

BASE PACK FOR CUBITO

2025.1

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WHAT IS NEEDED?

Please make sure the PC where you want this module to be active have VAST.Rehab Patient Panel installed and that the following hardware requirements are met:

- Windows 10/11
- Intel Core i5 (8th gen or newer). Important: Avoid ultra-low-power versions (e.g., i5-8250U), as they may not meet performance requirements. Prefer standard or high-performance CPUs.
- Minimum: 8 GB RAM (16 GB or more recommended for optimal performance).

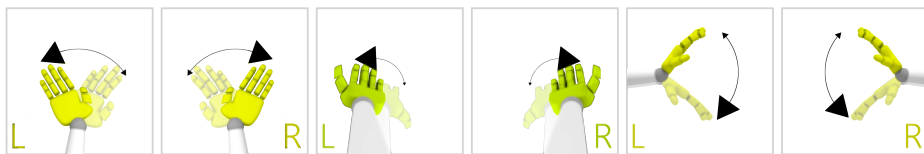


RANGE OF MOTION

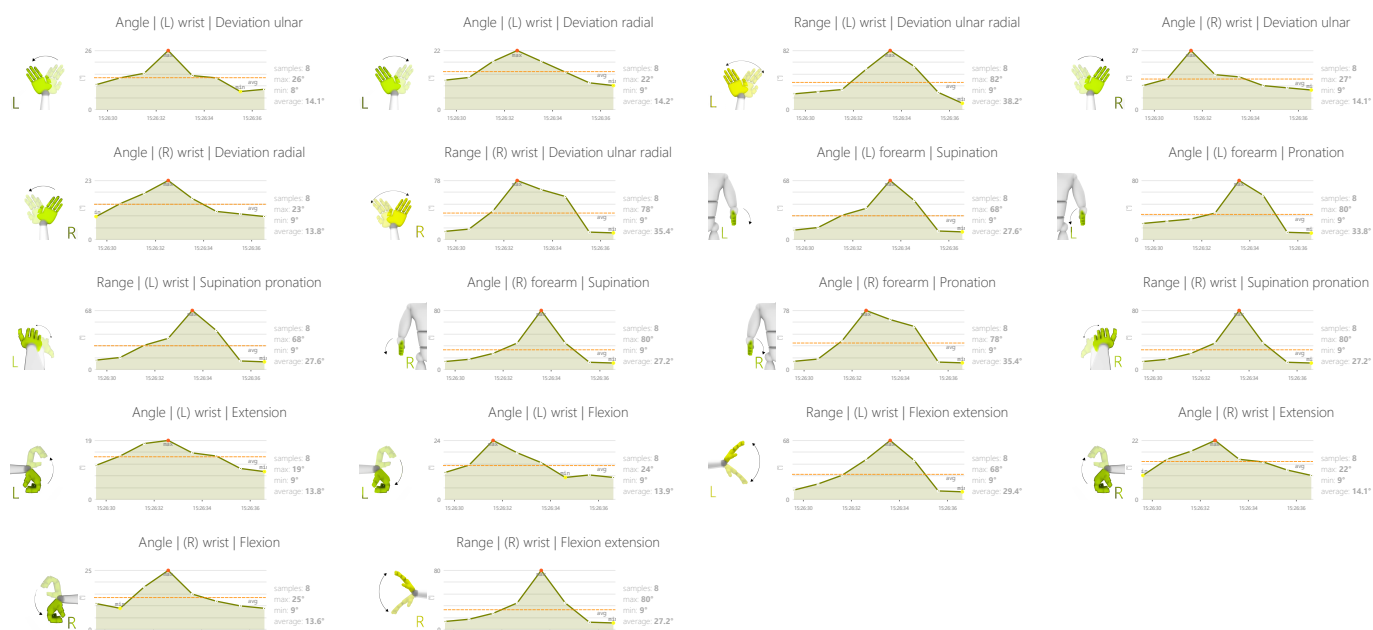
ANGLES EVALUATION

Measure and gently motivate to increase individual's range of motion in predefined movement patterns.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Time to complete action
- Resistance

OBJECTIVES

- Range of motion examination

INSTRUCTION FOR PATIENT

Try to achieve best result

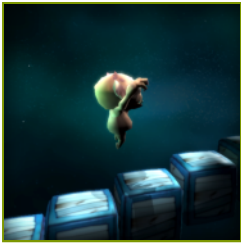


SAMPLE SETTINGS



The settings panel on the right side of the interface contains several controls:

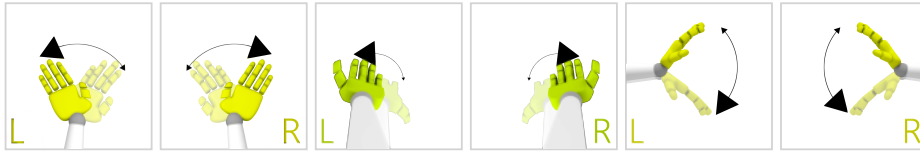
- Angular range:** A control with a hand icon and a curved arrow. It includes a 'start' value of 0° and an 'end' value of -30° .
- Minitask duration:** A control with a hand icon and a curved arrow. It displays a duration of $30s$.
- Resistance rubber:** A control with a hand icon and a curved arrow. It displays a resistance value of 1 .



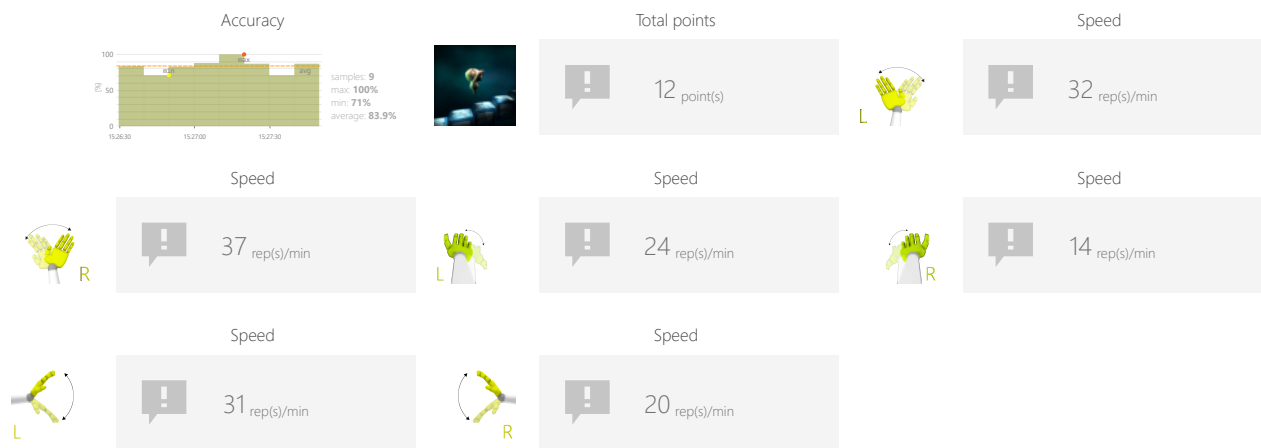
SPEED STAIRS

Measure number of repetitions of specific movement pattern an individual is able to perform within predefined time interval.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Max time per floor
- Number of stairs
- Pause length
- Resistance

OBJECTIVES

- Dynamics of planned movements

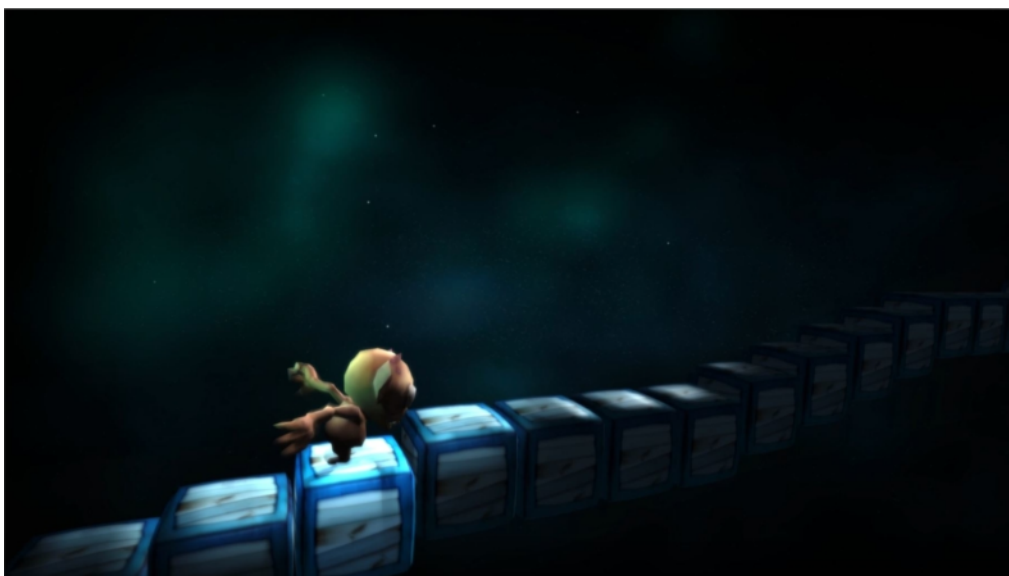
INSTRUCTION FOR PATIENT

Climb the stairs before they disappear.

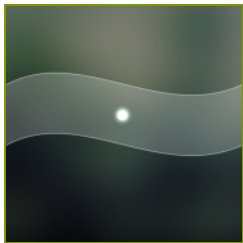


SPEED STAIRS

SAMPLE SETTINGS



◀	Difficulty custom	▶
Duration 90s		Angular range start ? end ?
Range adjustment 0% ↔ 100% ? ↔ ?		Max time per floor 15s
		Number of stairs 5
Pause length 3		Resistance rubber 1

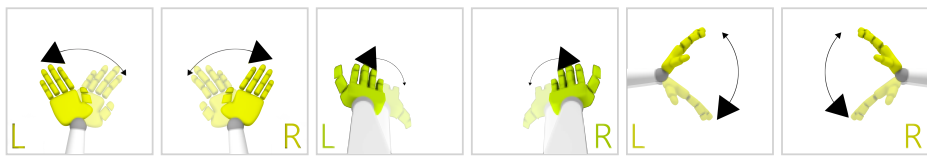


MOVEMENT PRECISION

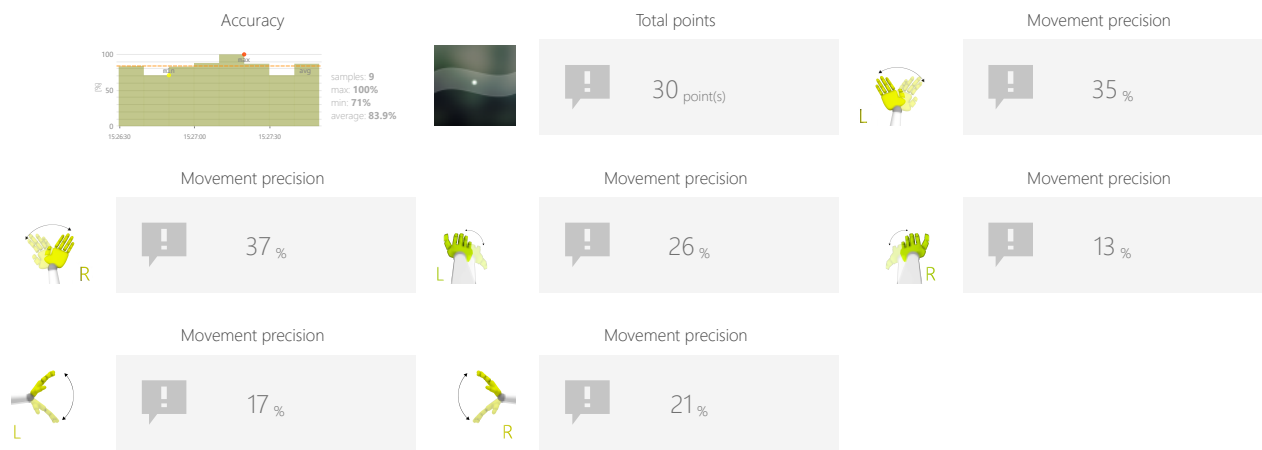
GRAPH

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Graph shape (sinus or square, amplitude, border, etc.)
- Task duration
- Resistance

OBJECTIVES

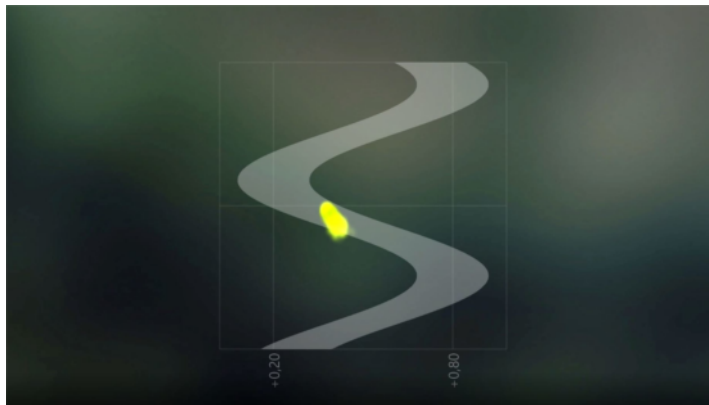
- Movement precision
- Activity in a given rhythm
- Repetitive movements

INSTRUCTION FOR PATIENT

Try to stay within the borders.



SAMPLE SETTINGS



Difficulty: 3/3

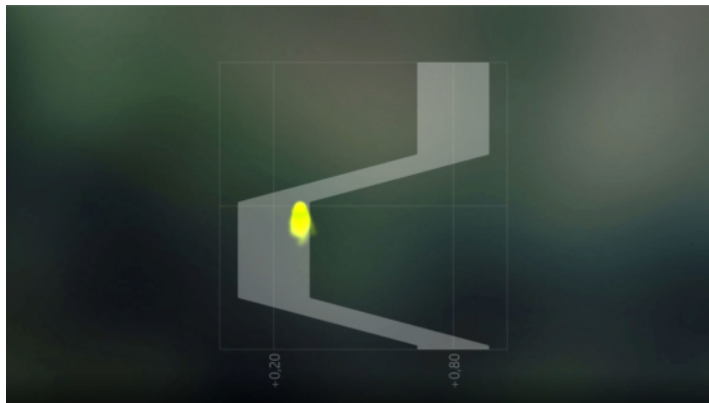
Graph configuration

Duration: 4.0s +/- 20%

Angular range: 30s

Range adjustment: 0% ↔ 100%

Resistance rubber: 1



Difficulty: 1/3

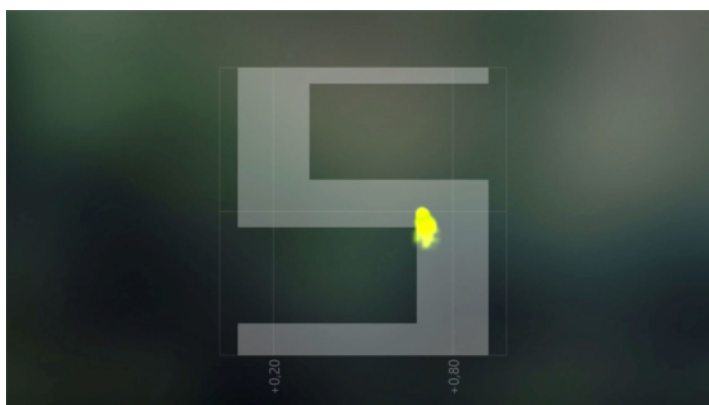
Graph configuration

Duration: 4.0s +/- 40%

Angular range: 90s

Range adjustment: 0% ↔ 100%

Resistance rubber: 1



Difficulty: custom

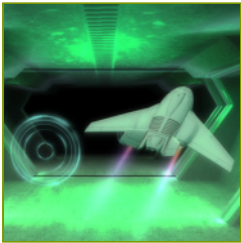
Graph configuration

Duration: 30s

Angular range: 30s

Range adjustment: 0% ↔ 100%

Resistance rubber: 1

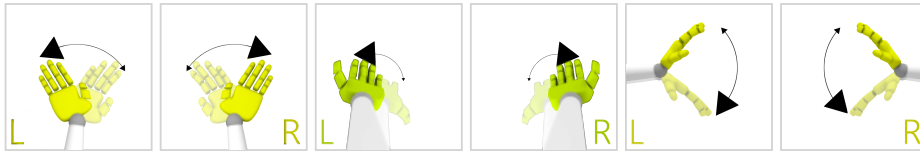


FUNCTIONAL MOVEMENTS

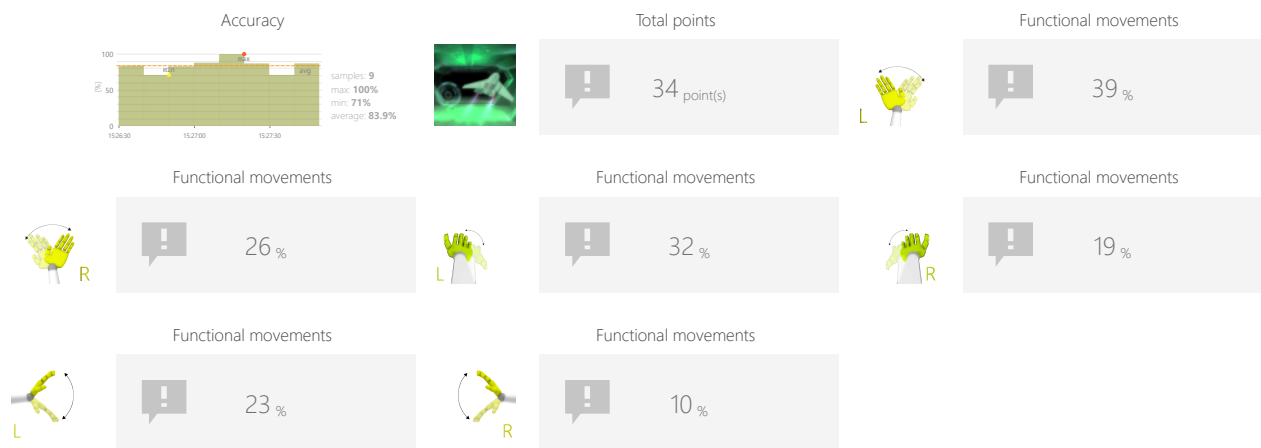
AIRPLANE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Speed
- Task duration
- Resistance

OBJECTIVES

- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space

INSTRUCTION FOR PATIENT

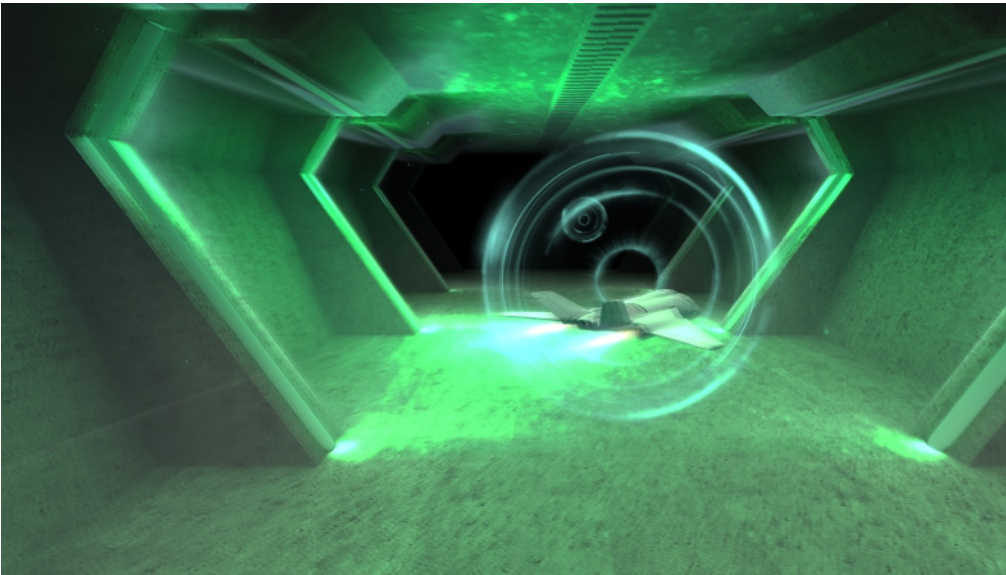
Make the airplane fly through the circles. The closer to the center it flies the more points you get.

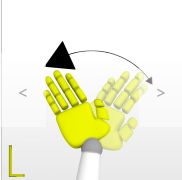
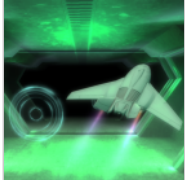


FUNCTIONAL MOVEMENTS

AIRPLANE

SAMPLE SETTINGS





◀

Difficulty

▶

2/4

<

Speed

>

100%

speed set automatically

<

Duration

>

90s

Angular range

start ? end ?

⚙

<

Range adjustment

>

0% ↔ 100%

? ↔ ?

<

Resistance rubber

>

1

⚙

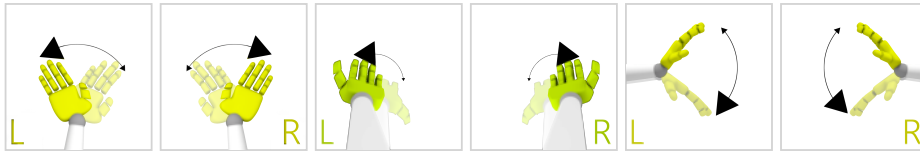


FUNCTIONAL MOVEMENTS

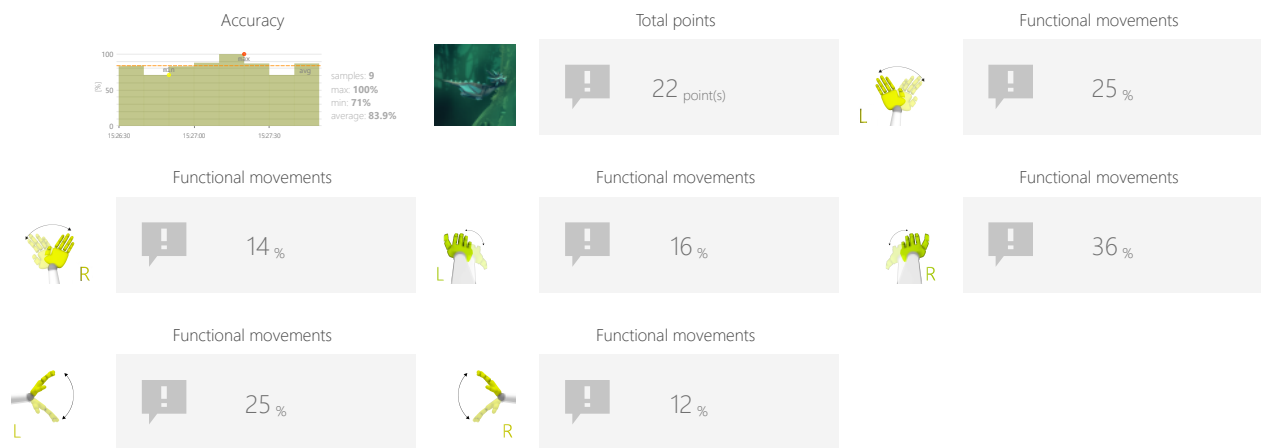
DRAGON

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Coins group size
- Distance between coins
- Gravity force
- Resistance

OBJECTIVES

- Predicting the trajectory of objects
- Improve range of motion
- Visual motor coordination
- Muscle strengthening
- Planning and Strategy

INSTRUCTION FOR PATIENT

Fly and collect the coins.



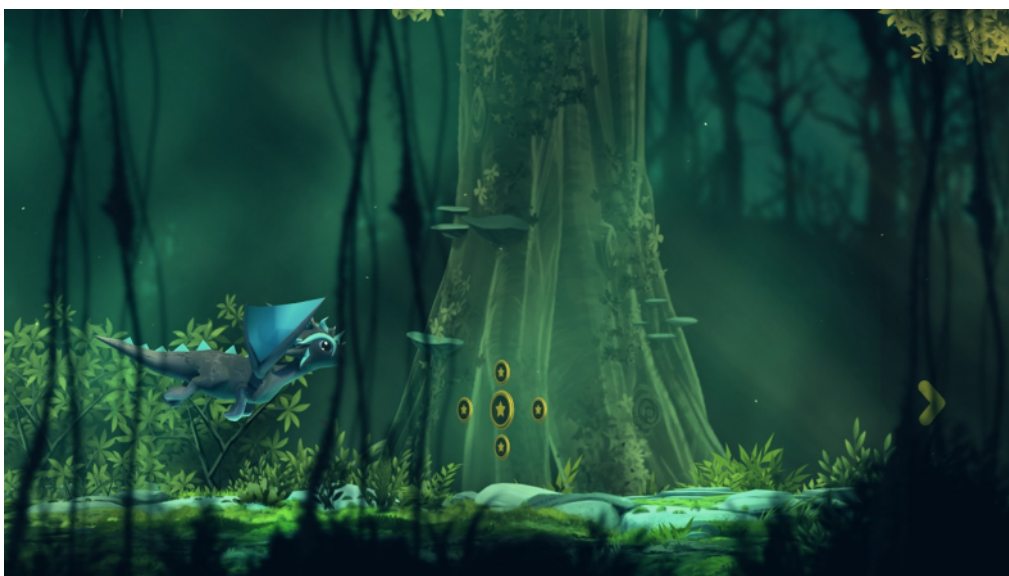
FUNCTIONAL MOVEMENTS

DRAGON

SAMPLE SETTINGS



Difficulty	custom
Duration	90s
Angular range	start ? end ?
Range adjustment	0% ↔ 100% ? ↔ ?
Coins group size	3
Distance between coins	250%
Gravity force	100%
Resistance rubber	1



Difficulty	1/3
Duration	90s
Angular range	start ? end ?
Range adjustment	0% ↔ 100% ? ↔ ?
Coins group size	5
Distance between coins	250%
Gravity force	100%
Resistance rubber	1

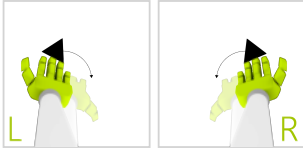


FUNCTIONAL MOVEMENTS

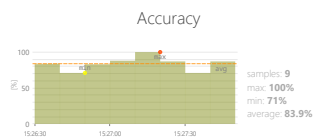
AMBULANCE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



Total points

35 point(s)

Functional movements



39 %

Functional movements



28 %

OBJECTIVES

- Dynamics of planned movements
- Focusing
- Speed of decision making
- Visual motor coordination

INSTRUCTION FOR PATIENT

Go as fast as you can and avoid hitting other cars.





FUNCTIONAL MOVEMENTS

AMBULANCE

SAMPLE SETTINGS





◀

Difficulty

▶

2/3

Speed


< 50% >


speed set automatically

Duration

< 90s >

Angular range

<  >

start ? end ? 

Range adjustment


0% ↔ 100%

? ↔ ?



Distance between cars

< 50% >

Resistance rubber

< 1  >





◀

Difficulty

▶

custom

Speed


< 50% >


speed set automatically

Duration

< 90s >

Angular range

<  >

start ? end ? 

Range adjustment


0% ↔ 100%

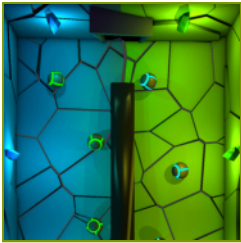
? ↔ ?

Distance between cars

< 200% >

Resistance rubber

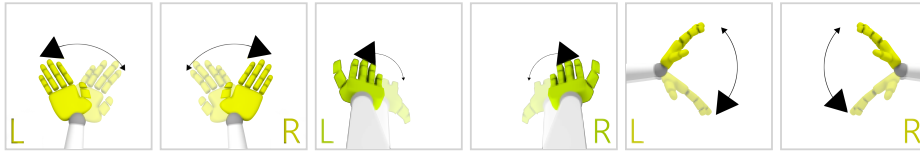
< 1  >



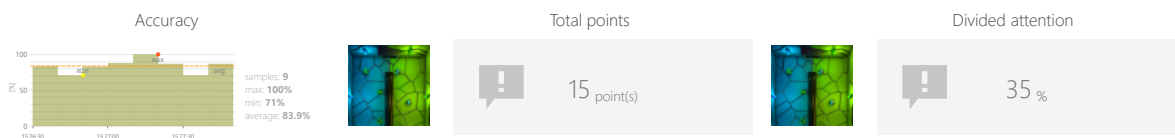
DIVIDED ATTENTION SORTER

Measure and train individual's skills to successfully execute more than one action at a time, while paying attention to two or more channels of information.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Number of objects
- Gap size
- Speed of objects
- Resistance

OBJECTIVES

- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

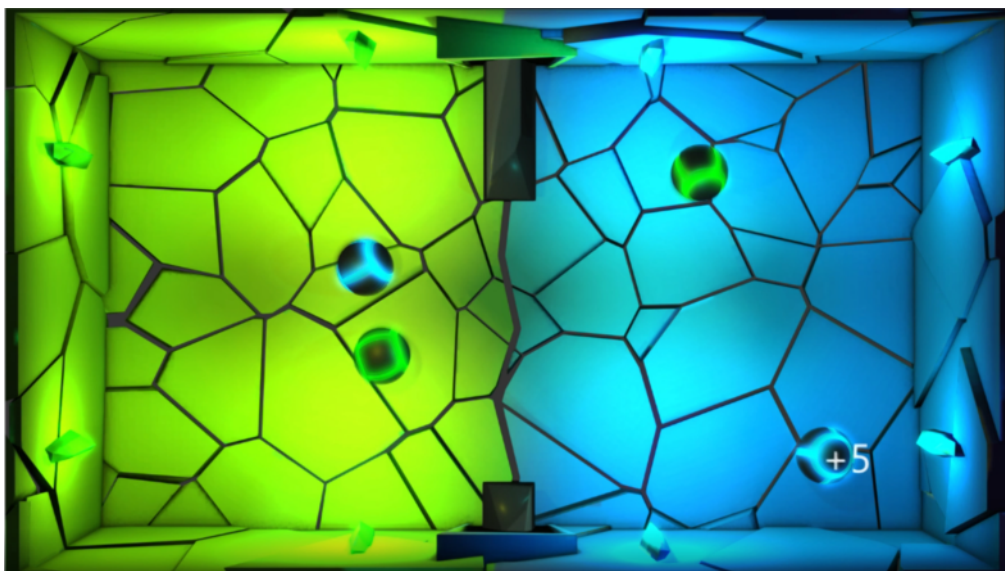
INSTRUCTION FOR PATIENT

Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.

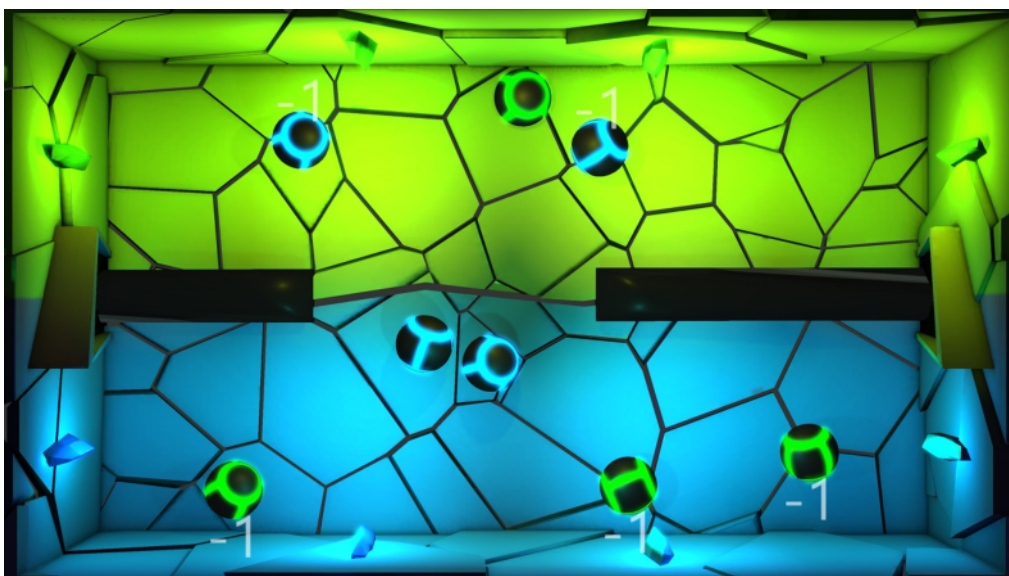


DIVIDED ATTENTION SORTER

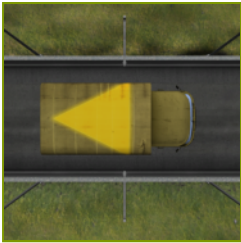
SAMPLE SETTINGS



Difficulty	1/3
Duration	90s
Angular range	
Range adjustment	0% ↔ 100%
Number of objects	4
Gap size	150%
Speed of objects	100%
Resistance rubber	1



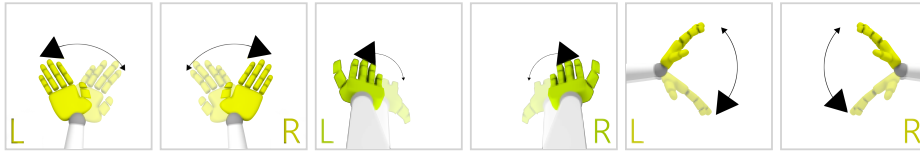
Difficulty	custom
Duration	90s
Angular range	
Range adjustment	0% ↔ 100%
Number of objects	8
Gap size	150%
Speed of objects	100%
Resistance rubber	1



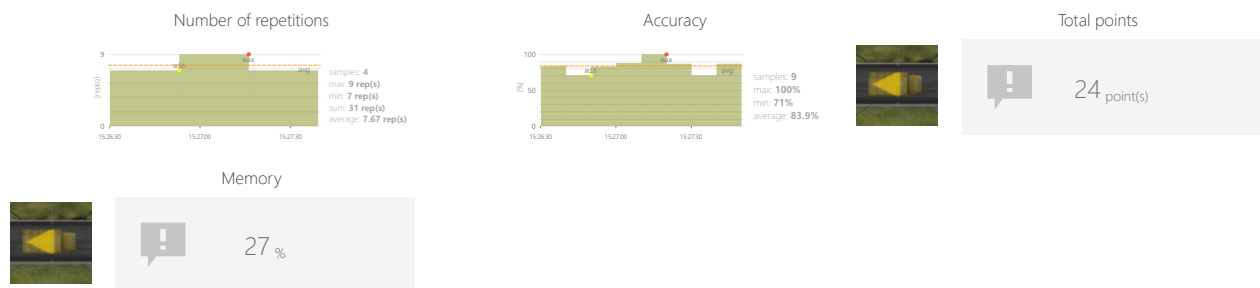
MEMORY TRUCKS

Measure and train individual's skills to memorize information.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Resistance
- Variations

OBJECTIVES

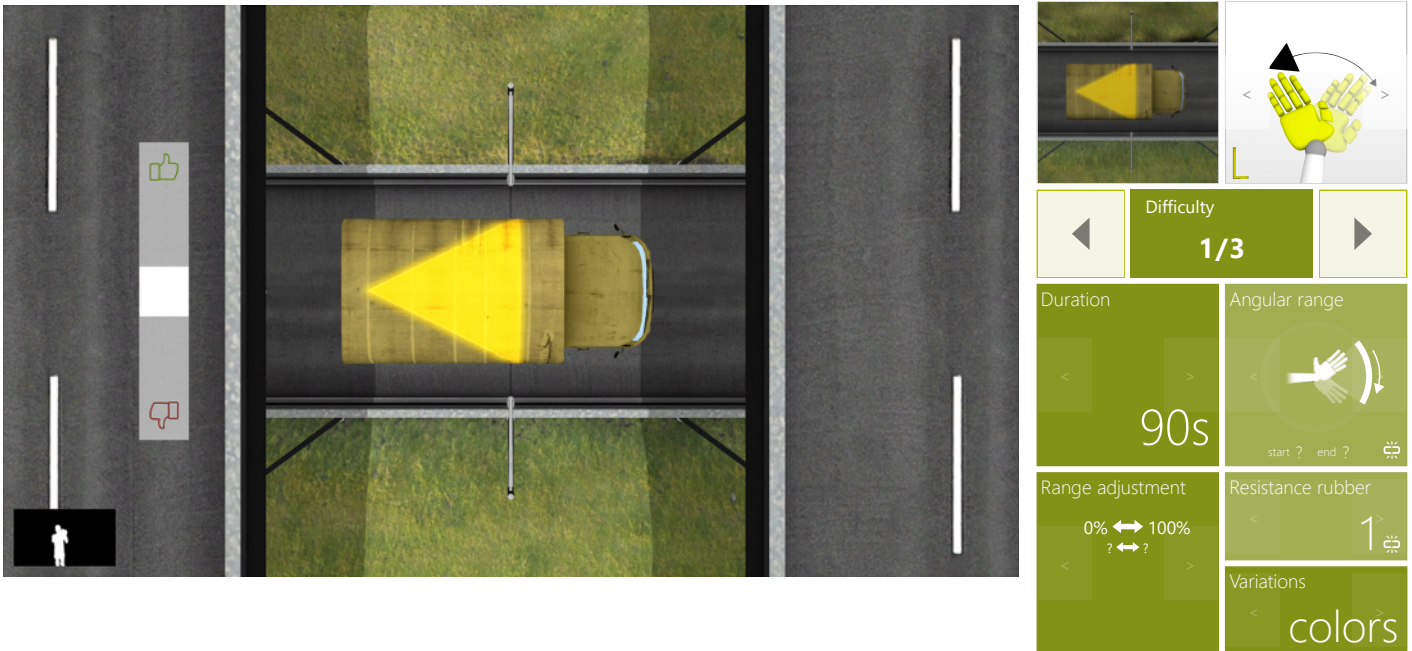
- Logical tasks
- Focusing
- Perceptivity

INSTRUCTION FOR PATIENT

Remember the shape and/or its color on the roof of the car you see. Decide with thumbs up or down whether the next car has the same shape and/or color on the roof as the previous one.



SAMPLE SETTINGS



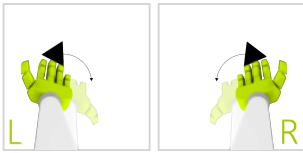


PROBLEM SOLVING

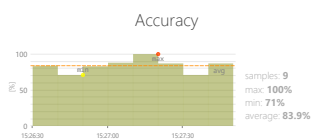
CLONES

Measure and train individual's skills to reach a solution of specific problems. Problem solving may include mathematical or systematic operations and can be a gauge of an individual's critical thinking skills.

CONTROL MODES



RESULTS



Total points

35 point(s)



Problem solving

24 %

OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

INSTRUCTION FOR PATIENT

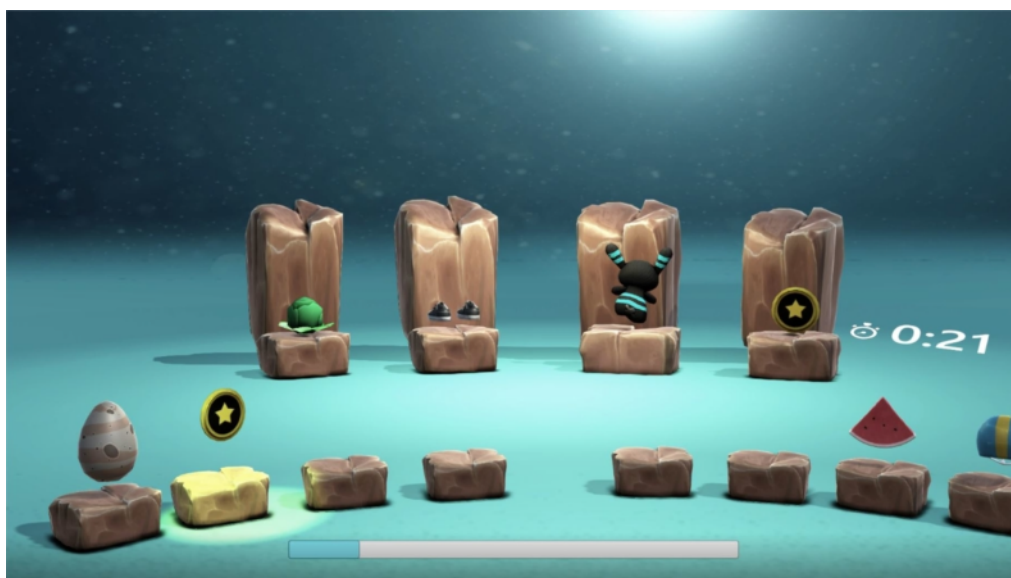
Select the item which has a pair on the screen.



PROBLEM SOLVING

CLONES

SAMPLE SETTINGS



	Difficulty 1/3	
Duration 90s		Angular range start ? end ?
Minitask duration 30s		Range adjustment 0% ↔ 100% ? ↔ ?
Number of pairs 4		Resistance rubber 1



SPECIALIZED BLOOD PRESSURE

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

CONTROL MODES



ADJUSTMENTS

- Resistance

OBJECTIVES

- Monitor external parameters

INSTRUCTION FOR PATIENT

Measure yourself your blood pressure and type it in the result.