

Magie Orchestra

Brain training activities

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Stakeholders

01

People
with and without NDD
(Primary Users)

02

<u>Caregivers</u> like therapists or teachers (Secodary Users)

03

Family of people with NDD which participate to the activities

04

i3Lab people
Researchers
And specialists

Context

Multi-sensory interactive smart physical indoor space in schools and therapeutic centres

Goals for the primary users

Goals for the <u>secondary</u> users



Create multi-sensory and game-style activities for brain training



Support the <u>customization</u> of the activities by therapists and teachers



Create <u>predictable</u>, <u>controllable and safe</u> activities to have fun and chances to play, explore and be creative



Create brain training activities that can enrich the analysis and work of researchers with different scenarios and situations

Constraints

01

Inability to have all the literature about brain training exercises specifications

02

Limited precision of the technology used to detect the user's gestures and movements

03

Game content must be <u>scalable</u> in order to fit different sizes of smart rooms

04

Each training task should take approximately at most 10 minutes to complete

What is Magie Orchestra

Activities

InstruMaps

Visual memory
Upper-body interaction



Quanti numeri!

Short term memory
Interaction with RFID reader



Sinfonia di luci

<u>Visual spatial</u> memory Walk-around interaction



No-context

Index pattern

Context

Index pattern or Guided Tour pattern

Magie Orchestra

Senza contesto



Contesto

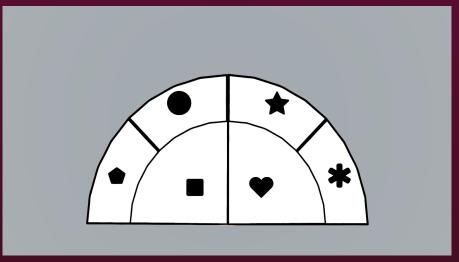
🛑 InstruMaps

Quanti numeri!

Sinfonia di Luci

Gioca

InstruMaps





No-context

Context



Quanti numeri!

2

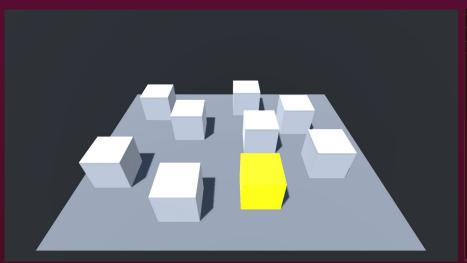


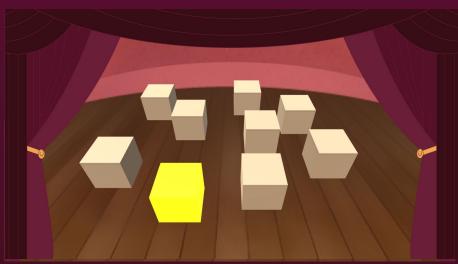
No-context

Context



Sinfonia di luci





No-context

Context



Torna alla Home

Instru Maps



Torna alla Home

Quanti numeri!



Gioca

Torna alla Home

Sinfonia di Luci



Value Proposition



Engagement





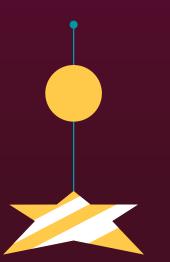
Customization



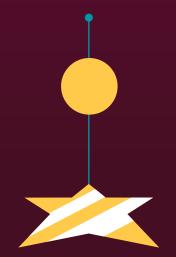
Embodied interactions

Future Works

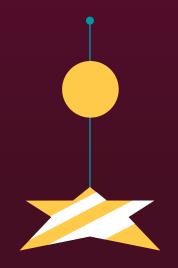
Caregiver's tablet interface



New game mode for InstruMaps



More control flow for each activity



Grazie!