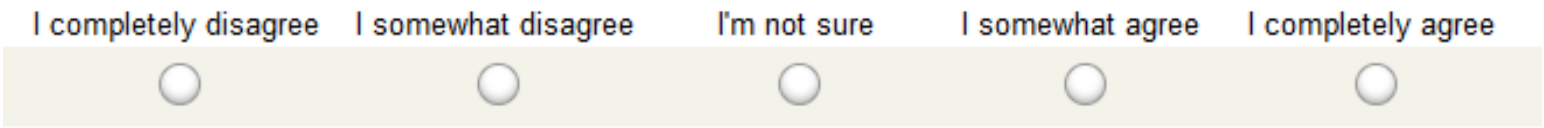


Motivation: Tease and show value (“why”)

Fortnite (Closed Alpha)

Measuring Engage-ability: Focus on WHY

Fortnite examples: Check if players got the PURPOSE by asking OBJECTIVE questions (less polluted by cognitive biases)



- What should you harvest to get metal efficiently (as much as possible as fast as possible)
- Who are you in the game?
- What makes a good fort?
- How do you increase your power in Fortnite?
- What are you most looking forward to obtaining?
- …

And with analytics later on.

USER EXPERIENCE

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

USABILITY

- ❑ Motivation

competence, autonomy, relatedness
meaning, rewards, implicit motives

- ❑ Emotion

game feel, presence, surprises

- ❑ Game flow

difficulty curve, pacing, learning curve

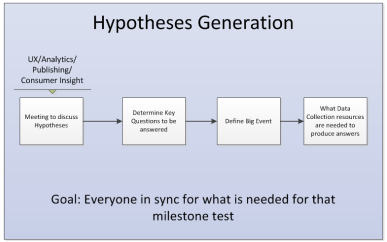
ENGAGE-ABILITY

Step 4: Process

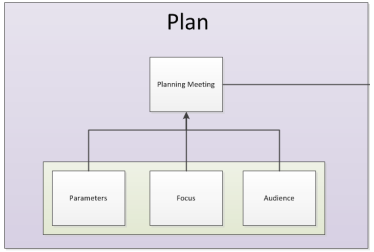
Fortnite – UX pipeline

Hypotheses

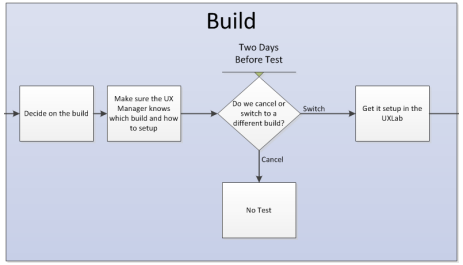
Milestone Start



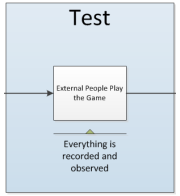
Plan



Build

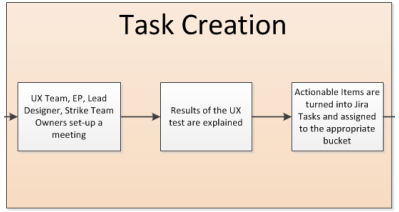


Test

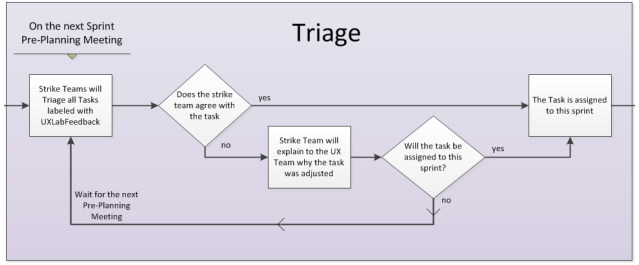


Report

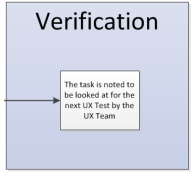
Task Creation



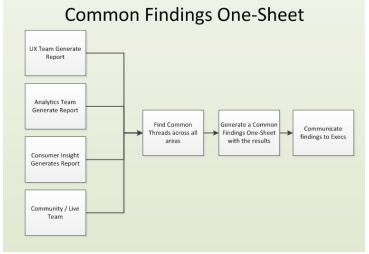
Triage



Verification

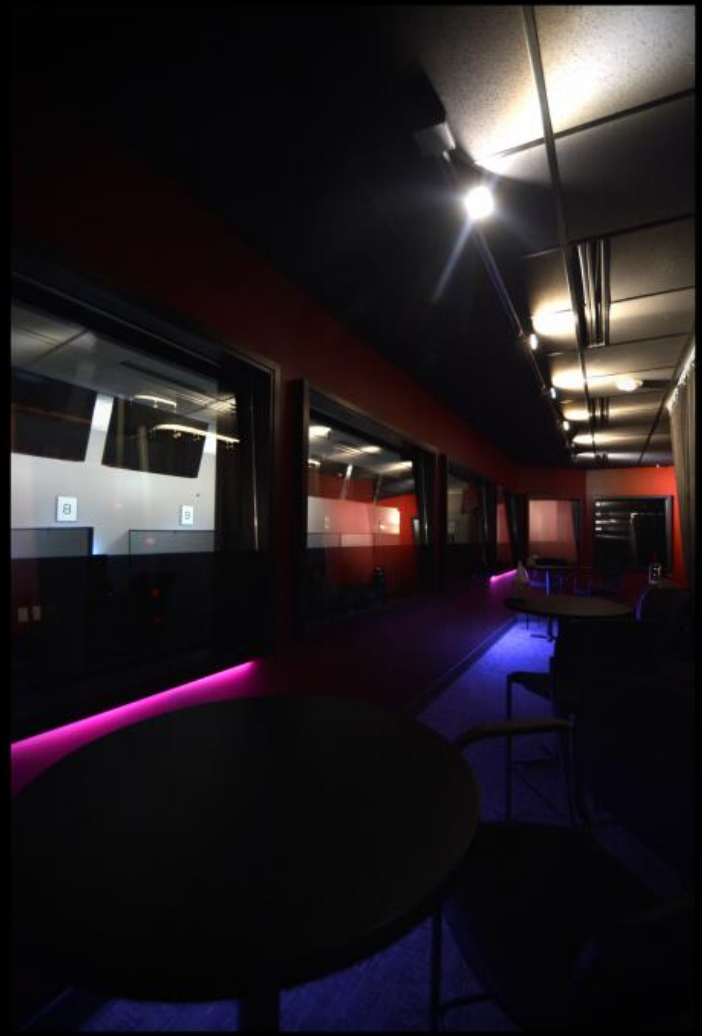


One-Sheet



EPIC

USER EXPERIENCE

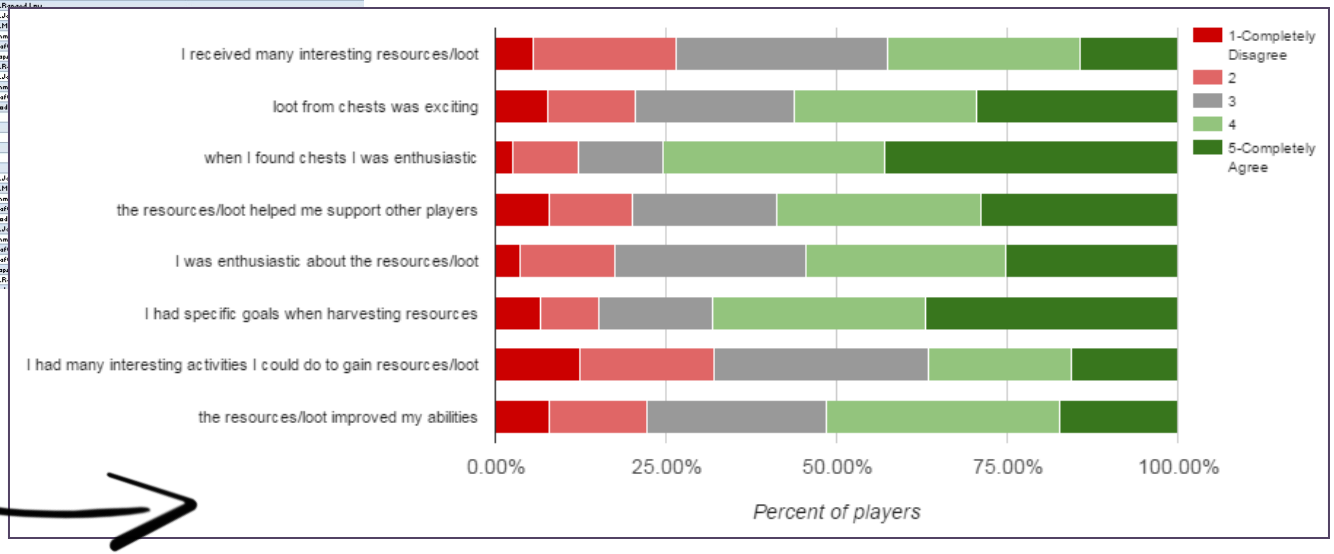


You found a weakness: find WHY it's happening

PackageID	Weigh	MinQ	MaxQ	LPCost	Requir	LootPackageCall	ItemData
WorldPKG.Refine.Metal	1			1		WorldList.Metal	
WorldPKG.RareOutdoorr	1.2			0		WorldHelper.Ranged	
WorldPKG.RareOutdoorr	0.85			0		WorldHelper.Melee	
WorldPKG.RareOutdoorr	1			0		WorldList.CraftingIngredients	
WorldPKG.RareIndoorr	3.5			0		WorldHelper.Ranged	
WorldPKG.RareIndoorr	2.5			0		WorldHelper.Melee	
WorldPKG.RareIndoorr	5			0		WorldList.CraftingIngredients	
WorldPKG.Onboarding.Chest3	1		4	1			Ammo.Light
WorldPKG.Onboarding.Chest3	1			0			WID.Launcher.Rocket.R.Ore.T01
WorldPKG.Onboarding.Chest2	1	6	7	1			Ammo.Light
WorldPKG.Onboarding.Chest2	1	2	2	0			OB.Trap.Floor.Spikes
WorldPKG.Onboarding.Chest2	1	10	10	3			Resource.Metal
WorldPKG.Onboarding.Chest2	1	20	20	2			Resource.Stone
WorldPKG.Onboarding.Chest2	1			4			WID.Edged.Sword.Medium.C.Ore.T00
WorldPKG.Onboarding.Chest1	1	7	7	0			Ammo.Medium
WorldPKG.Onboarding.Chest1	1	20	20	2			Resource.Stone
WorldPKG.Onboarding.Chest1	1	30	30	1			Resource.Wood
WorldPKG.Midgrade3	0.8			0		WorldHelper.Ranged.Lau	
WorldPKG.Midgrade3	0.14			0		WorldHelper.Jackpot	
WorldPKG.Midgrade3	1.5			0		WorldList.AmmoHigh	
WorldPKG.Midgrade3	1.5			0		WorldList.CraftingIngredients	
WorldPKG.Midgrade3	3			0		WorldList.Trap	
WorldPKG.MidGrade2	0.3			0		WorldHelper.Ranged.Lau	
WorldPKG.MidGrade2	0.165			0		WorldHelper.Jackpot	
WorldPKG.MidGrade2	1.5			0		WorldList.AmmoHigh	
WorldPKG.MidGrade2	2			0		WorldList.CraftingIngredients	
WorldPKG.MidGrade2	4			0		WorldList.Trap	
WorldPKG.MidGrade1	0.25			0		WorldHelper.Ranged.Lau	
WorldPKG.MidGrade1	0.1			0		WorldHelper.Jackpot	
WorldPKG.MidGrade1	0.15			0		WorldHelper.MeleeHigh	
WorldPKG.MidGrade1	1			0		WorldList.AmmoHigh	
WorldPKG.MidGrade1	1			0		WorldList.CraftingIngredients	
WorldPKG.MidGrade1	2			0		WorldList.Trap	
WorldPKG.LivingRoom	0.25			0		WorldHelper.Ranged.Lau	
WorldPKG.LivingRoom	0.043			0		WorldHelper.Jackpot	
WorldPKG.LivingRoom	1.5			0		WorldList.AmmoHigh	
WorldPKG.LivingRoom	1.5			0		WorldList.CraftingIngredients	
WorldPKG.LivingRoom	1			0		WorldList.Food	
WorldPKG.LateJoin	1		10	1			
WorldPKG.LateJoin	1		25	5			
WorldPKG.LateJoin	1		75	4			
WorldPKG.LateJoin	1		150	3			
WorldPKG.LateJoin	1			6			
WorldPKG.LateJoin	1			0			
WorldPKG.Kitchen	0.077			0		WorldHelper.Jackpot	
WorldPKG.Kitchen	0.5			0		WorldHelper.MeleeHigh	
WorldPKG.Kitchen	3			0		WorldList.AmmoHigh	
WorldPKG.Kitchen	1			0		WorldList.CraftingIngredients	
WorldPKG.Kitchen	3			0		WorldList.Food	
WorldPKG.Industrial	0.06			0		WorldHelper.Jackpot	
WorldPKG.Industrial	1.5			0		WorldList.AmmoHigh	
WorldPKG.Industrial	2			0		WorldList.CraftingIngredients	
WorldPKG.Industrial	1			0		WorldList.CraftingIngredients	
WorldPKG.Industrial	1.5			0		WorldList.Trap	
WorldPKG.GunnLau	1			0		WorldHelper.Ranged	

Design

Player perception



Find out why: feeling “grindy”?

Fortnite (2014 dev build)

Fortnite (2015 dev build)

Find out why: mastering harvesting (e.g. weak points)

"Weakpoint vision" is now unlocked after players have experienced harvesting without it.
→ Now it's a reward that has a ***meaning***.

Weak points!

Fortnite
(Closed Alpha)

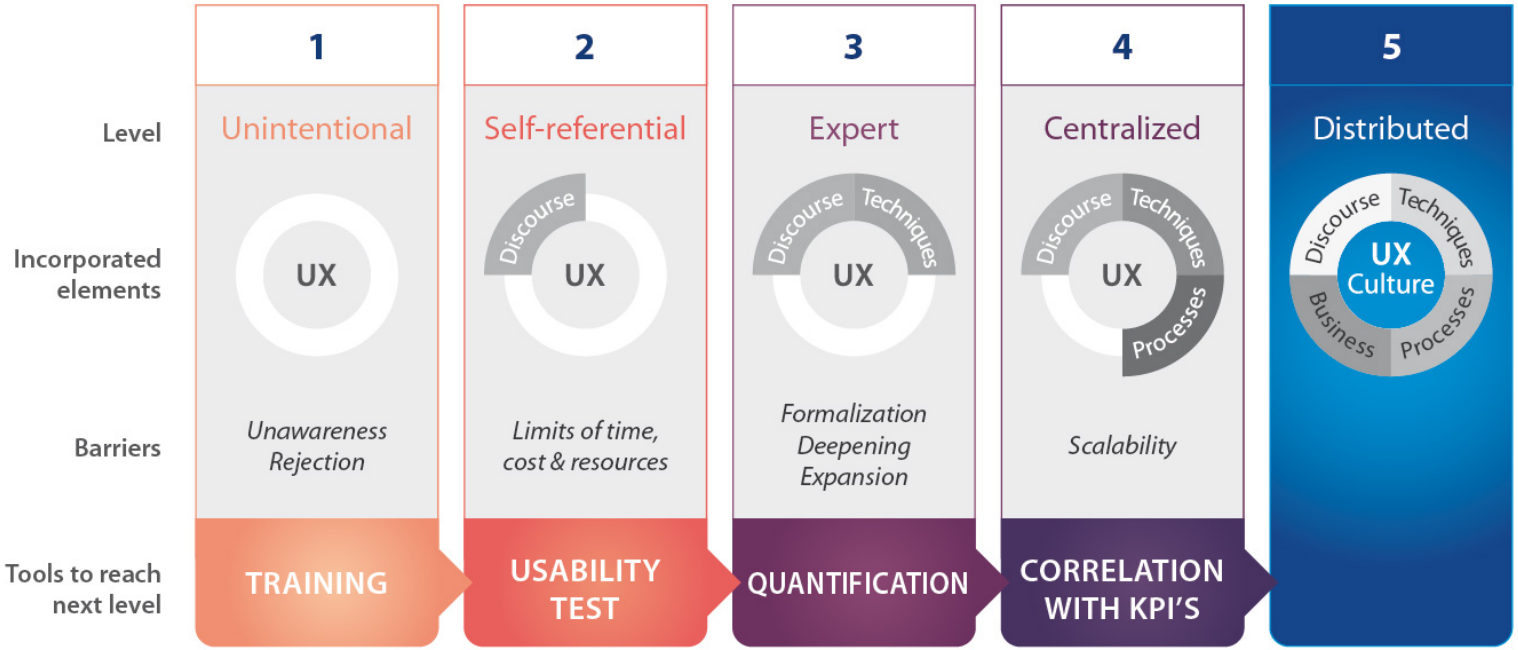
Build Trust

Quick Wins

Common Language

Process

KEIKENDO MATURITY MODEL



Game UX roles to consider

- **UX Designers**

Information Architecture, Interaction Design, Visual Design

→ at least one per dev team, and one can be on the UX team to offer support across the studio

- **UX Researchers**

Evaluate and test using the scientific method

→ At least 1-2 on the UX team (UR lab) and if possible one embedded on the dev team

- **UX Data Analysts**

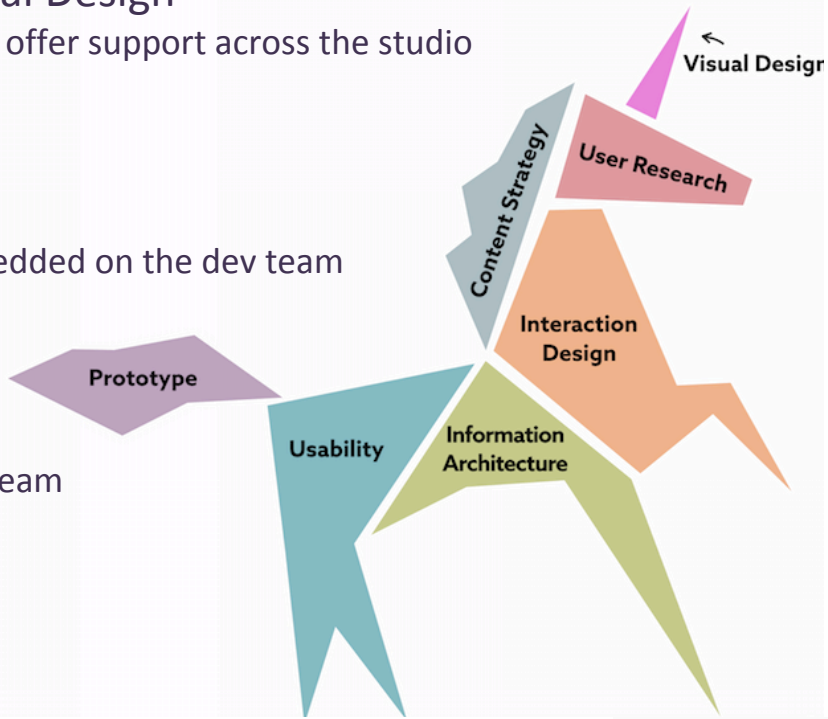
Data analysis

→ At least on the UX team, if possible embed one on each dev team and one on the publishing team

- **UX Strategists (Director of UX, and… VP?)**

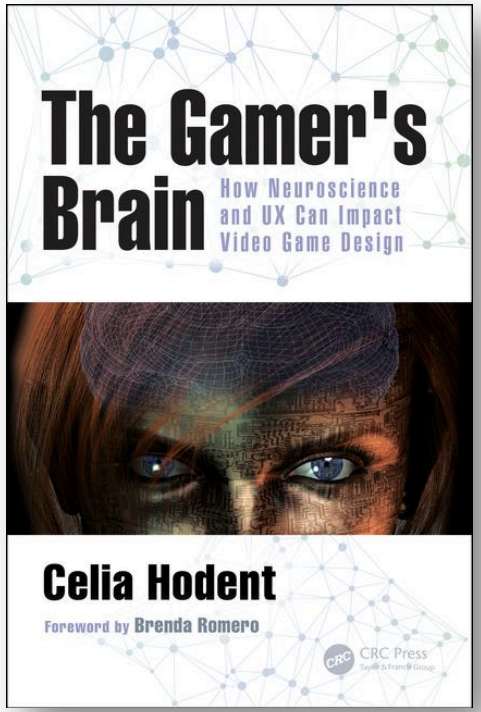
Manage, coordinate, advocate

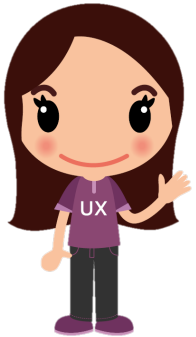
→ At least one at the studio level, if possible one on each dev team (at the same level as creative director and art director)



UX Strategy

THANKS!





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Blog/Resources: celiahodent.com

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