



# Game loops, feedback loops

*and other loops*



# Today

- Check who's here
- Info
- **Theory:** Loops
- **Practice:** Personal projects

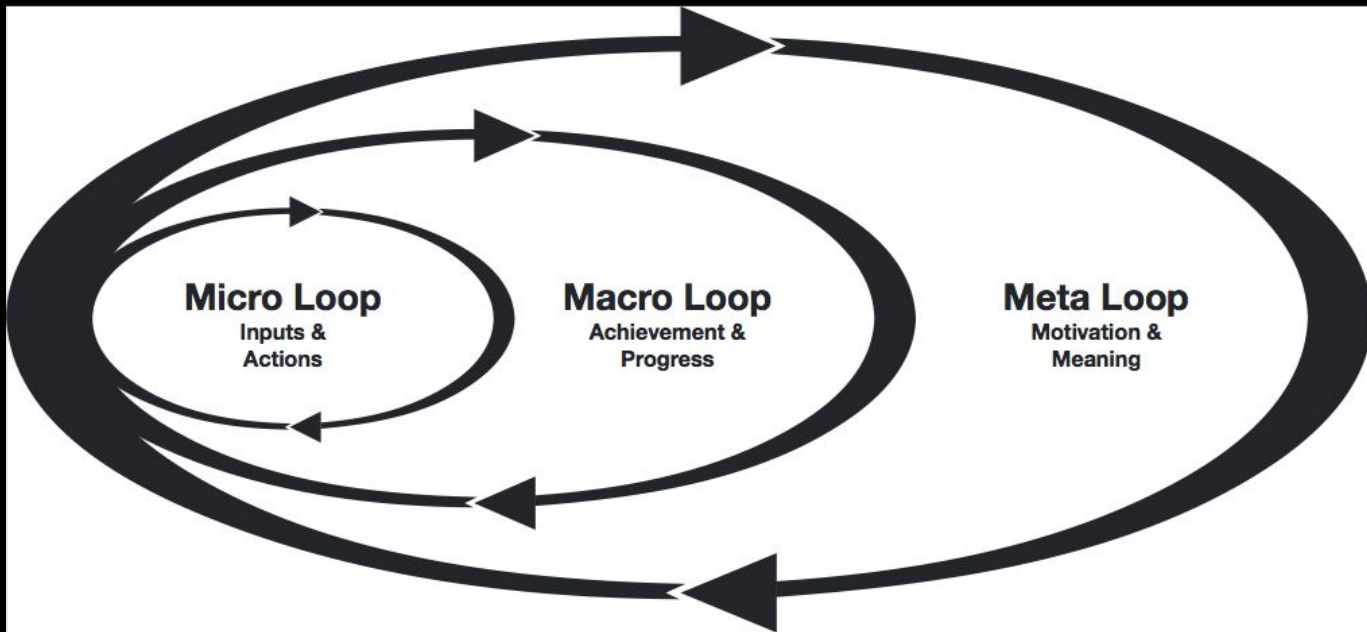


## First off...

- If you are sick/away:
  - <1 week
    - Check slides & assignments
    - No need to report
  - >1 week
    - Note from doctor (if sick)
    - Email [crew@futuregames.se](mailto:crew@futuregames.se)
  - Make sure you check ItsLearning and follow along



# Game loops





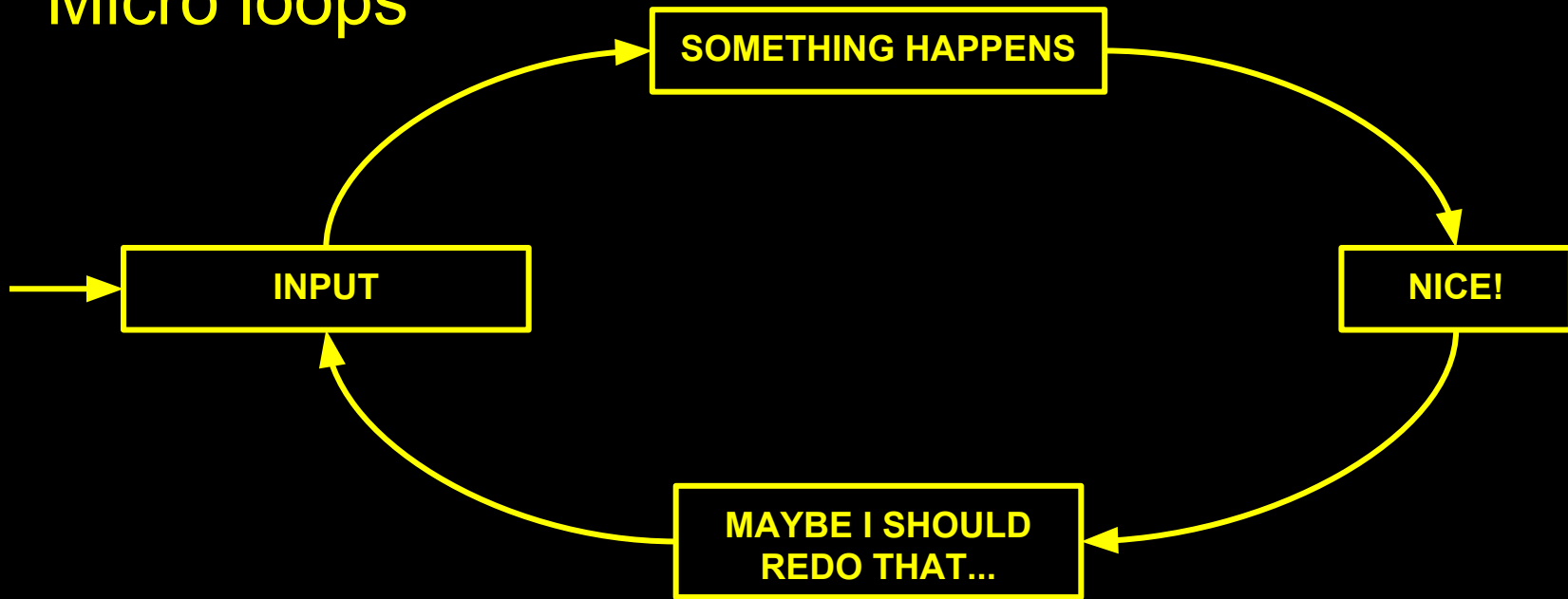
## Micro loops

- Actions
- Reactions



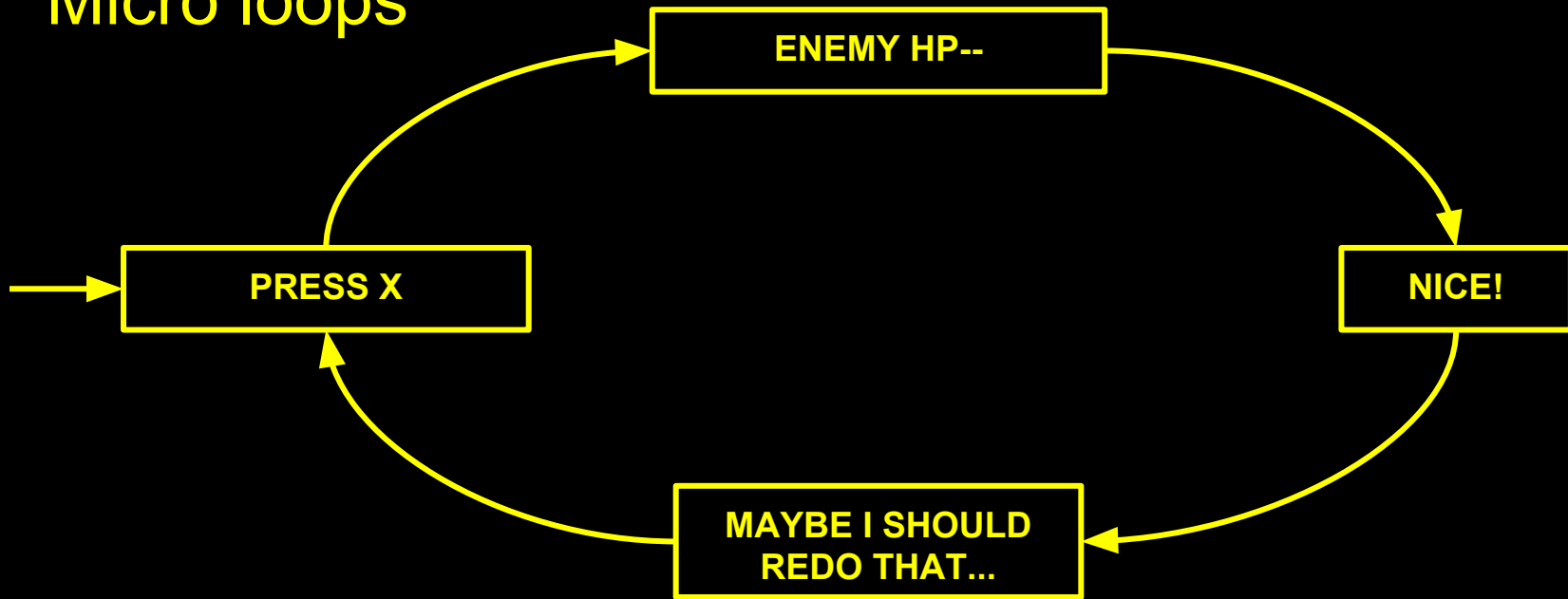


# Micro loops



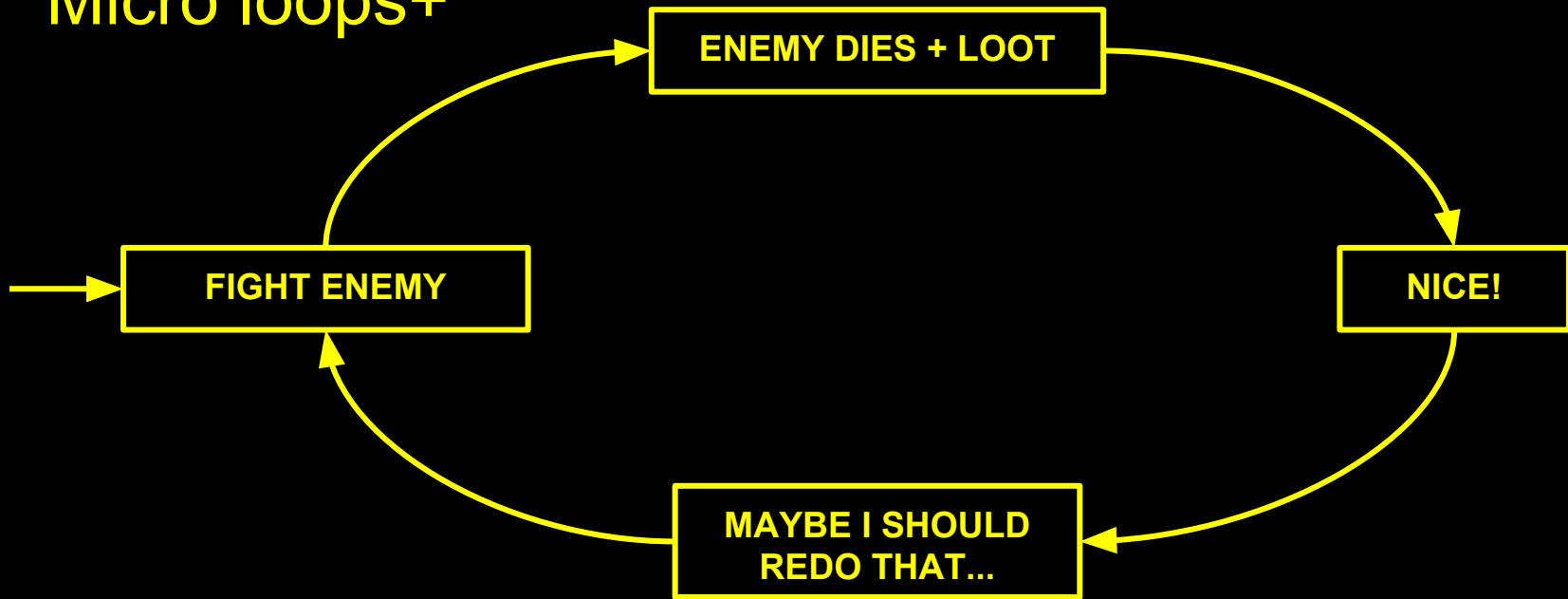


# Micro loops





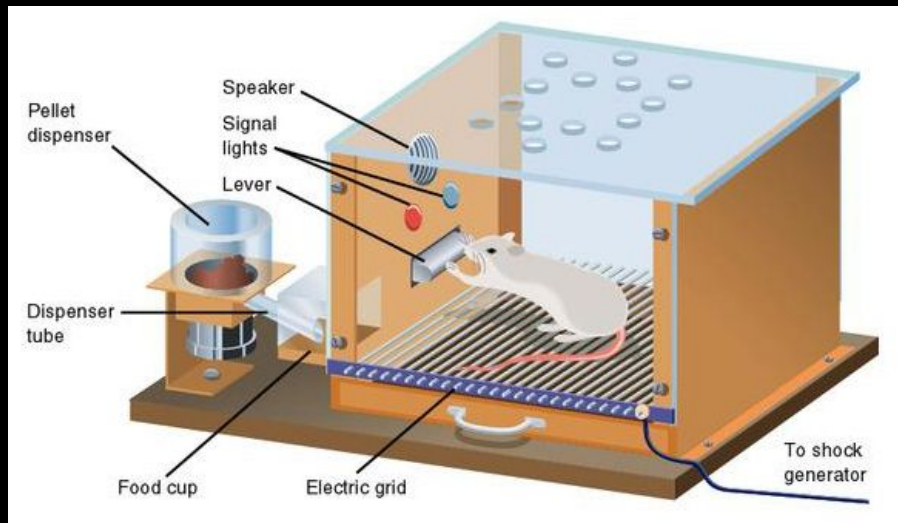
## Micro loops+







# Skinner box



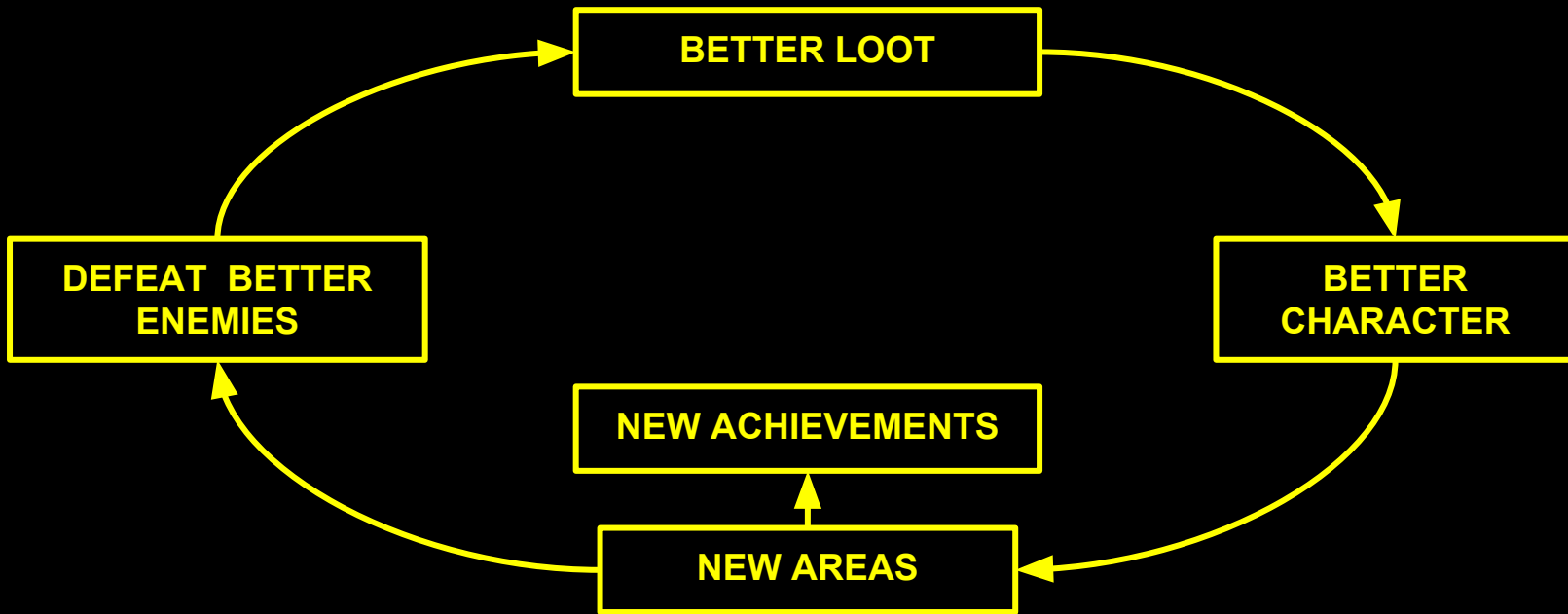




# Macro loops

- Achievement
- Progress







# Meta loops

- Motivation
- Meaning





**WHY  
ARE WE  
HERE?**







# Monomyth







The more engaging the micro, the less you need meta.





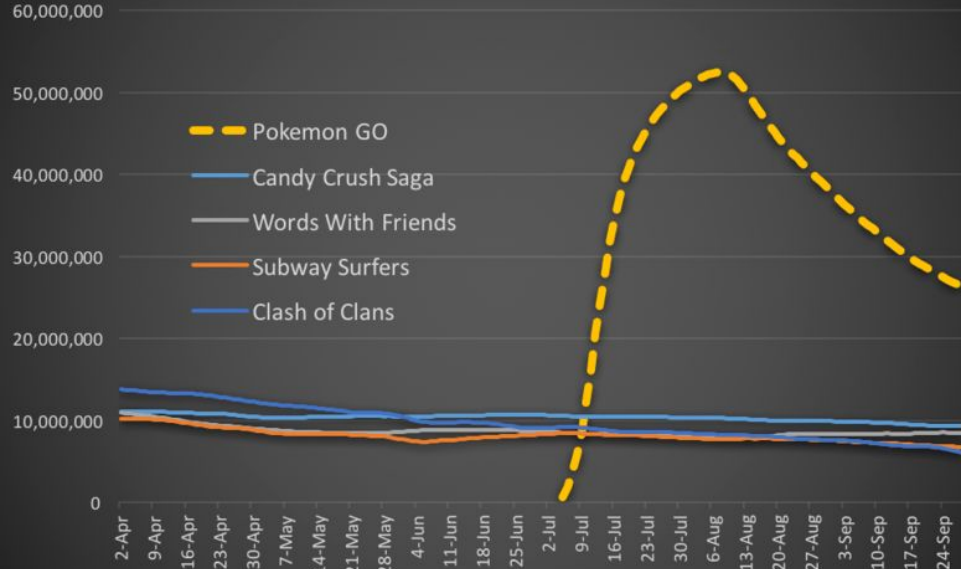
## Case study





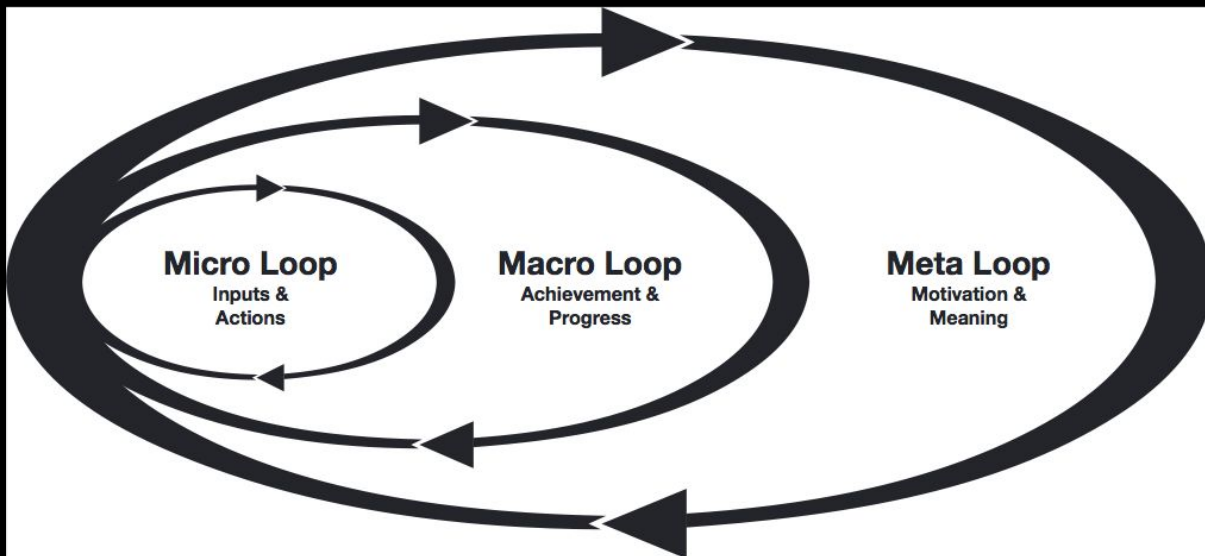
## Pokemon GO Monthly Active Users

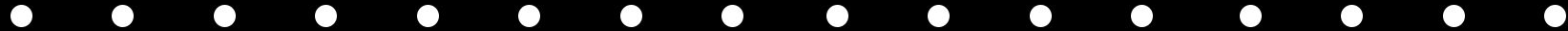
For iOS & Android smartphones in the U.S.





## Case study





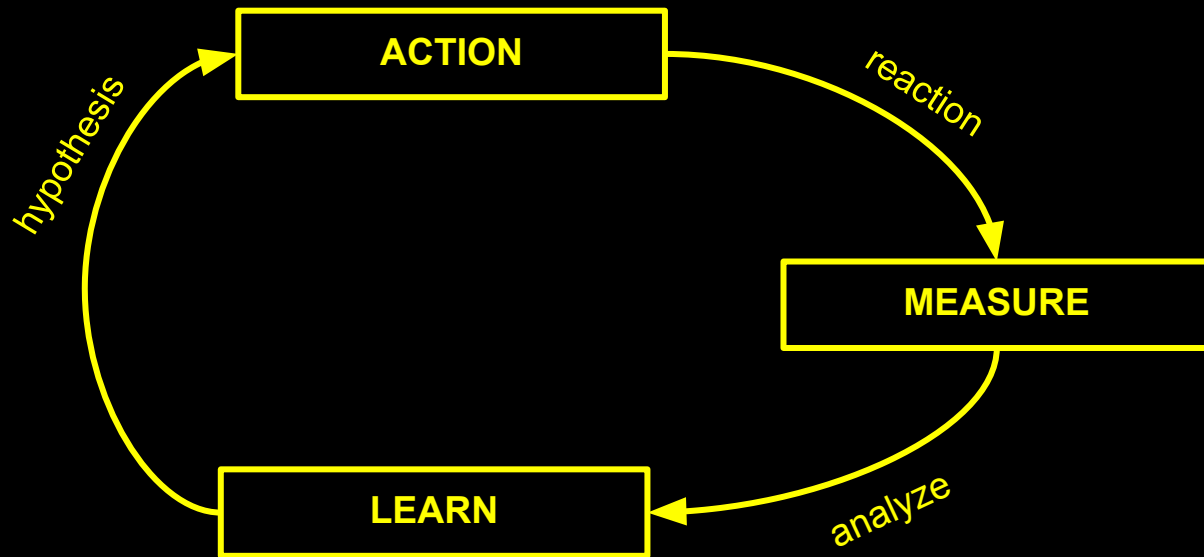
# Feedback loops

- Loops that **provide feedback**
- Loops that **feed back** into the system



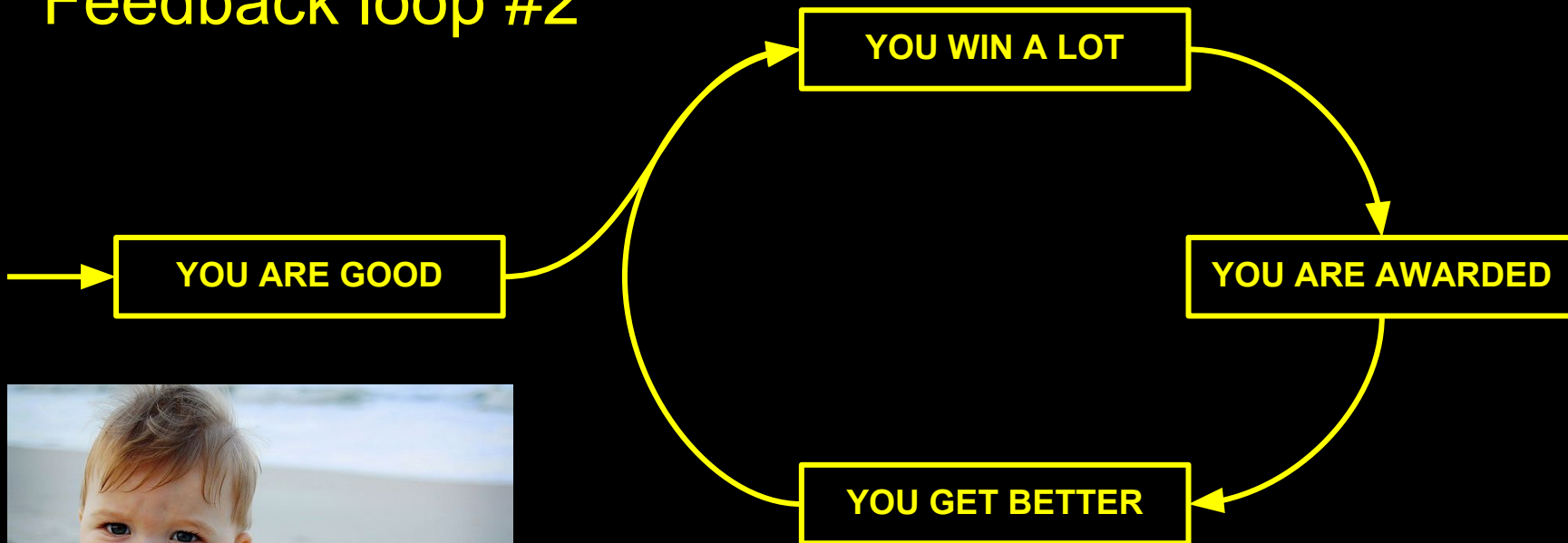


# Feedback loop #1



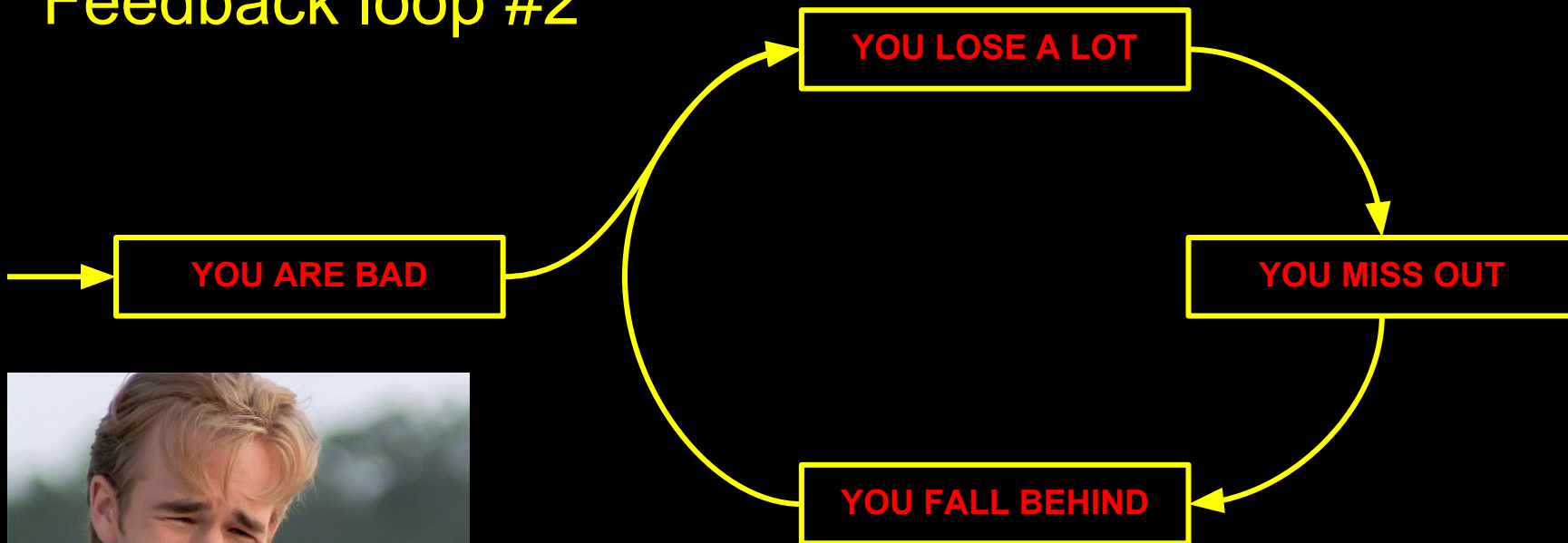


## Feedback loop #2





## Feedback loop #2







# Countering



League of Legends 5:19 15\_09\_26\_14\_28

Overview Grid Graph

### VICTORY

IP +103

Tristana Markkannan

Summer's Rift Classic 179 | 135 Series Won! 37/23

48/11/86 28/45/56

#### Congratulations Summoner!

You have been promoted to Yorick's Cheetahs, Platinum Division V.

Best of luck in the Fields of Justice!

Player	Champion	Level	Kills	Deaths	Assists	CS	Gold
Ramuhdo	Tristana	16	11	3	1	135	15.7k
Wehöt	Evelynn	16	2	1	1	113	209
JeanEudMechanics	Shen	18	11	3	1	174	138
LoLFR Pikachu	Nautlius	16	1	7	24	16	40
XSaevar	Lux	18	6	5	27	15.7k	209
FloThe800n	Lee Sin	17	7	8	15	14k	138
Cabuxa	Braum	14	1	12	16	8.6k	40
Absolute Power	Jarvan IV	16	3	8	10	12k	229
Apfelx33	Yayne	16	9	10	7	14.7k	251
SKT T1 LeMiflin	LeBlanc	16	8	10	8	12.3k	167

Home Share Match Play Again!



# Reversing





# Better for...



...Games with long-term goals



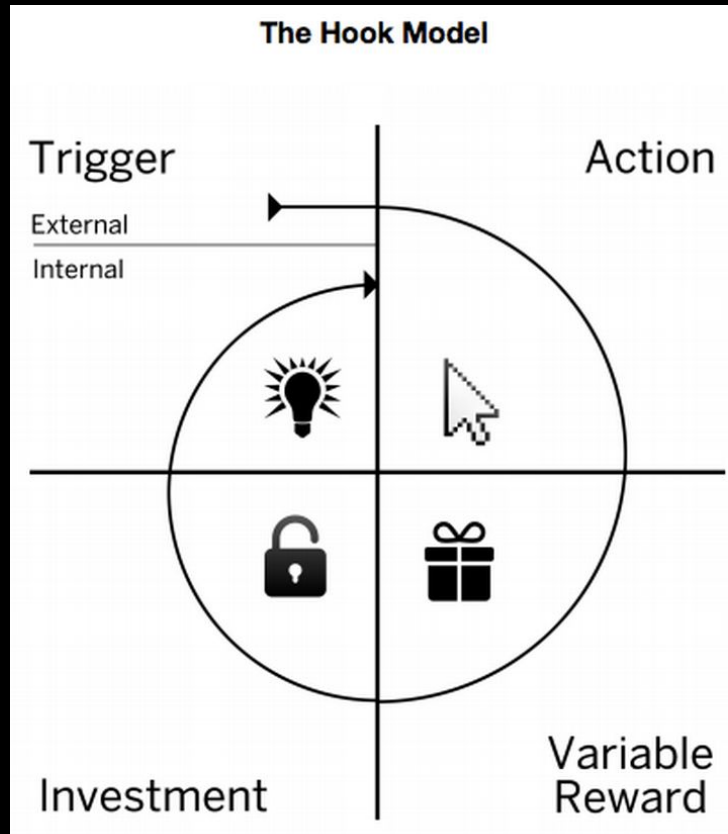
...Party games



# Hook Model loop

We want people to...

- play our games
- **continue** to play our games



By: Nir Eyal, "Hooked"



# External triggers

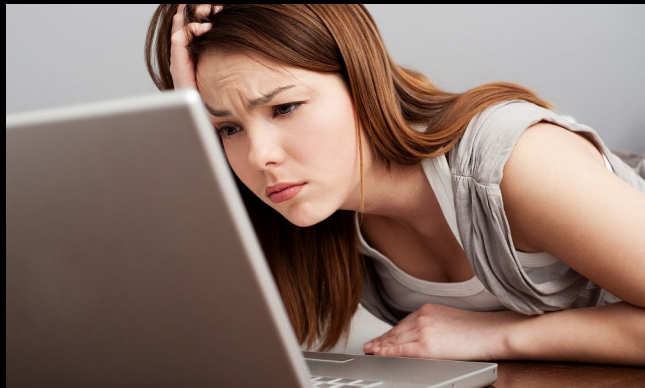
- Paranoid parents should no longer worry about potential plots against dead children.
- You can no longer arrange a ball in the dungeons.
- Handsome and lustful men now also populate the cabins in the wild for the pleasures of people who find them attractive.
- You no longer feel like you're partying on your own when inviting people that are not your vassals.
- You no longer feel bad for having a romantic relationship with your spouse.







# Internal triggers





# Actions



PRESS START

*Invite your friends to Candy Crush Saga!*

Select all

<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

*Invite*

**Today's Quests**

<b>Shaman or Warlock Victory</b> 0/1	<b>Priest or Warlock Dominance</b> Win 5 games with Priest or Warlock. 0/5 60	<b>Mage Victory</b> Win 3 games with Mage. 0/3 50
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...ly be completed in Play mode. The Arena or Tavern Brawl.















# Variable reward

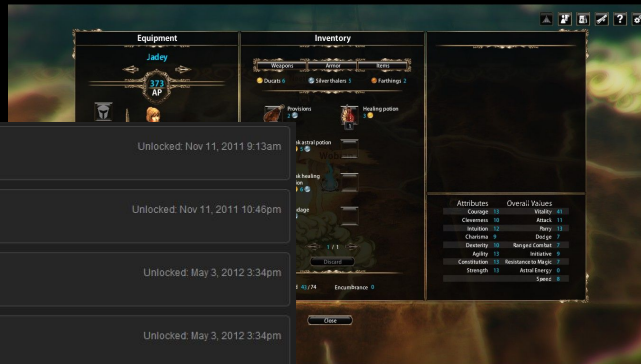




# Rewards

- The Self
- The Hunt
- The Tribe

	<b>Unbound</b> Complete "Unbound"	Unlocked: Nov 11, 2011 9:13am
	<b>Bleak Falls Barrow</b> Complete "Bleak Falls Barrow"	Unlocked: Nov 11, 2011 10:46pm
	<b>The Way of the Voice</b> Complete "The Way of the Voice"	Unlocked: May 3, 2012 3:34pm
	<b>Diplomatic Immunity</b> Complete "Diplomatic Immunity"	Unlocked: May 3, 2012 3:34pm
	<b>Alduin's Wall</b> Complete "Alduin's Wall"	Unlocked: May 3, 2012 3:34pm
	<b>Elder Knowledge</b> Complete "Elder Knowledge"	
	<b>The Fallen</b> Complete "The Fallen"	
	<b>Dragonslayer</b> Complete "Dragonslayer"	
	<b>Take Up Arms</b> Join the Companions	
	<b>Blood Oath</b> Become a member of the Circle	





# Investment

**Armor Crafting**  
Heavy Armor  
(🛡️ 🏹 🏰 🏹 🏰)

- Legion of the Dead Armor
- Sturdy Battlemaster Armor
- Sturdy Battlemaster Mail
- Templar Armor**
- Battlemaster Armor
- Battlemaster Coat
- Dalish Warrior Armor

TIER 3 HEAVY ARMOR SCHEMATIC

**Torin**  
LEVEL 24 WARRIOR

[194 - 280] Armor Rating



4 27:01 + 64 +

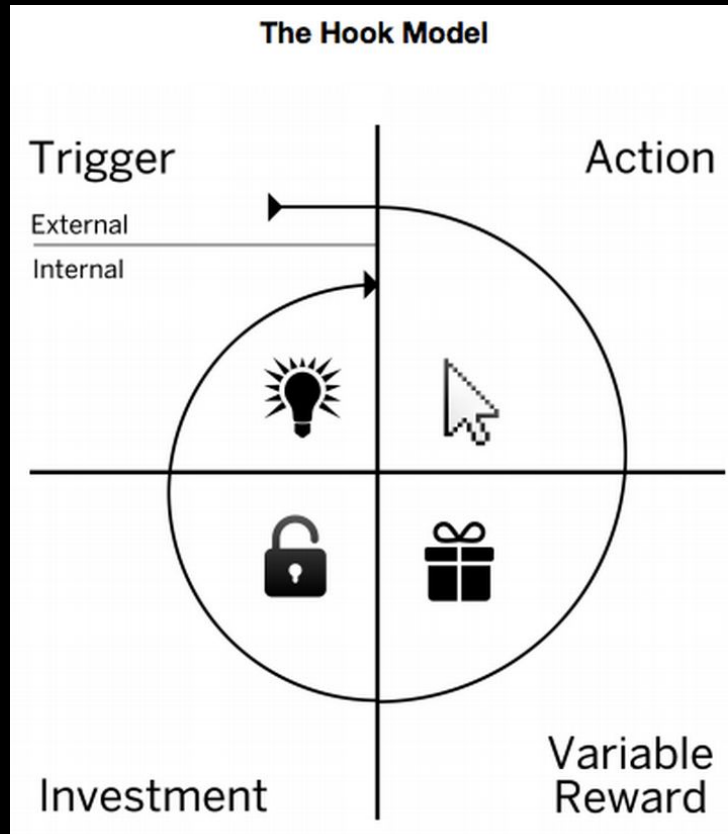
**Rainbow Bubble**

x1

Shoot the Rainbow Bubble at any group of bubbles to remove all of them at once!

6 🏠

100 500 1000 500 100



By: Nir Eyal, "Hooked"





## Let's make stuff!

- Focus on an area of Unreal/Blueprint **you need to improve in.**
- If you need help finding one, **I will help you.**