

RDC
17

ROBLOX DEVELOPERS CONFERENCE

Plan & Design: A Roblox Game

Michael “Rototally” McHale

 @ROBLOXTotally

First off...

Who Is This Guy?



Michael McHale

Director of Product

- Gaming Apps
- Player Experience

EIDOS
INTERACTIVE

KONAMI

SEGA[®]



Methods And Tools That Can Help You Plan And Design Your Game.



What Game Should I Build?



Questions to answer about your game



Documenting the Design



Plan Ahead



Rapid Prototyping



Keep Players Engaged

```
textureId, scale, offset)
/character | character, character)
"BoolValue", character)
"lied"

A
A:save
avoidRootPart

id

character:GetChildren() do
    .rt') and child.Name == "Head" then
        .rcy = i
        /Accountment") then
            = child:FindFirstChild("Handle")
            = nil and Handle:IsA("BasePart") then
                .Transparency = i

        :IsA("Clothing") then
            /parent = character.HumanoidRootPart

        r.Humanoid.RigType == Enum.HumanoidRigType.R15 then
            .sh.Offset = offset + Vector3.new(0, 0.7, 0)

            .Mesh.Offset = offset

        / applyCharacterMorph(player, character, morphCharacter)
        / saveMorph(player, character)
        local characterMorphApplied = Instance.new("BoolValue", character)
        characterMorphApplied.Name = "CharacterMorphApplied"

        local CharacterItems = Instance.new("Folder", game.ServerStorage)
        CharacterItems.Name = player.Name .. "CharacterItems"

        for _CharacterItem in pairs(character:GetChildren()) do
```



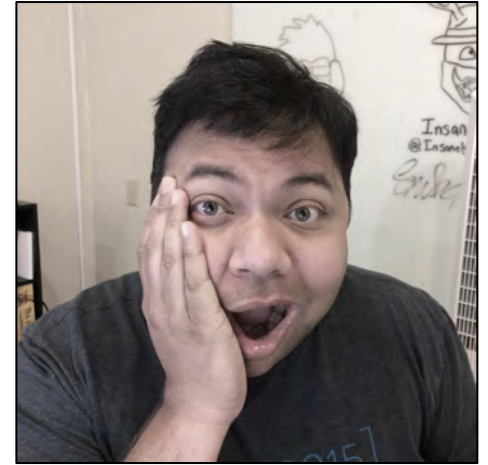

I'm starting from scratch...

What Game Should I Build?

What Are My Goals?

Define what success means to you:

- 🏆 Most Popular, Top rated charts
- 💰 Top Earning – How important is \$\$\$?
- 👤 Innovative, ground breaking, community admiration
- 🏆 Make a game, gain experience and advance my skills
- 👨👩👦 A place to hang out with my friends and family



What Are Common Traits In Popular Roblox Games?

- Multiplayer - Other players create *emergent gameplay*
- Social - Fun player interaction, chat, safe zones and lobbies between the action
- Player Expression & Status - Custom avatar, vehicle, base, gamer skills
- Physics Simulation
- Fidget Spinners



Consider The Game Genre You Want To Develop

- Examples – shooter, tycoon, driving, disaster, social, fashion
- Is there a game genre that is currently underserved?
- For a popular game genre:
 - Can I bring something new and innovative?
 - Can I build the best version of the genre?



I have an idea... how do I know it is a good idea?

Questions To Answer About Your Game

What Is The Core Concept (Elevator Pitch)?



Can you describe your game in 2 minutes or less?



What is unique, cool and exciting about the concept?



Why would players care about this game?



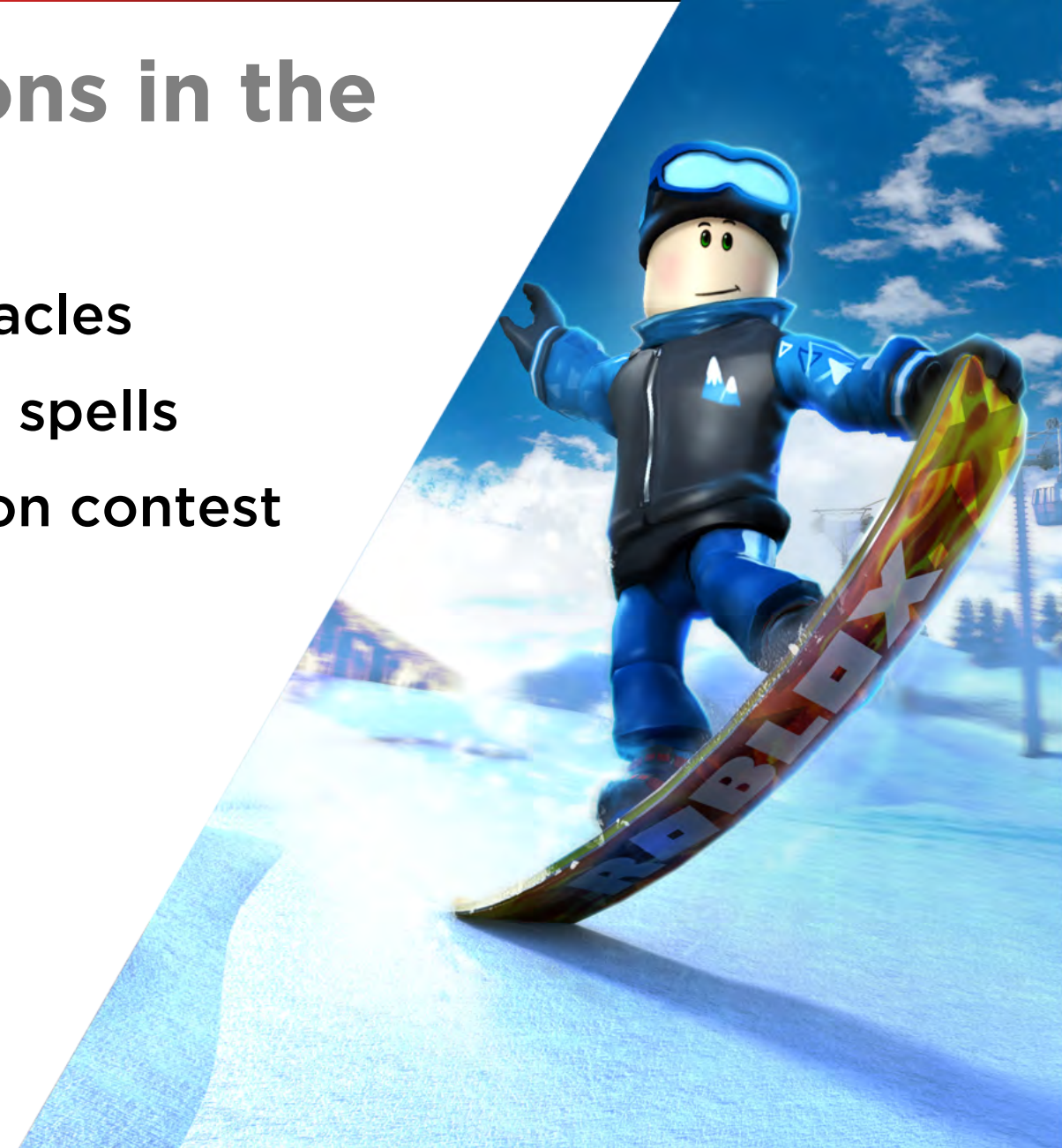
What Is The Theme And Player Fantasy?

- Kid goofing around in high school
- Fearless knight fighting against mythical beasts
- Architect building an amusement park
- Cops and robbers
- A guy who moves lumber around in a truck
- Race car driver



What are the player actions in the game?

- Running, jumping and avoiding obstacles
- Swinging a sword and casting magic spells
- Choose clothes & dress up in a fashion contest
- Constructing buildings
- Shooting and arresting bad guys
- Adopt and raise a cute baby



**Out of all of your
great game ideas,
why should you
make THIS game?**



Now I know what game I want to build...

Time To Start Documenting The Design!



Game Design Document (GDD)

Living document that evolves as you build your game

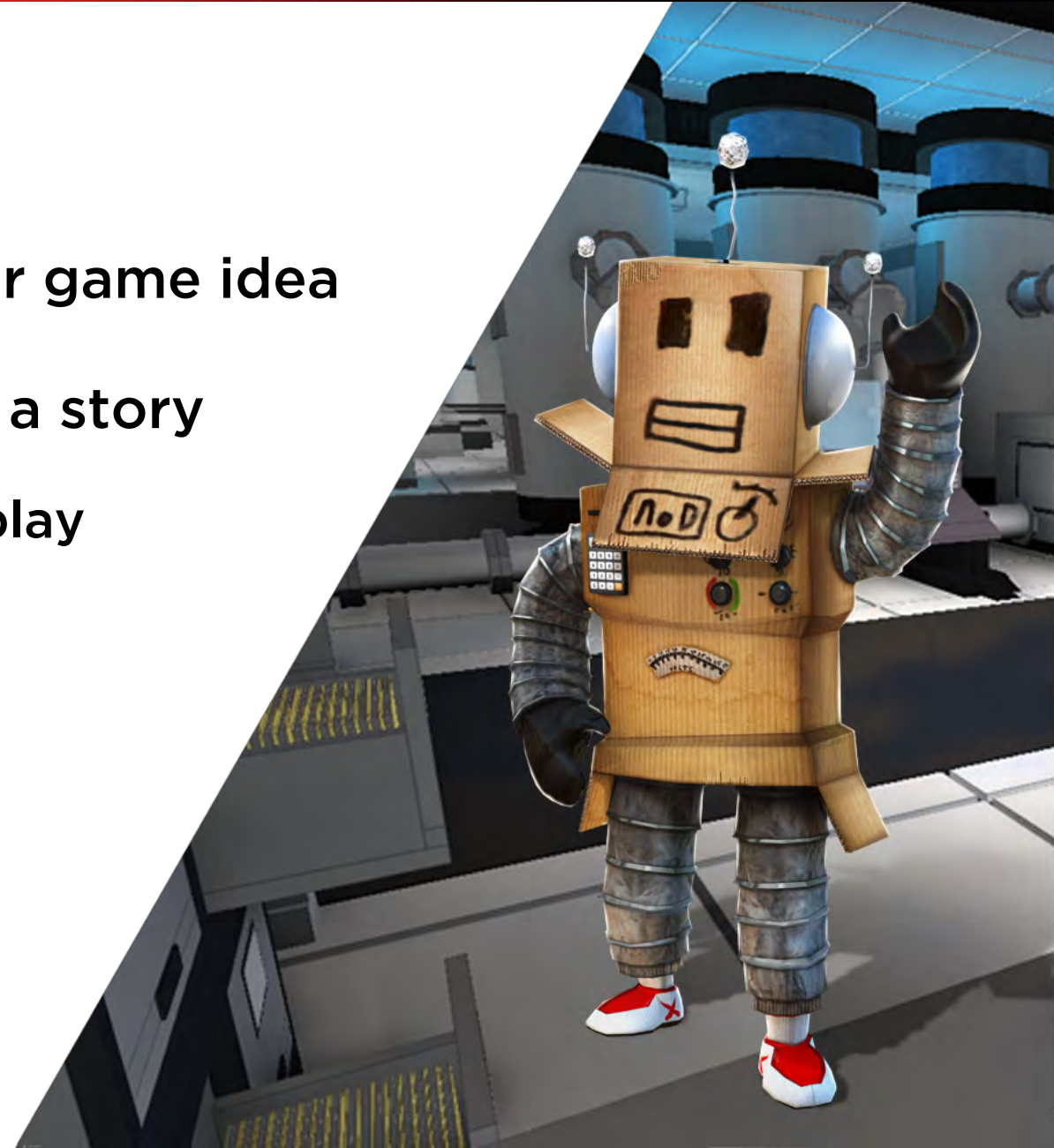
- Introduction / Overview
- Common Questions
- Gameplay Narrative
- Game Design Pillars
- Game Mechanics & Dynamics
- Player Progression
- Game Features
- Live Updates
- Monetization
- Live Updates





Gameplay Narrative

 You can use this tool to explore your game idea

 Narrative prose, as if you are telling a story

- Describe moment to moment gameplay
- What the player will experience
- What kind of emotional response(s) do you expect from the player?



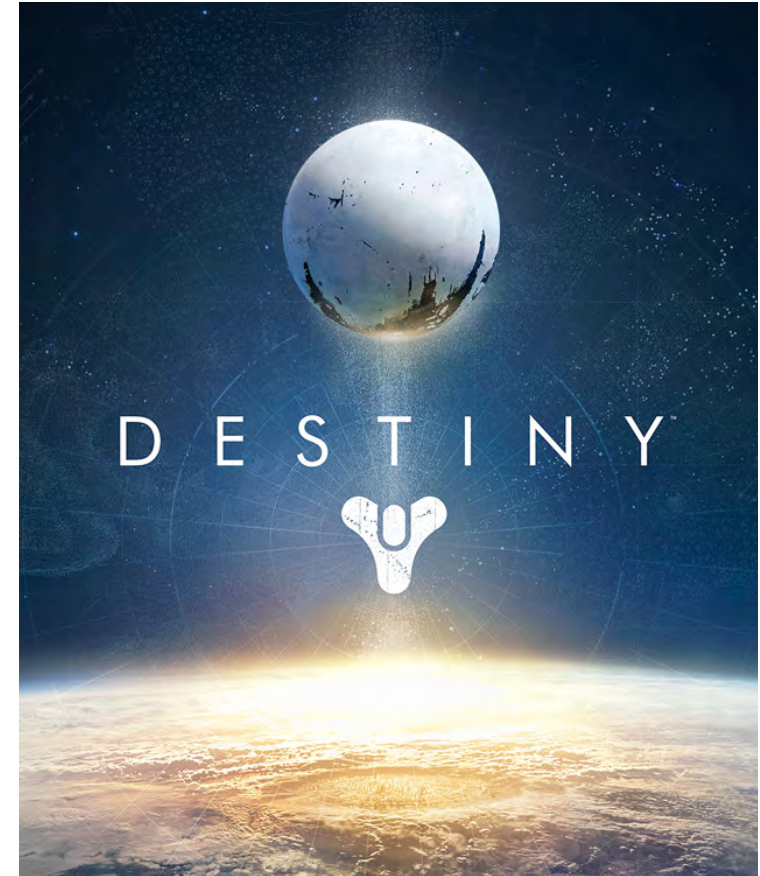
-  Overall design philosophy and approach for your game
-  What your game is and is not
-  Guides the entire design
-  Helps direct other team members

...Can go back & update if the design changed



Design Pillars Example - Destiny

- A World Players Want to Be In
- A Bunch of Fun Things to Do
- Rewards Players Care About
- A New Experience Every Night
- Shared With Other People
- Enjoyable By All Skill Levels
- Enjoyable By The Impatient And Distracted



Game Features

List out the core features of your game:

- 50 Player Servers
- 10+ Mini-games
- Build and Customize Your Base
- Variety of Vehicles
- Enemy NPC's
- Currency System and Item Shop



Game Mechanics

- The agents, objects, elements and their relationships in the game
- They define your game as a rule-based system, specifying:
 - What there is
 - How everything behaves
 - How the player interacts in the world

Game Dynamics

- Interactions with the game systems and other players
- Emerge as a result of the Game Mechanics and game content

Shooter Mechanics

- Character Movement
- Health
- Cover System
- Weapons
- Ammunition Types
- Damage
- Spawn points

Shooter Dynamics

- Camping
- Sniping
- Hiding
- Cooperating



I have a first draft of my design document...

What's my plan to build the game?

Plan Ahead! (This Could Be An Entire Talk...)

How long do I want to take to build the game?

- Set some goals and target dates to achieve them
- Will help you track whether you are on schedule

Will I make this game by myself, or with a group of devs?

- What are my own strengths and weaknesses?
- What additional people do I need to make this game?

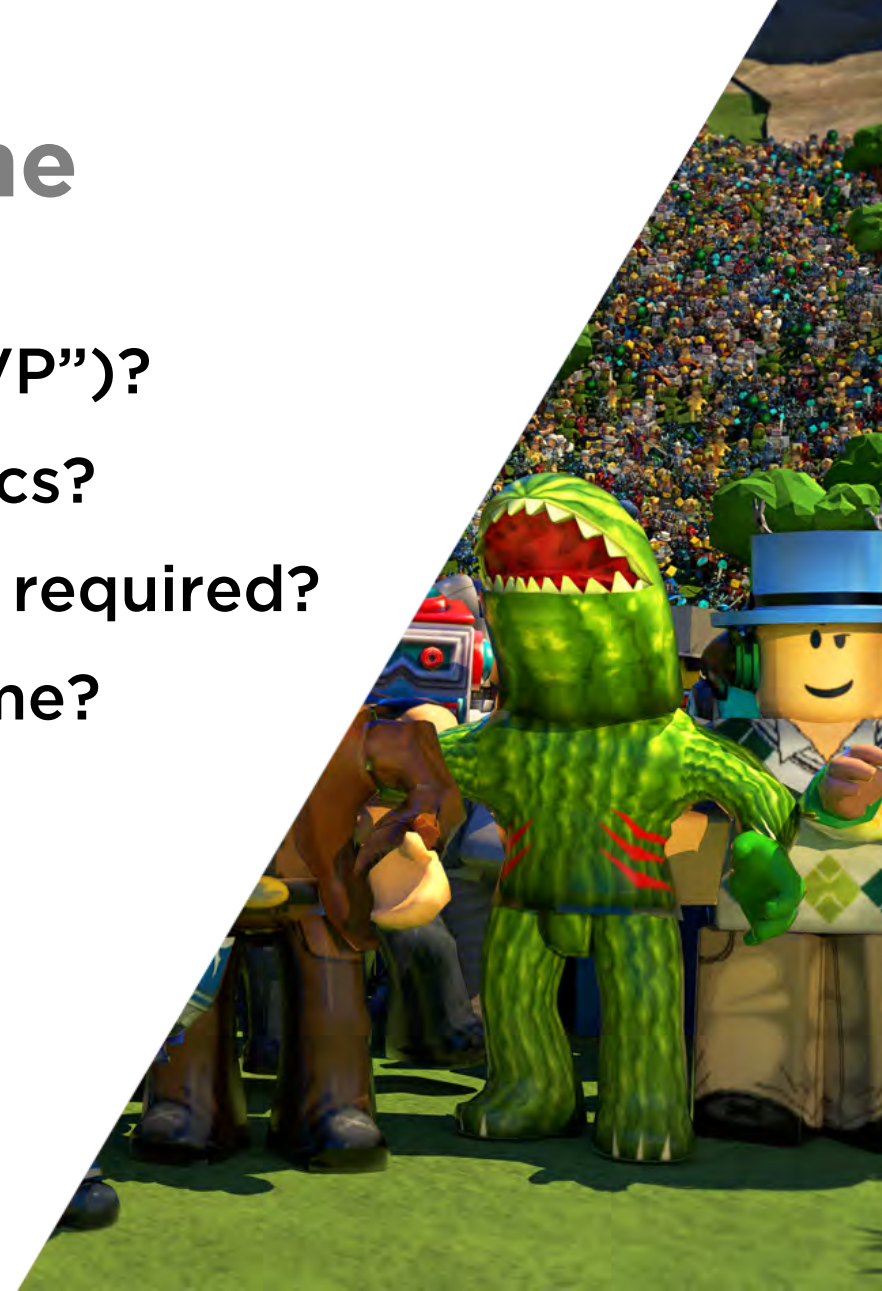


#1 REASON PROJECTS FAIL TO SHIP

The scope is too big!

Manage The Scope Of Your Game

- What is your Minimum Viable Product (the “MVP”)?
- How long will it take to build the core mechanics?
- How much game content and art assets will be required?
- If you had to, what could you cut from the game?



What Tools Do I Need To Build The Game?

Helpful software tools to manage and build your project include:

Roblox Studio:

Studio Plugins

Documentation:

Google Docs or Wiki

Project Management:

Trello

Communication:

Discord/Roblox Chat

Find Team Members:

Dev Forums/Twitter



I'm ready to start building some stuff...

Use rapid prototyping to test ideas!

Tackle Risks Up Front

- Is there a new game mechanic that no other game has tried?
- Is there a new piece of technology that you haven't built before?

...These Are RISKS!

- Work on the most risky features first
- Some of the risky features may not work out
- Easier to adjust the design earlier in the project



Finding The Fun

- Get the game mechanic(s) up and running
- Get the controls feeling good
- Don't worry about the art, use temp assets
- Fail fast
- Test early, test often
- Keep iterating until you find the fun!

...make a game that you have fun playing



I've got some cool game mechanics...

How do I keep players engaged?

Design And Architect Your Game To Be Easily Tunable

- Need to be able to react to feedback quickly
- Avoid hard coding, use tunable variables
- Can include global, per class and per entity/item

Example - Enemy Health:

- Global - Adjust health for ALL enemies
- Class - Adjust health for the zombie enemies
- Entity - Adjust health for 1 specific zombie type

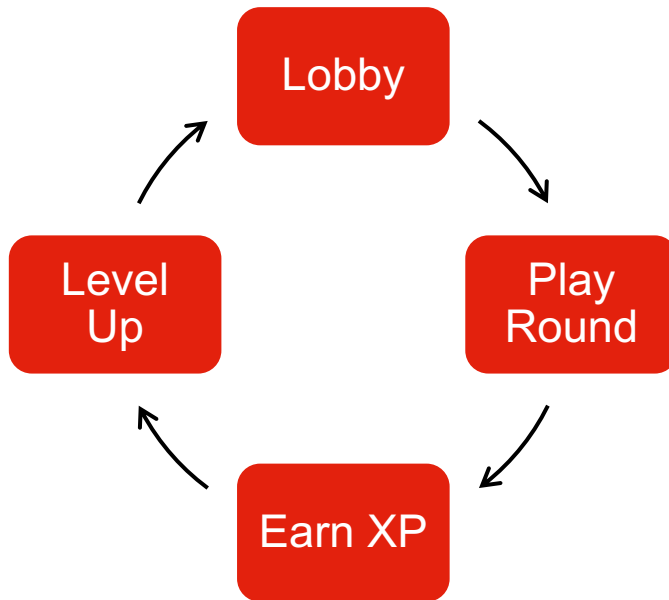
**COMING TO
ROBLOX:**

**Cameras and
Controls with
Tunable
Parameters!**





What Is The Core Loop?



- Map out your core loop
 - Group of activities that a player goes through and repeats within the game
- How long is a single game session?
- How fast can players make progress?
- Consider the platforms you are targeting



How does the player progress through the game?

-  Is there a tutorial at the beginning?
-  Do players earn currency and/or XP?
-  Do players gain access to or unlock new content?
-  Try to give the player goals to reach for at all times

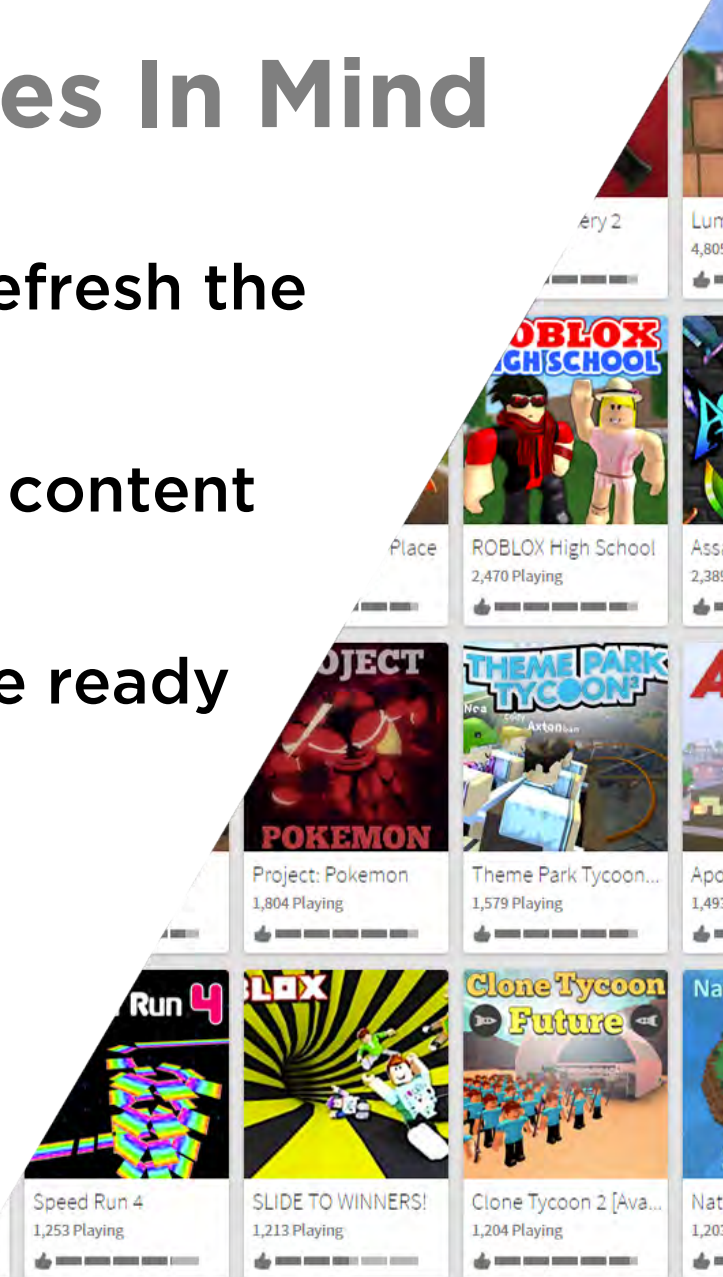


Design Your Game With Live Updates In Mind

In order to keep players interested, you will need to refresh the content after its released

- Design and architect the game so it is easy to add content
- Anticipate the demand
- Front-load some of the content creation so you are ready

...and when you go live, check your data often



Monetization



Design your monetization up front as you design your game!

If your game is already in beta or close to being finished, and you are now thinking about how to monetize, it may be too late

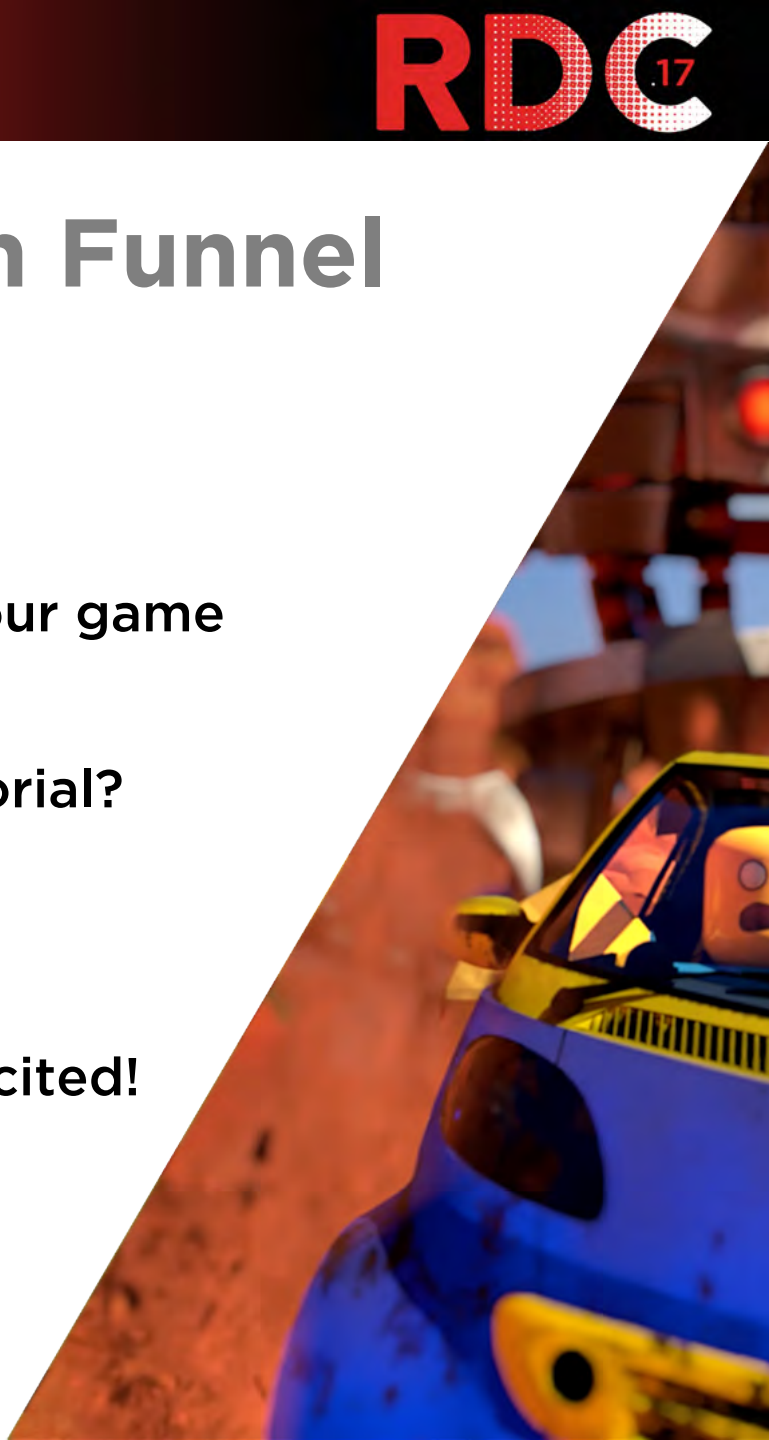


For more info on this...

There is a Monetization session at RDC!

Tutorial Helps Players Get Through Funnel

- Some games on Roblox can be difficult to learn at first
 - This can lead to players getting frustrated and leaving your game
- Is there a way to teach the game without it feeling like a tutorial?
- If you add a tutorial, always add an option to skip it
- Just make sure you open with a BANG and get the player excited!



User Testing And Beta Testing

Test your game with a small group of players, before your big launch!



Friends and Family



Other Roblox Developers & Forums



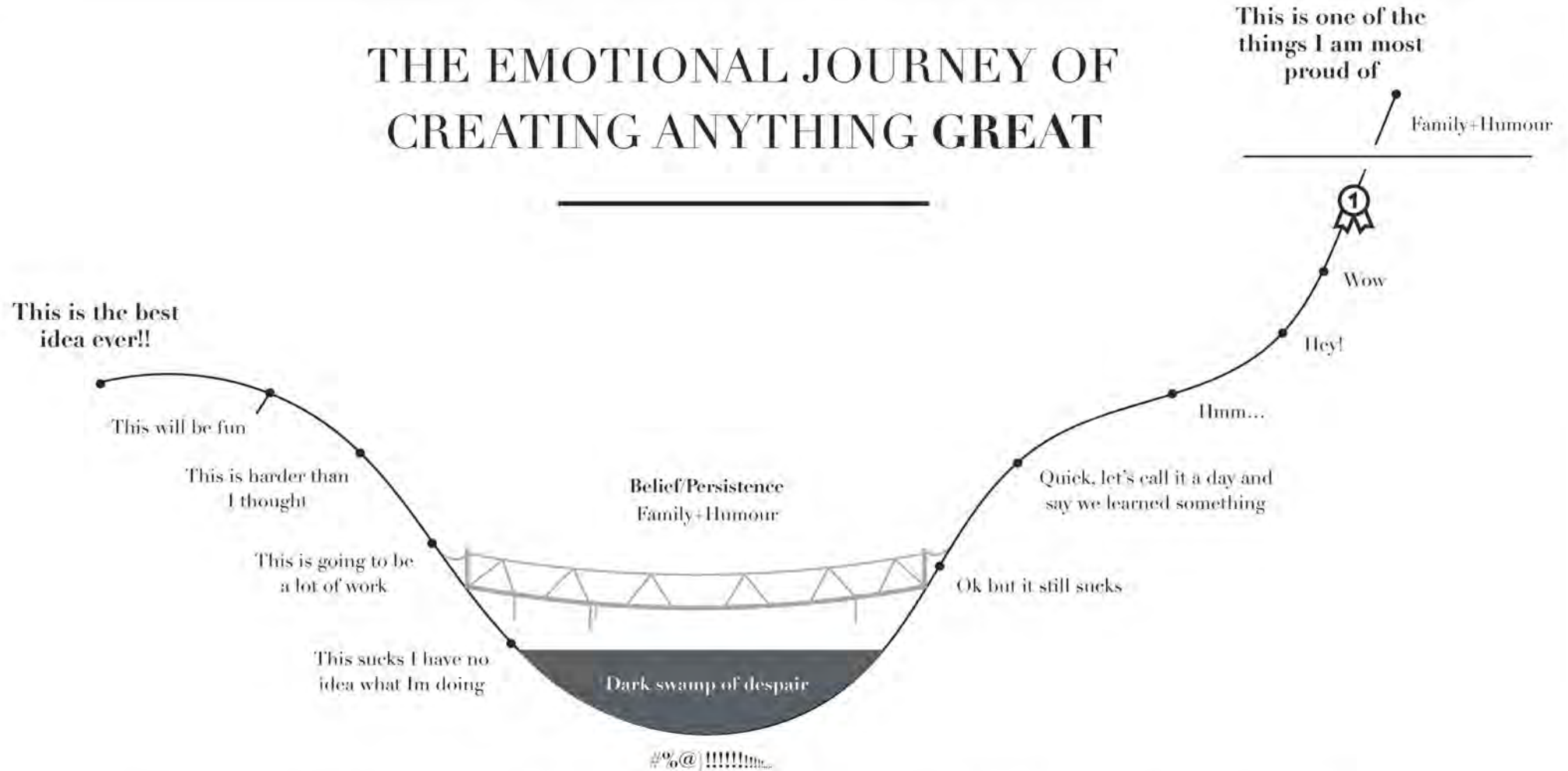
Fans and Social Network Followers



Soft Launch - Beta Testing



THE EMOTIONAL JOURNEY OF CREATING ANYTHING GREAT



THE EMOTIONAL JOURNEY IS INEVITABLE AND PERHAPS NECESSARY



Questions?



Michael “Rototally” McHale



@robloxtotally