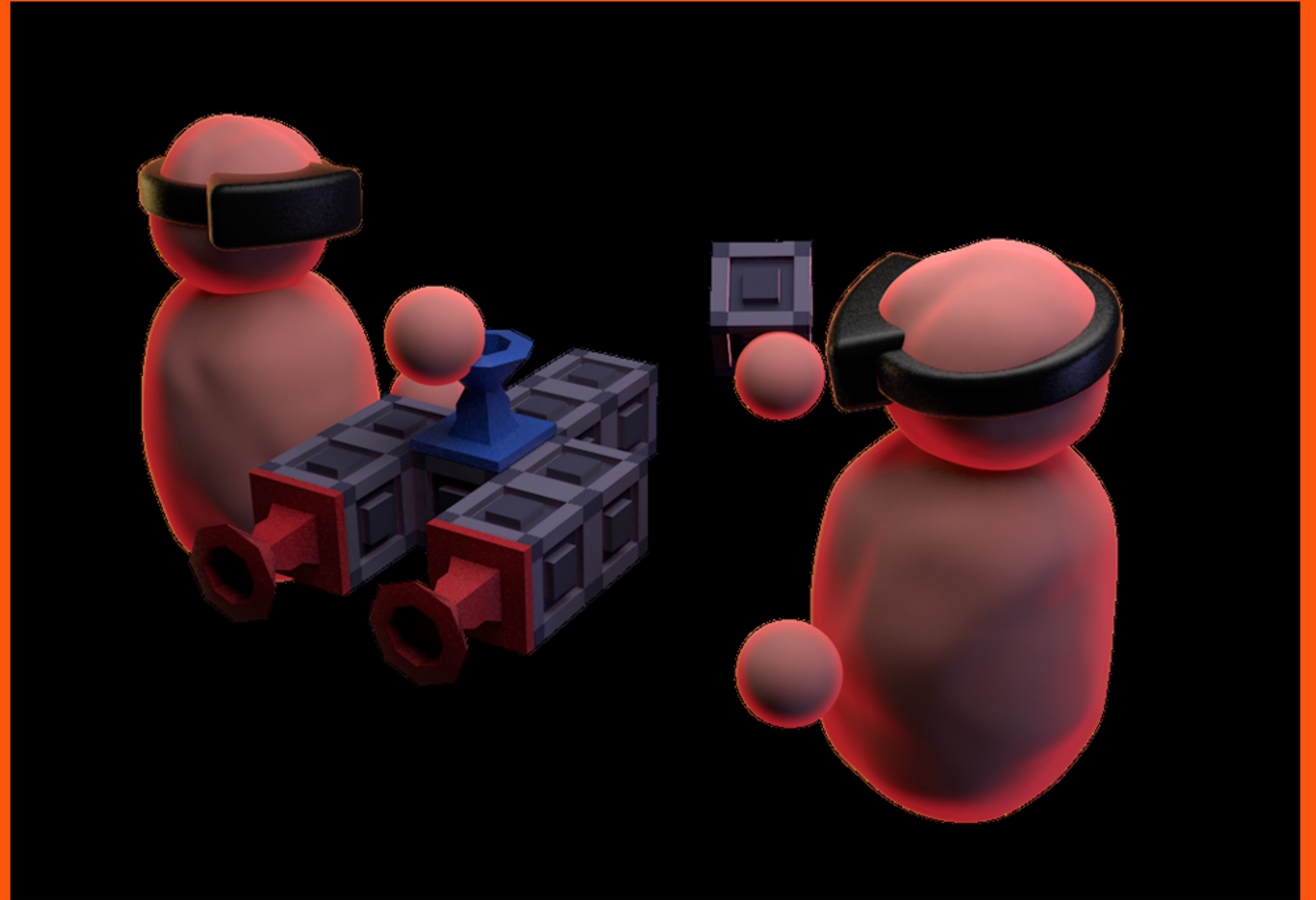




SHIP IT

*A Collaborative VR
Problem Solving game*



*this asymmetric two player game presents a series of obstacle courses, navigated by building and piloting a blocky space ship. Leveraging affordances of VR and constructivist approaches to learning, **Ship It** challenges users to iterate quickly, communicate effectively and think creatively.*

WHY?

Why education?

Why VR?

Why don't you just play Minecraft?



EDUCATION & DEVELOPMENT

EDUCATION & DEVELOPMENT

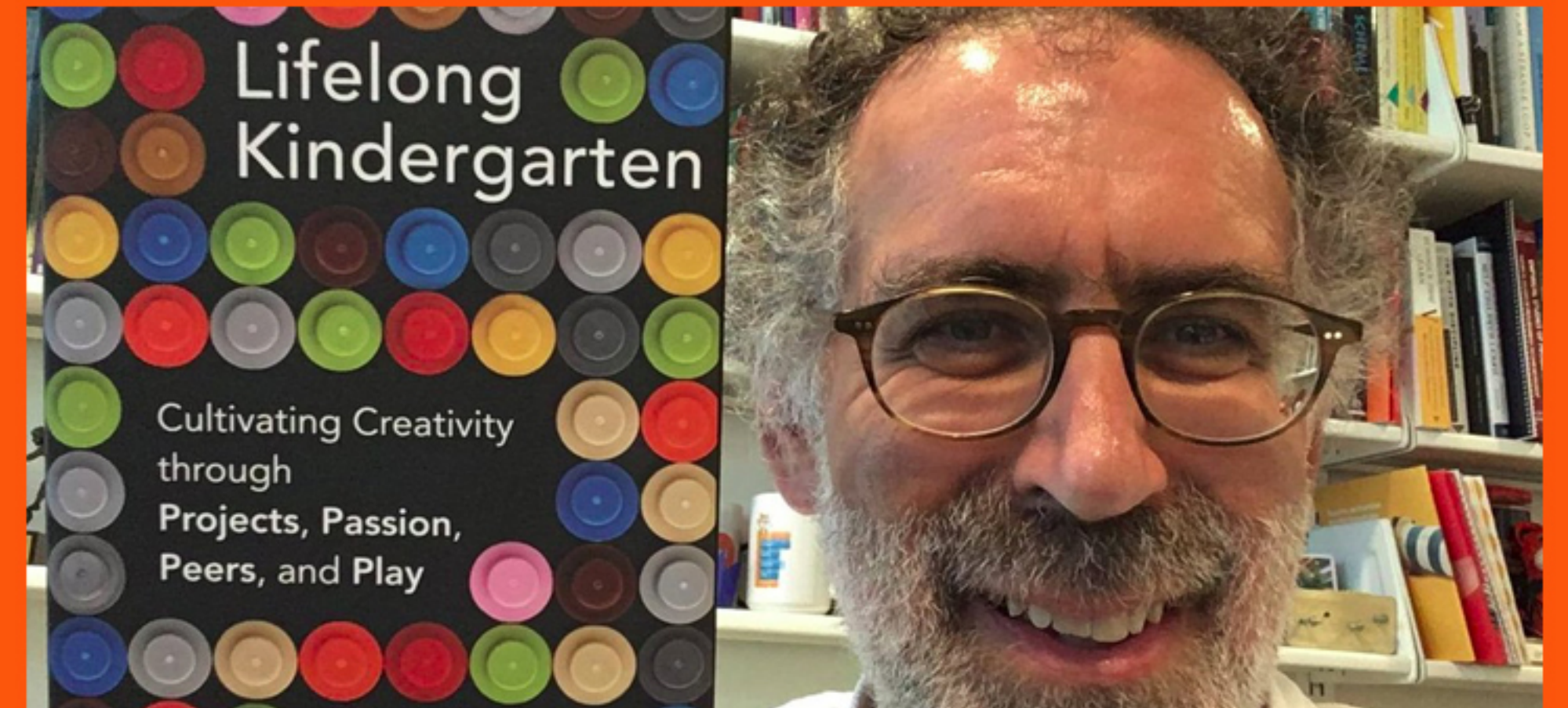


Exploration & action driven learning

production over consumption

Communication & conflict as learning tools

Imagine - Create - Play - Reflect

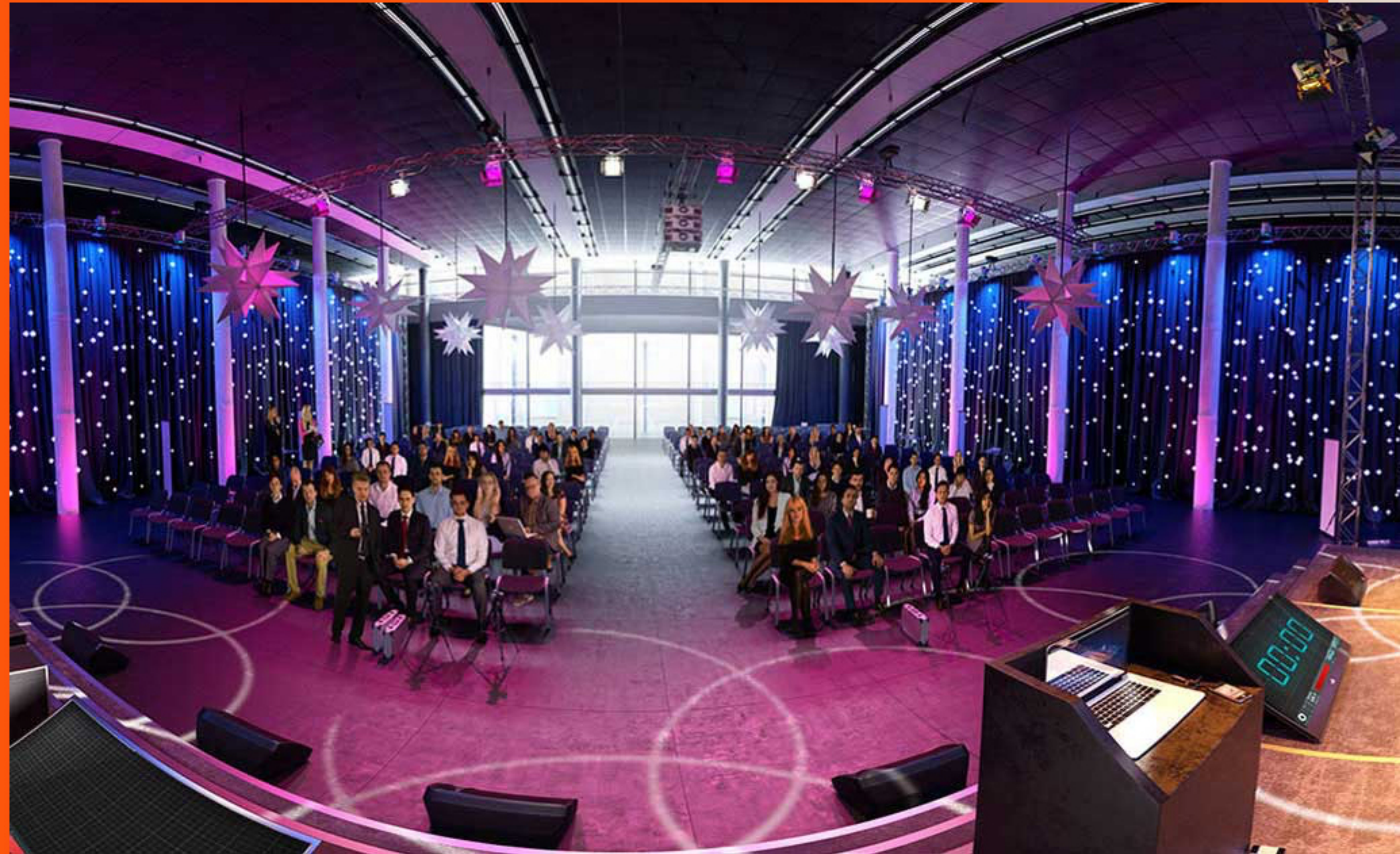


VR

Affordances for education

Social Connectivity

“Safe” non-material environment



**WHAT
EXISTS?**

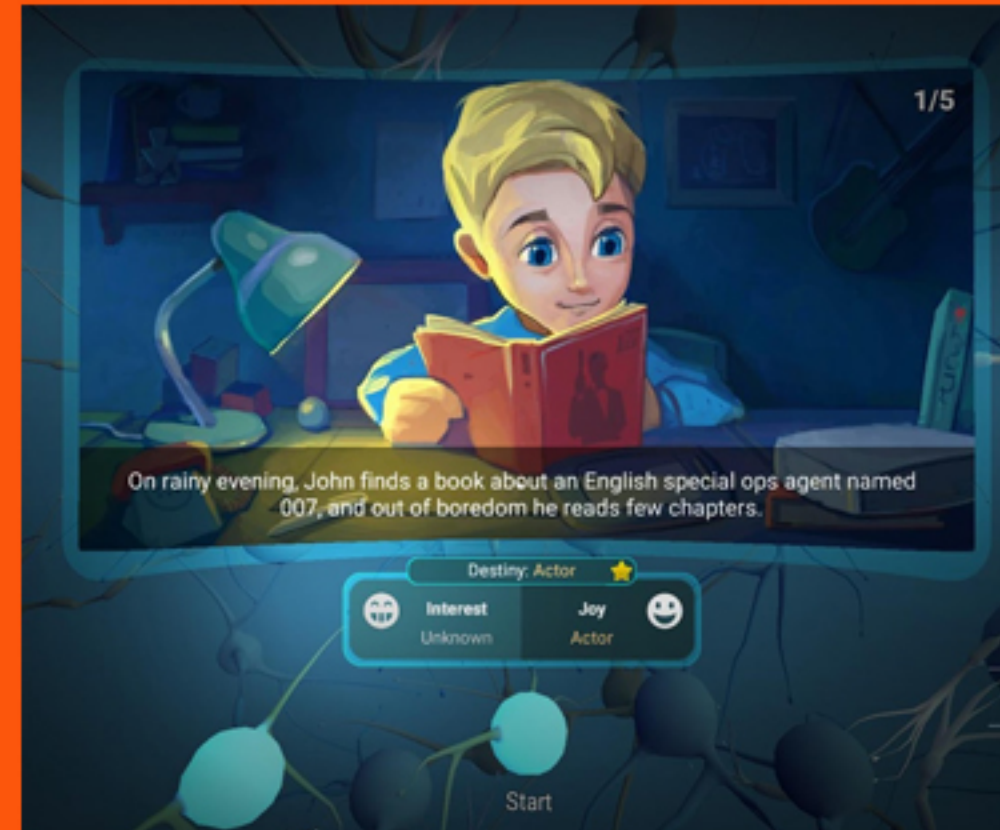
WHAT EXISTS?

VR edutainment

History Sims

Digital Field Trips

STEM learning tools



WHAT EXISTS?

Minecraft



Infinifactory

Legos

Fantastic Contraption



WHAT EXISTS?

Keep Talking & Nobody Explodes

Black Hat Cooperative

The Diner Duo

Playroom VR



HOW'S IT'S DIFFERENT

Learning as a core mechanic

Production over consumption

Combination of construction and collaboration

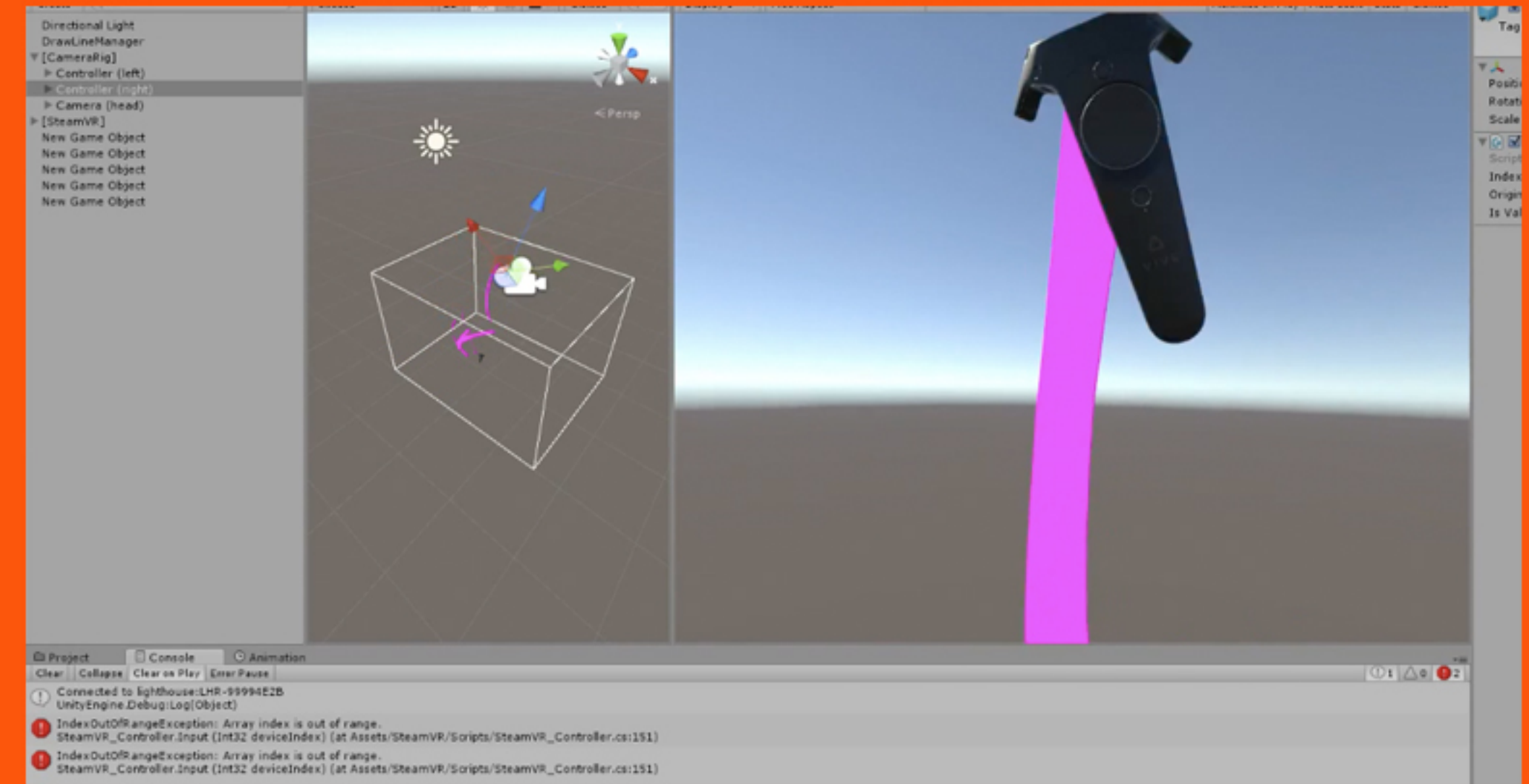
Imagine - Create - Play - Reflect

PROCESS

VR Meeting & Collaboration Space

Too unconstrained

Already been done



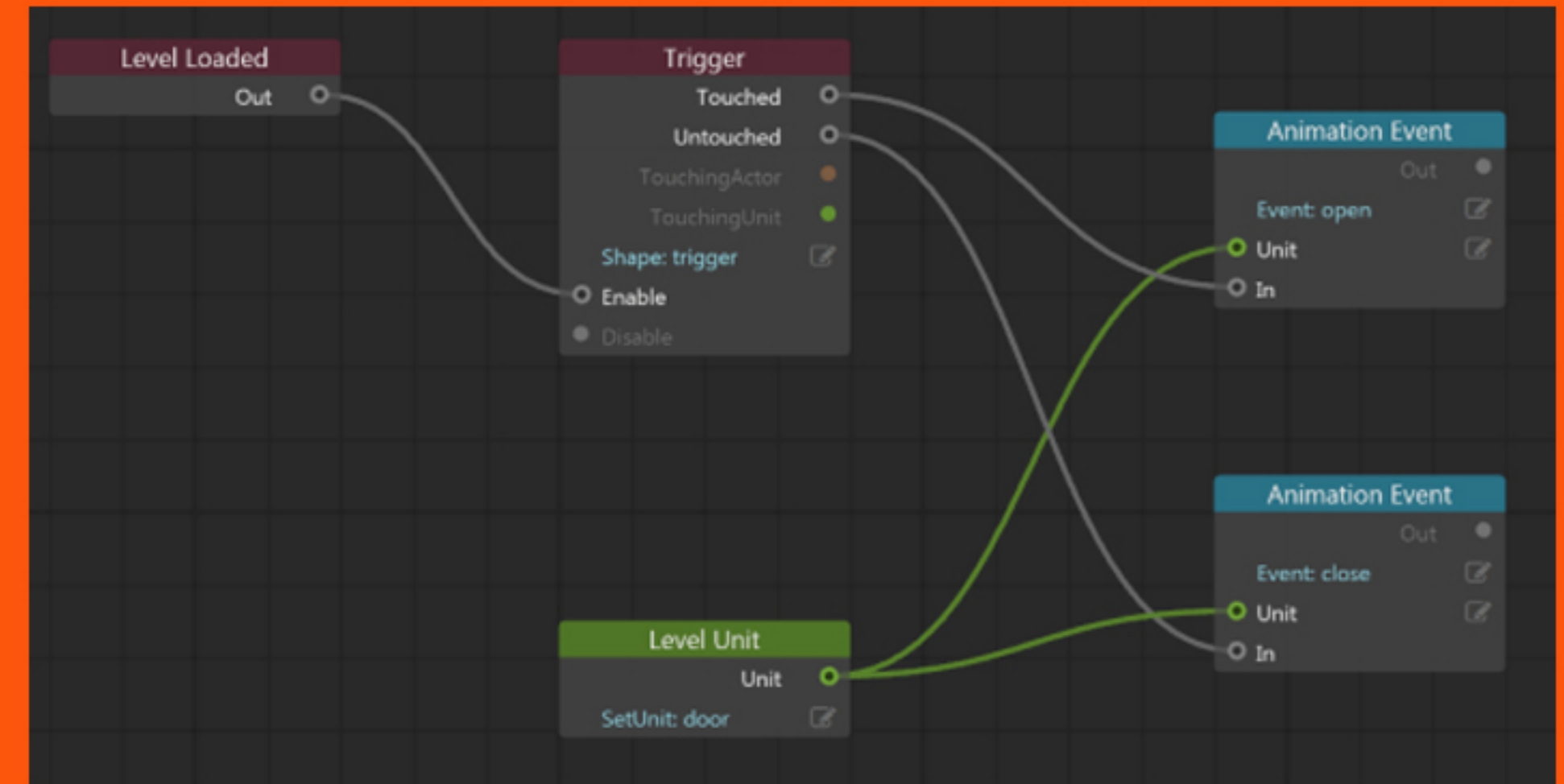
PROCESS

Physical programming game

I'm not a strong programmer

Already been done

Too big in scope



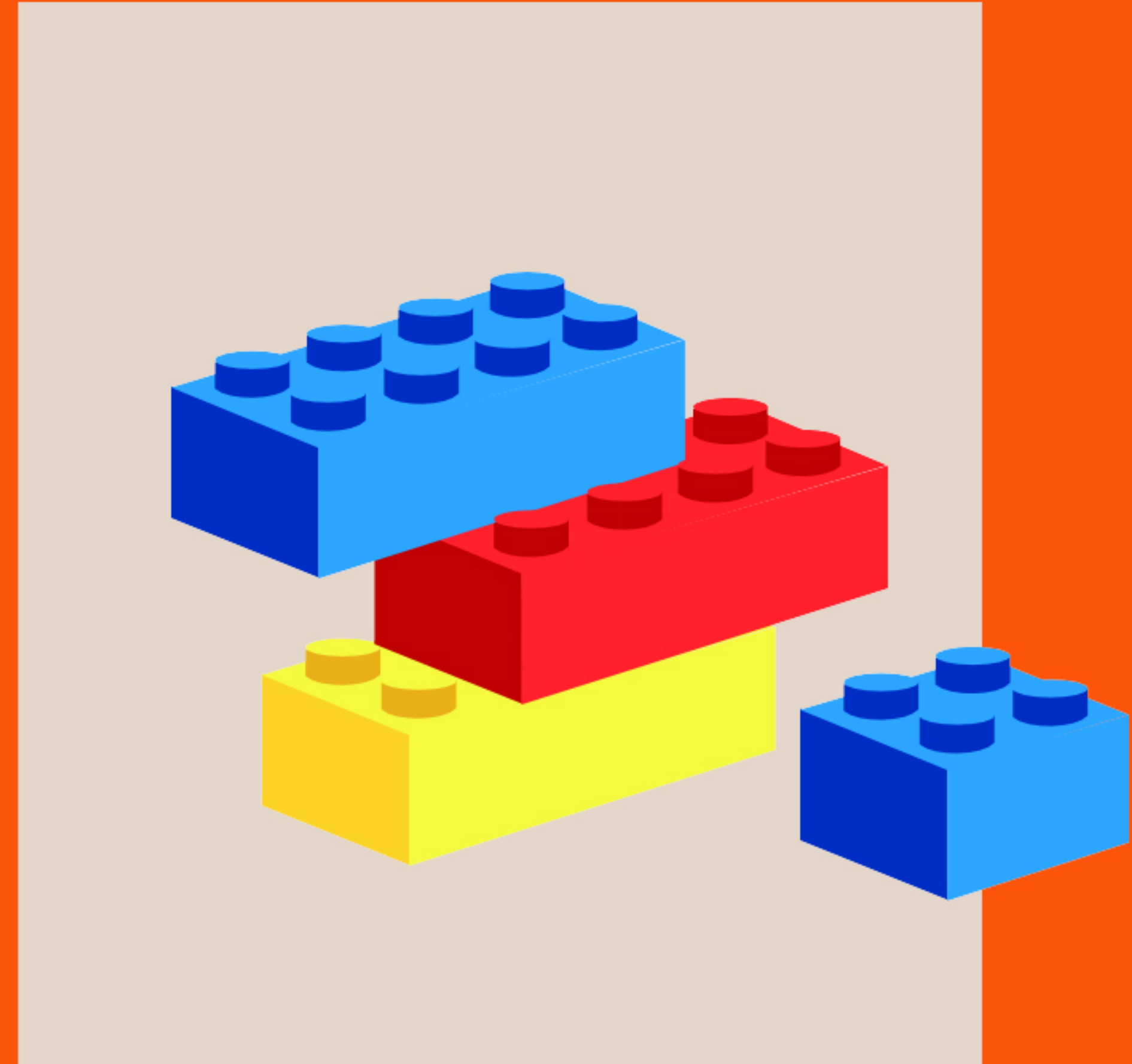
PROBLEM

Trying to solve too much

Too hung up on trying to be original

Lacking constraint for ideas

Need to focus a specific design goal



SNAPPING BLOCKS TOGETHER



WORK TOGETHER

Multiplayer problem solving game

*Each player has information/resources/abilities
that the other relies on but cannot directly access*

Problems are open ended and whimsical

*Learning by doing reinforced by
time and communication constraints*

SHIP IT

*Space physics problems solved
by building and flying a ship*

2 player (or maybe more)

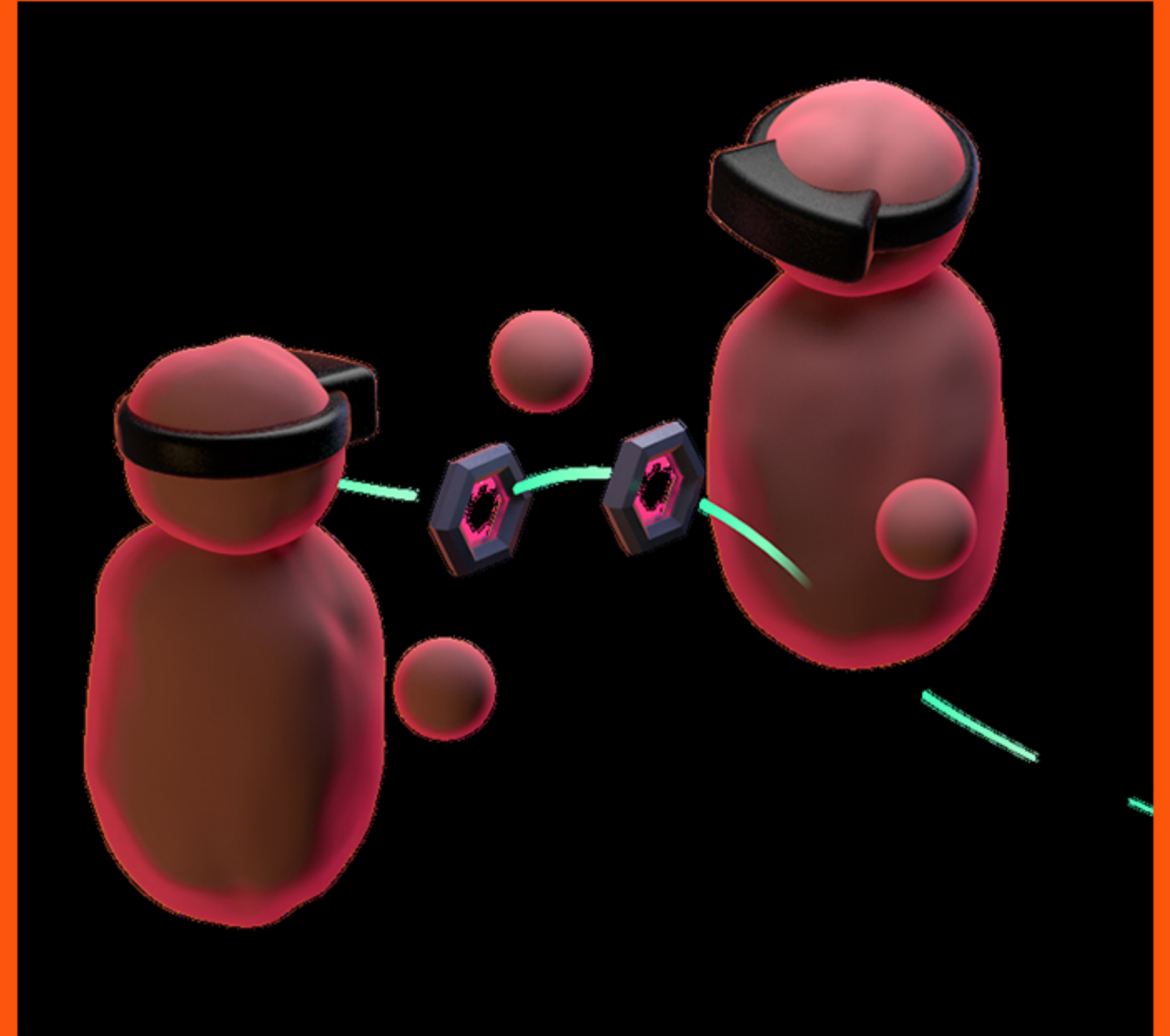
3 stages of process

1. PLANNING

Players observe map and discuss their plan

No access to the building tools yet

Ends after a short period of time

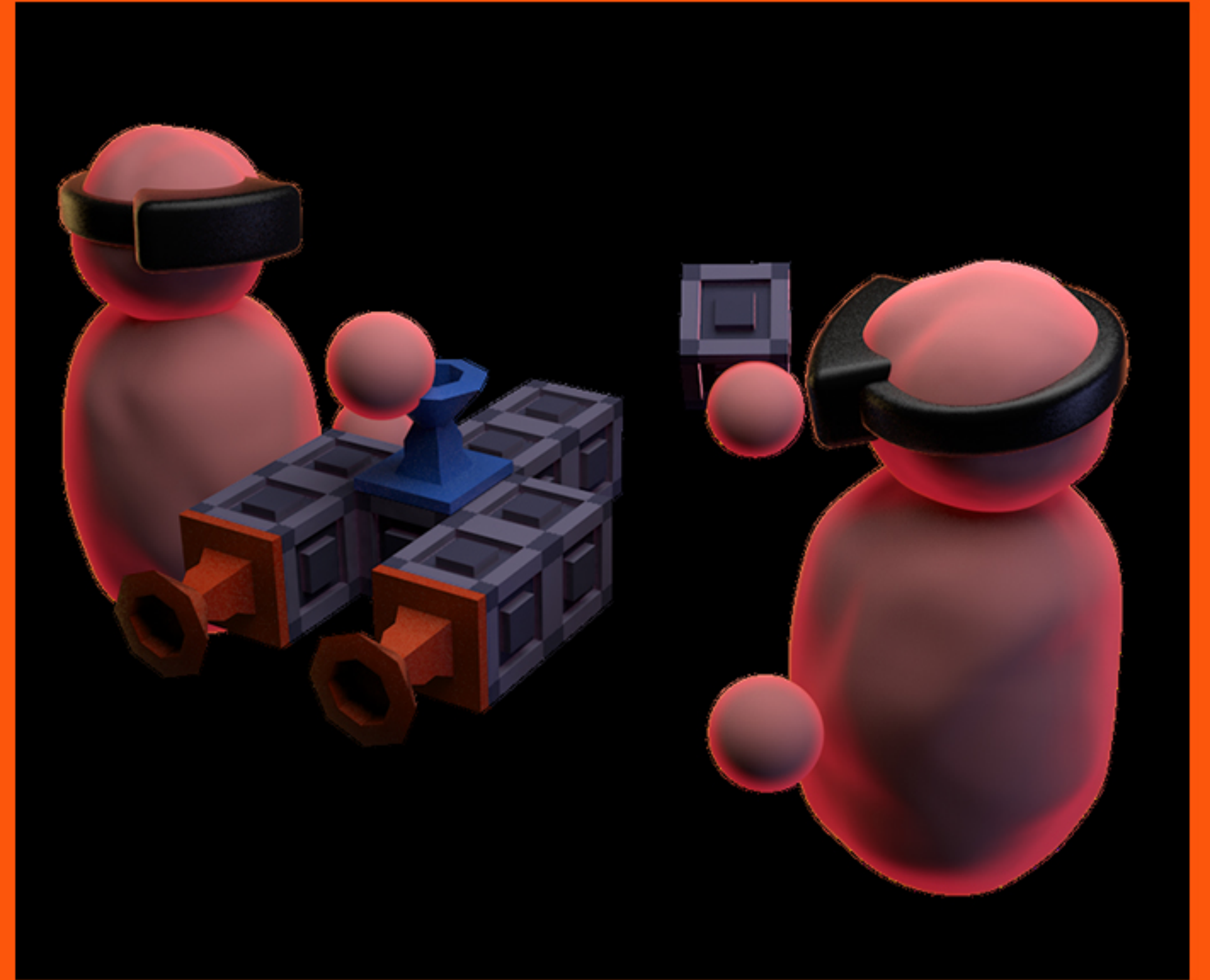


2. BUILDING

Players are given tools to build their ship

Verbal communication is cut off

Ends after a short period of time

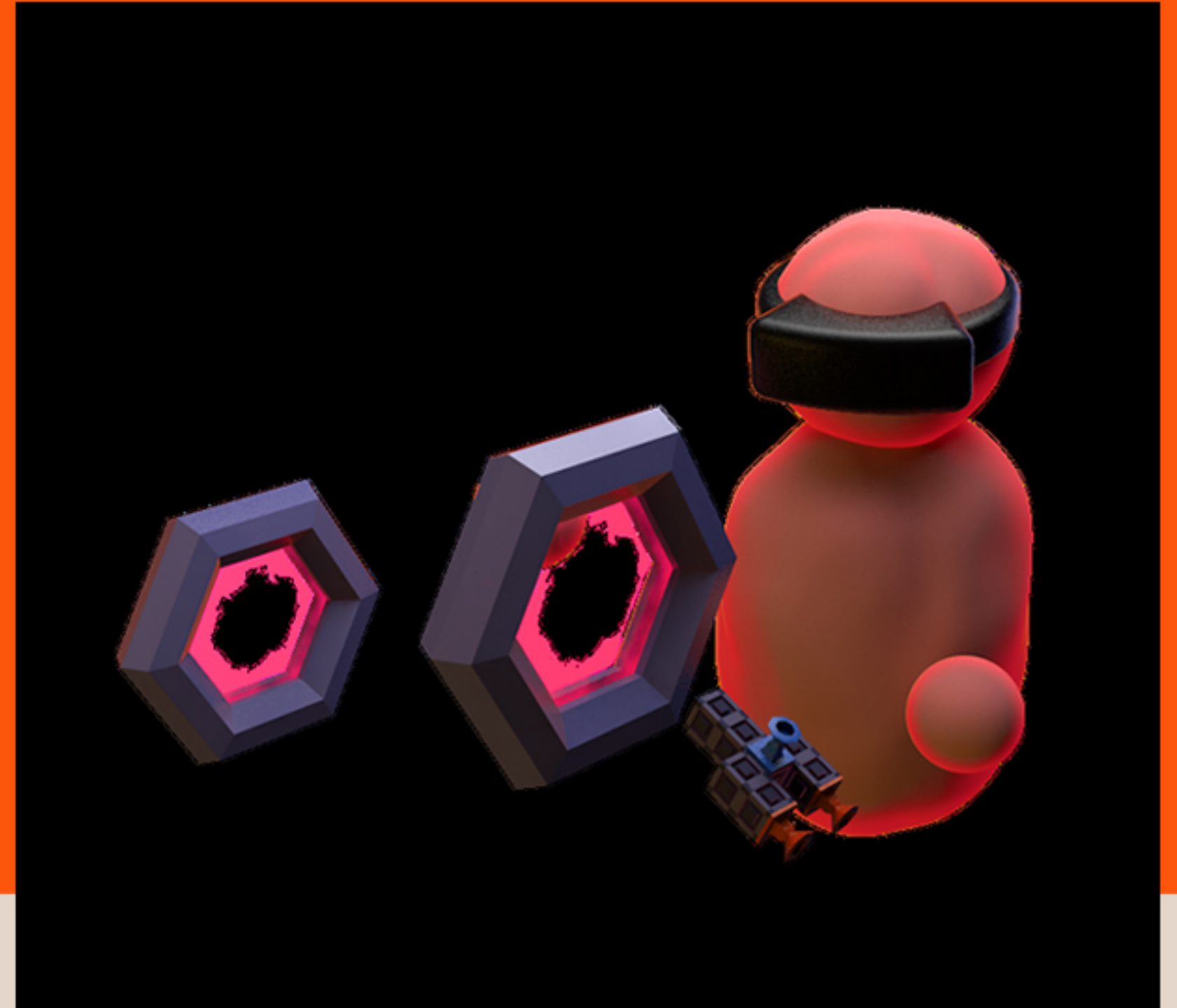
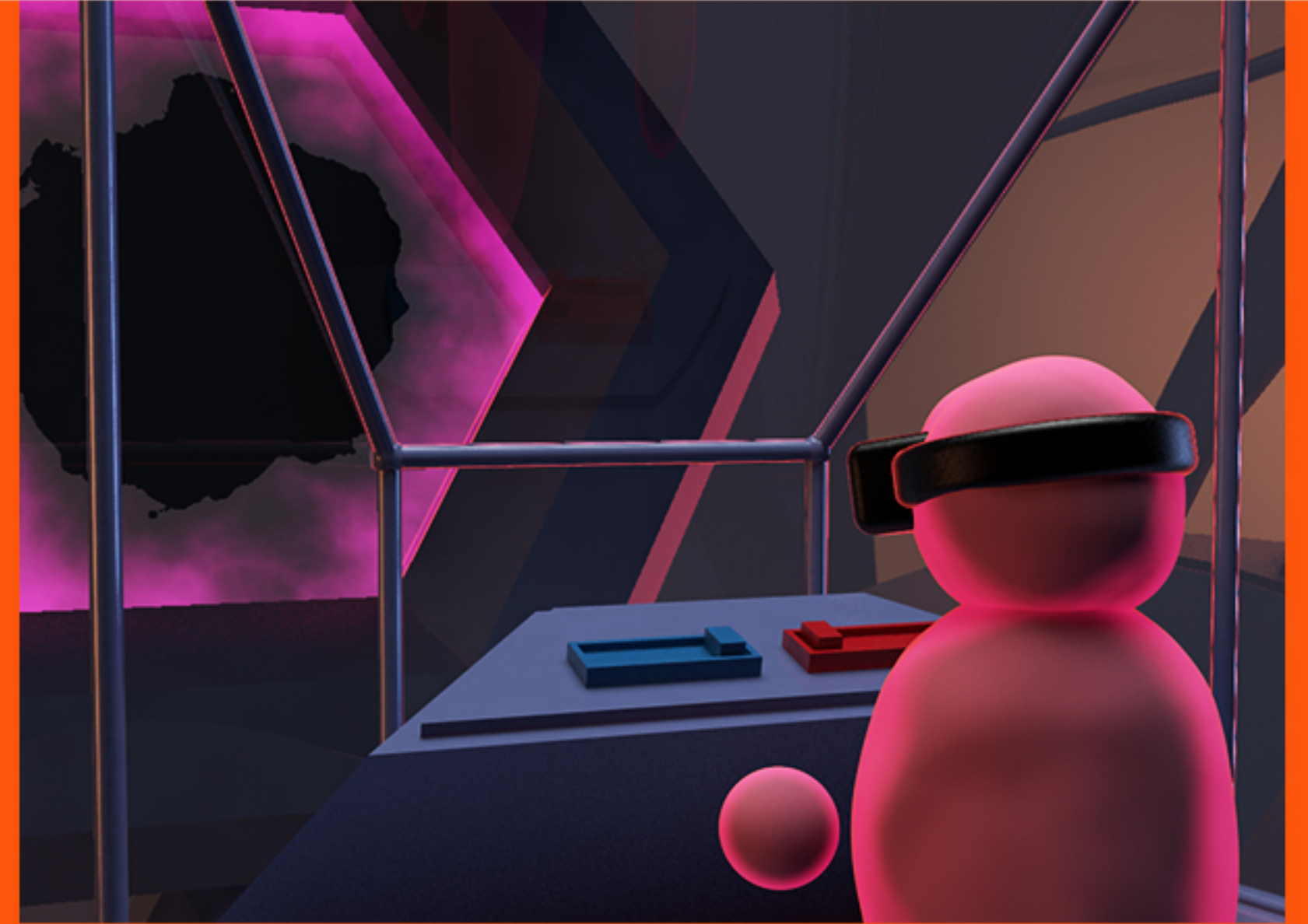


3. EXICUTION

Verbal communication is restored

One player pilots ship with limited, first-person view

The other player has a bird's eye view of the map, but no access to controls



& REPEAT

*Subsequent planning stages show past attempts
and points of failure to suggest reflection*

*Quick segments of play encourage trying new
ideas and iterative design approaches*

Player roles switch

DEMO

Snapping blocks

Thrust physics

Dynamic center of mass

VR implamentation

test controls

NEXT STEPS

Multiplayer mechanics

Complete game loop

Creatively challenging level design

UI for ship controls

Polish

FINAL THOUGHTS

Not end all solution to education

Step towards exploring creative tools and games

Interest in working with educators and students in the future

THANK YOU