

DISplay: Collaborative Play Environment for All

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Bioengineering, Mechanical Engineering, Industrial Design, Human Centered Design & Engineering



HUSKYADAPT

Accessible Design & Play Technology

“children learn to engage and interact with the world through play”

- Lev Vygotsky

OUR CHALLENGE

Very few games on the market are made accessible to kids of all abilities. This means many of them **miss out on a chance to play and learn**. There are even fewer opportunities within a shared play environment making chances for collaborative play are significantly decreased.

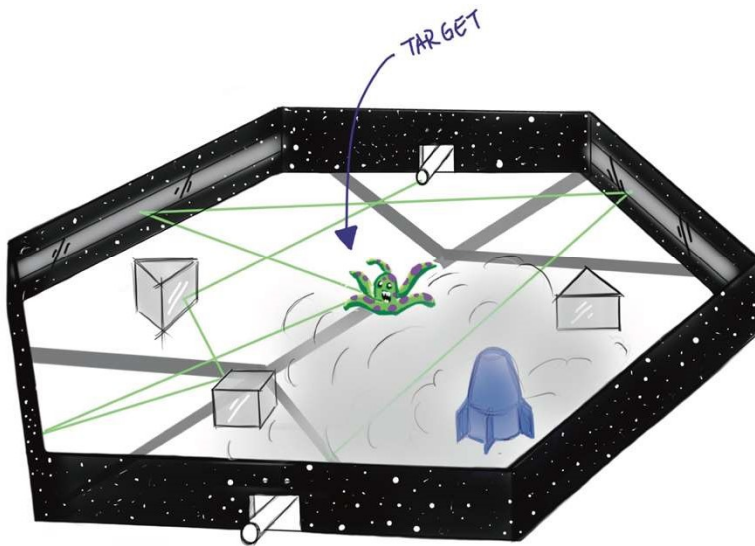
OUR MISSION

Because children of all abilities deserve to play, learn, and collaborate, we adopted a modular, flexible game platform to design an **inclusive** activity that ensures all kids enjoy the benefit of child's play.

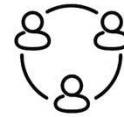
Why is this important? Being able to play and collaborate with others at an early age helps develop intuition and social skills.

OUR IDEA

An exciting **laser game** that encourages collaboration among players.



Core Functions



Collaboration
lasers can't be seen without one person to control the smoke machine and one or more people controlling lasers



Modular input methods
accessible to children of all abilities



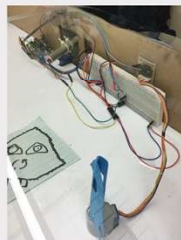
Motorized components
children can control pieces of the game within the abilities they can perform

What is the platform sitting on?



flexibility in all directions
height adjustable

What's making it work?

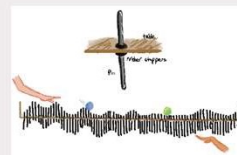


arduino:
motorizing lasers
& obstacles



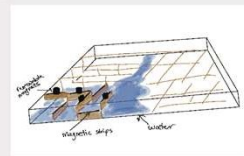
smoke machine:
making the laser beams visible
by scattering the light

Future possibilities?



PIN ART

WATER FLOW



COLLEGE OF ENGINEERING
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