

BASE PACK FOR JUPITER

2025.1

Hardware requirements	3
What is needed?	3
Therapeutic tasks database	5
Range of motion	5
Speed	6
Movement precision	8
Functional movements	10
Strength	16
Divided attention	17
Memory	19
Specialized	21

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).

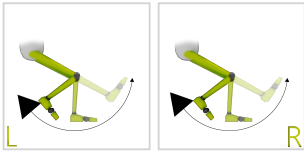


RANGE OF MOTION

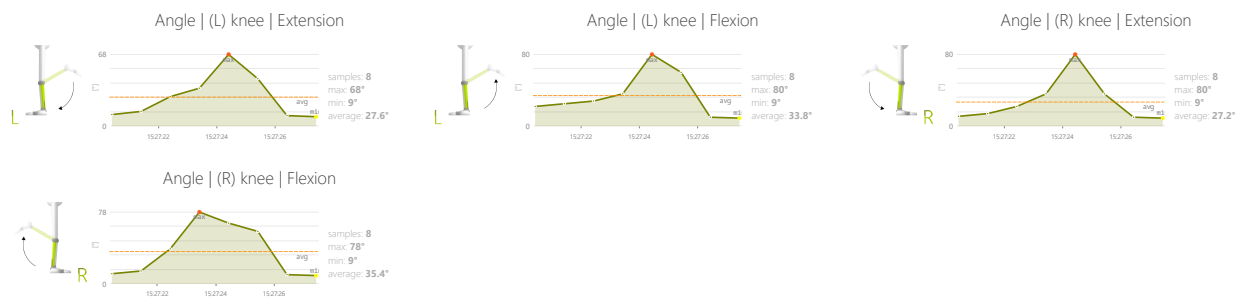
ANGLES EVALUATION

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

CONTROL MODES



RESULTS



ADJUSTMENTS

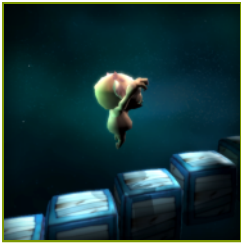
- Time to complete action
- Black Rubbers
- Arm length
- White Rubbers

OBJECTIVES

- Range of motion examination

INSTRUCTION FOR PATIENT

Try to achieve best result



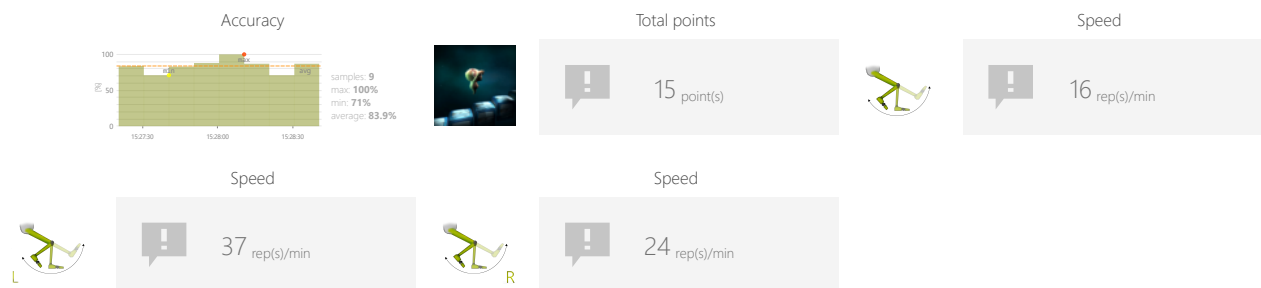
SPEED STAIRS

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
- Black Rubbers
- Arm length
- Number of stairs
- Pause length
- White Rubbers

OBJECTIVES

- Dynamics of planned movements

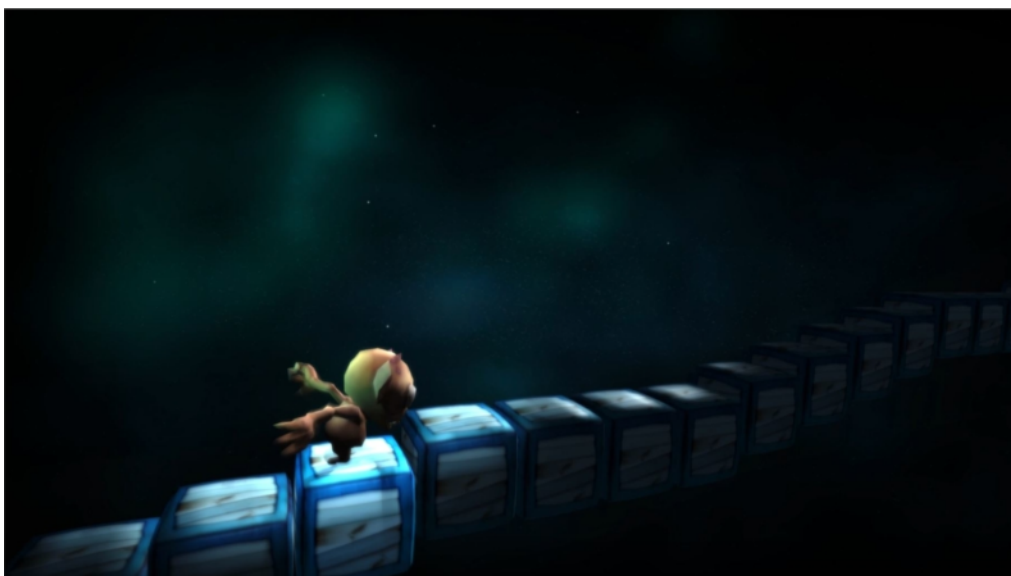
INSTRUCTION FOR PATIENT

Climb the stairs before they disappear.

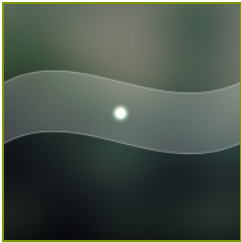


SPEED STAIRS

SAMPLE SETTINGS



◀	Difficulty custom	▶
Direction < Flexion > ⚙		Duration < 90s >
Torque range < min ? > max ? ⚙		Range adjustment 0% ↔ 100% ? ↔ ?
Angle < 60° > ⚙		Max time per floor < 15s >
Arm length < set in runtime > ⚙		Number of stairs < 5 >
Pause length < 3 >		



MOVEMENT PRECISION

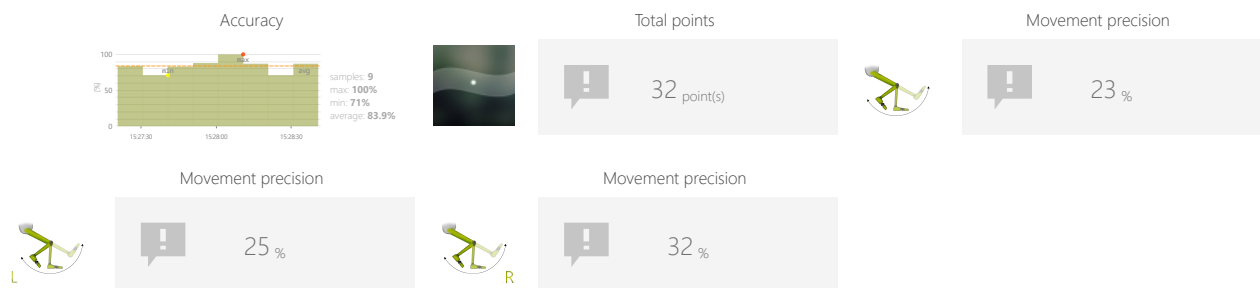
GRAPH

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
- Black Rubbers
- Arm length
- White Rubbers

OBJECTIVES

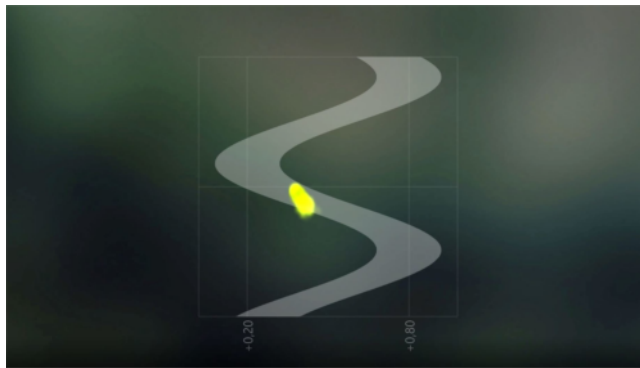
- Movement precision
- Activity in a given rhythm
- Repetitive movements


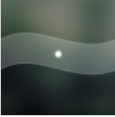
INSTRUCTION FOR PATIENT

Try to stay within the borders.



SAMPLE SETTINGS





Difficulty **3/3**

Graph configuration
4.0s \pm 20%

Direction
Flexion

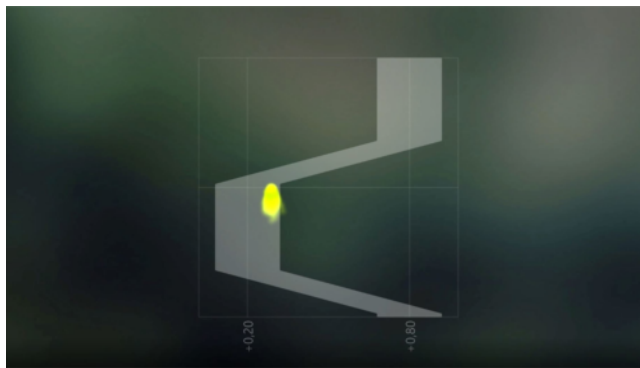
Duration
30s


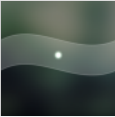
Torque range
min ?
max ?

Range adjustment
0% \leftrightarrow 100%
7 \leftrightarrow 7

Angle
60°

Arm length
set in runtime





Difficulty **1/3**

Graph configuration
4.0s \pm 40%

Direction
Flexion

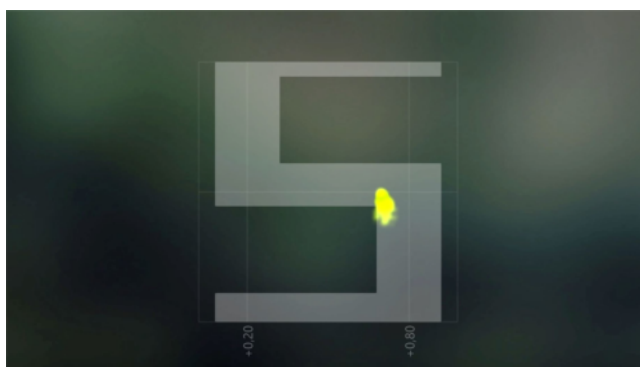
Duration
90s


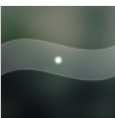
Torque range
min ?
max ?

Range adjustment
0% \leftrightarrow 100%
7 \leftrightarrow 7

Angle
60°

Arm length
set in runtime





Difficulty **custom**

Graph configuration
 \pm 20% \uparrow 2.0s \downarrow 2.0s \nearrow 1.0s \searrow 1.0s

Direction
Flexion

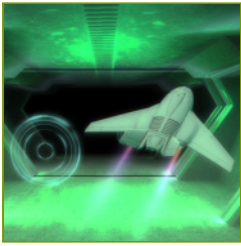
Duration
30s

Torque range
min ?
max ?

Range adjustment
0% \leftrightarrow 100%
7 \leftrightarrow 7

Angle
60°

Arm length
set in runtime



FUNCTIONAL MOVEMENTS

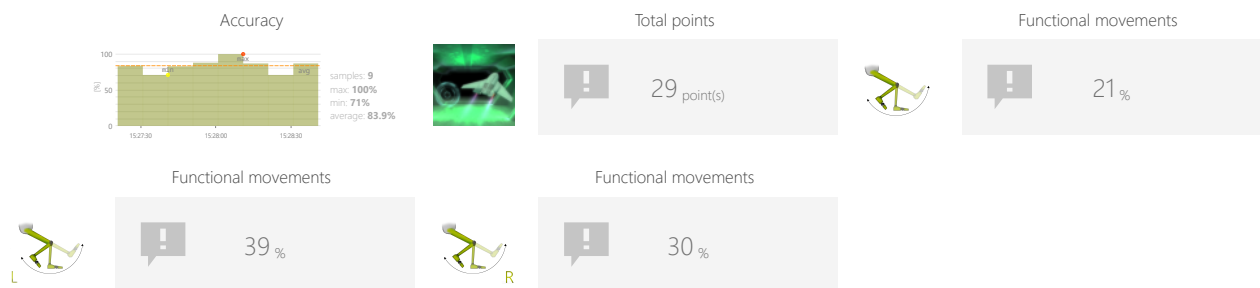
AIRPLANE

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
- Black Rubbers
- Arm length
- White Rubbers

OBJECTIVES

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

INSTRUCTION FOR PATIENT

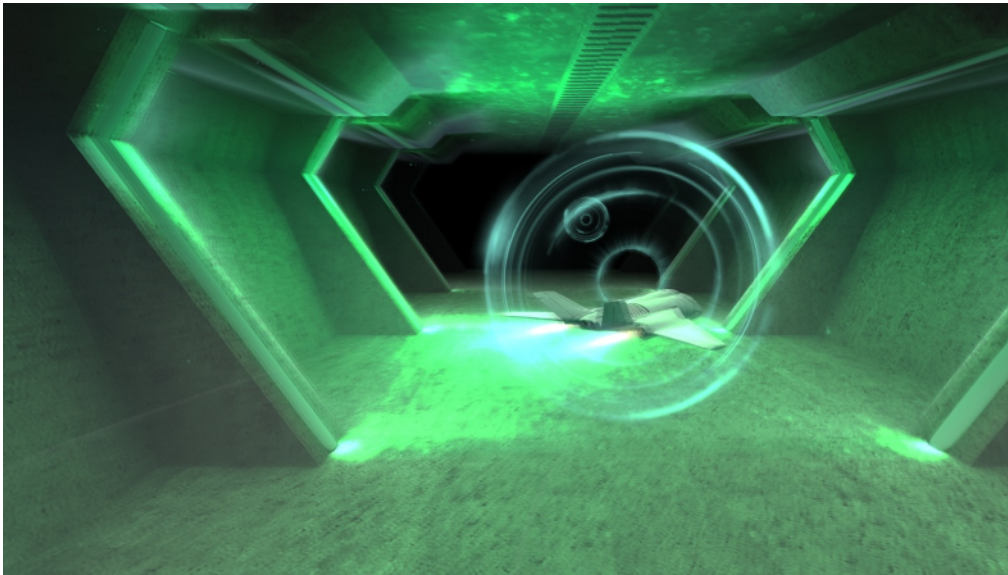
Make the airplane fly through the circles. The closer to the center it flies the more points you get.

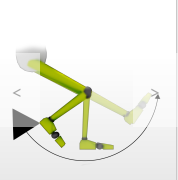
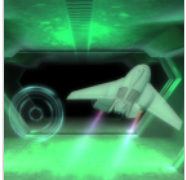


FUNCTIONAL MOVEMENTS

AIRPLANE

SAMPLE SETTINGS





◀

Difficulty

▶

2/4

Speed

< 100% >

speed set automatically

Direction

< Flexion >

⚙️

Duration

< 90s >

Torque range

< min ? >

max ?

⚙️

Range adjustment

0% ↔ 100%

? ↔ ?

Angle

< 60° >

⚙️

Arm length

< set in runtime >

⚙️



FUNCTIONAL MOVEMENTS

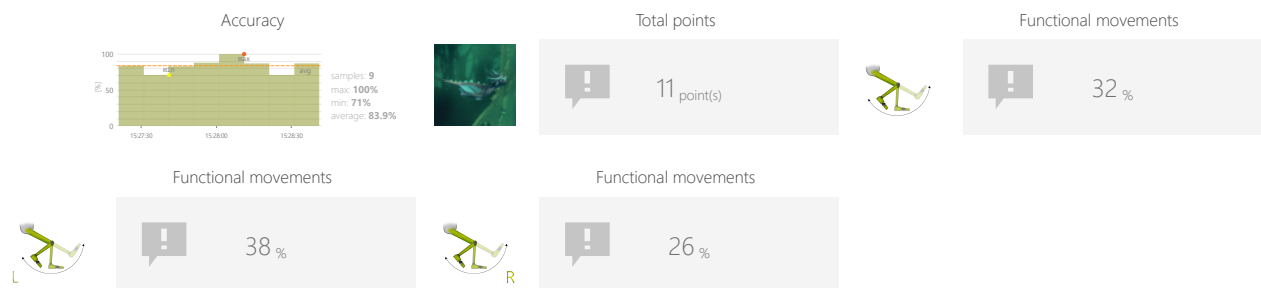
DRAGON

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
- Black Rubbers
- Coins group size
- Arm length
- White Rubbers
- Distance between coins
- Gravity force

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.



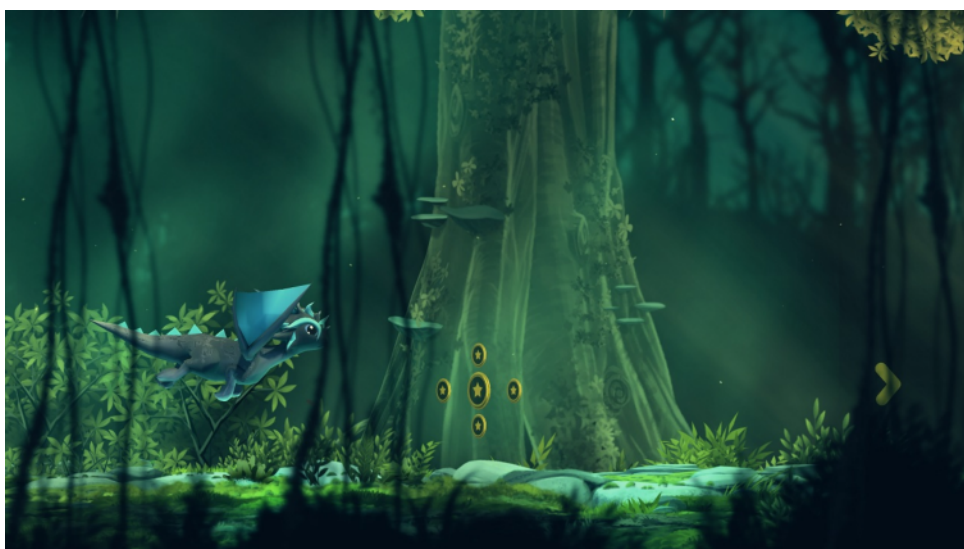
FUNCTIONAL MOVEMENTS

DRAGON

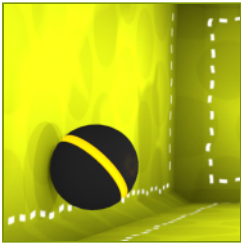
SAMPLE SETTINGS



◀	Difficulty custom	▶
Direction < Flexion > ⚙		Duration < 90s >
Torque range < min ? > max ? ⚙		Range adjustment 0% ↔ 100% ? ↔ ?
Angle < 60° > ⚙		Coins group size < 3 >
Arm length set in runtime ⚙		Distance between coins < 250% >
Gravity force < 100% >		



◀	Difficulty 1/3	▶
Direction < Flexion > ⚙		Duration < 90s >
Torque range < min ? > max ? ⚙		Range adjustment 0% ↔ 100% ? ↔ ?
Angle < 60° > ⚙		Coins group size < 5 >
Arm length set in runtime ⚙		Distance between coins < 250% >
Gravity force < 100% >		



FUNCTIONAL MOVEMENTS

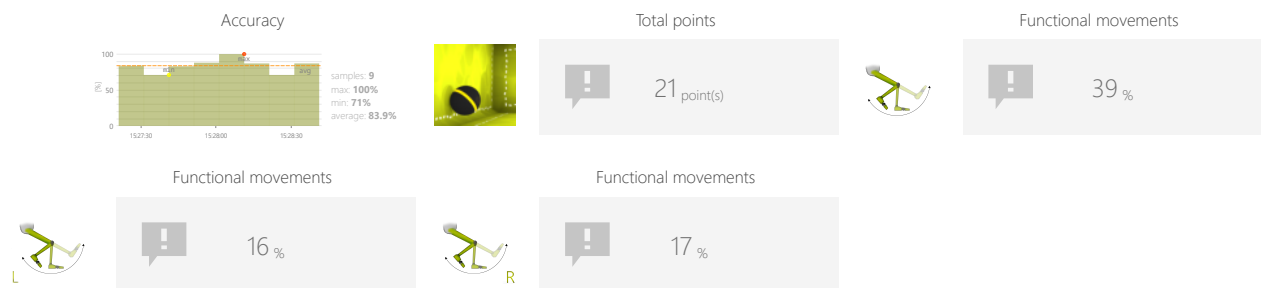
ARCANOID

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
- Black Rubbers
- Arm length
- White Rubbers
- Reticle size
- Speed of objects

OBJECTIVES

- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

INSTRUCTION FOR PATIENT

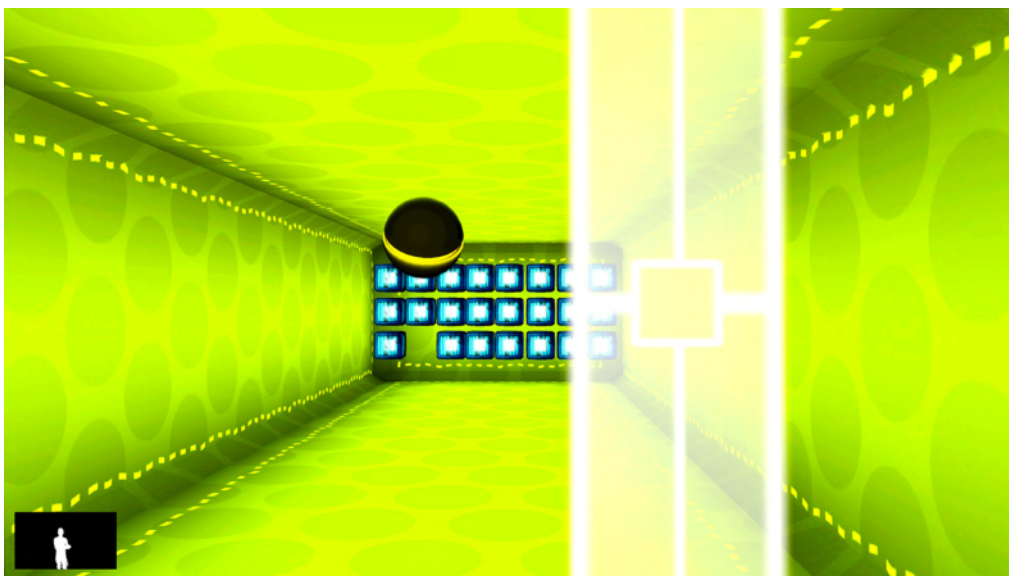
Destroy as many boxes as you can.


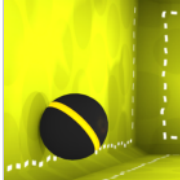


FUNCTIONAL MOVEMENTS

ARCANOID

SAMPLE SETTINGS





◀

Difficulty
custom

▶

Direction

< Flexion >

↺

Duration

< 90s >

↺

Torque range

< min ? >
max ?

↺

Range adjustment

0% ↔ 100%
? ↔ ?

< >

Angle

< 60° >

↺

Arm length

< set in runtime >

↺

Reticle size

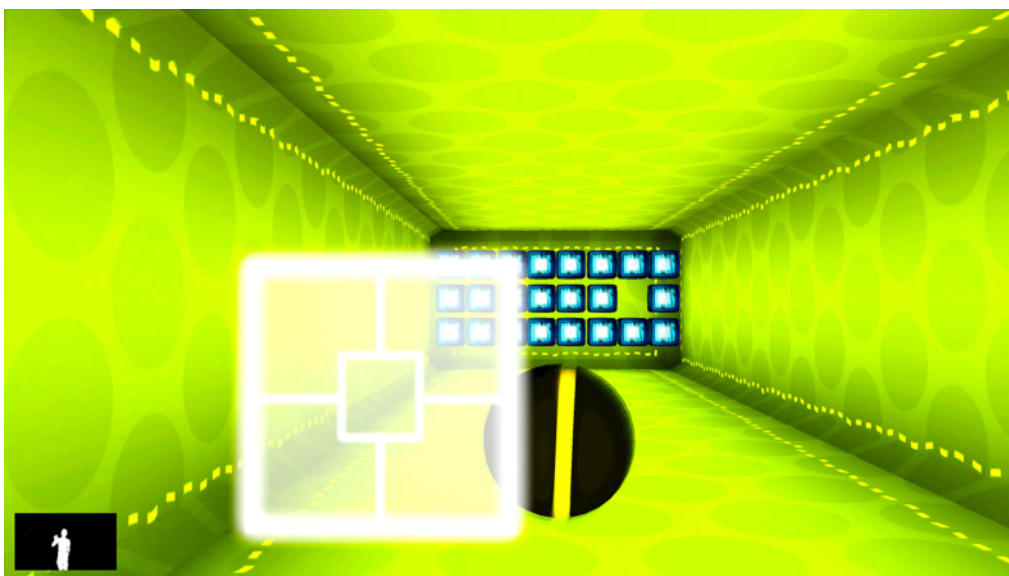
< 100% >


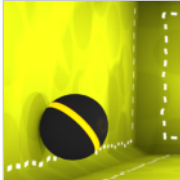
↺

Speed of objects

< 70% >

↺





◀

Difficulty
custom

▶

Direction

< Flexion >

↺

Duration

< 90s >

↺

Torque range

< min ? >
max ?

↺

Range adjustment

0% ↔ 100%
? ↔ ?

< >

Angle

< 60° >

↺

Arm length

< set in runtime >

↺

Reticle size

< 75% >

↺

Speed of objects

< 70% >

↺

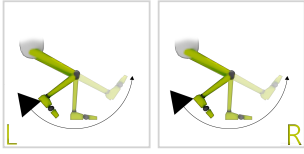


STRENGTH

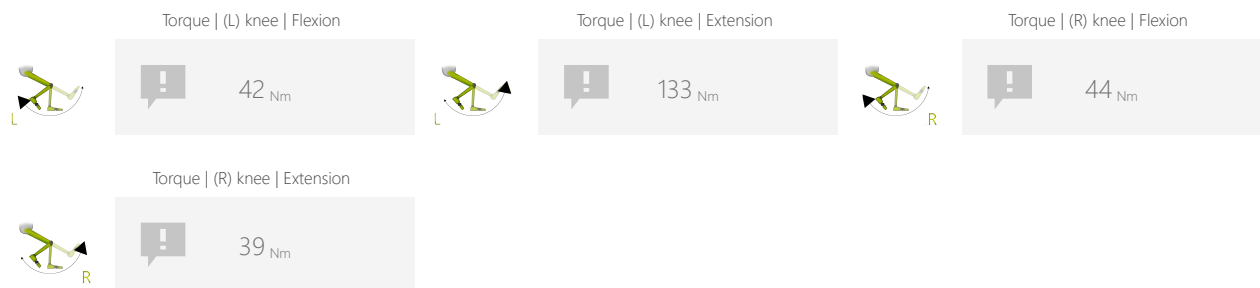
STRENGTH TEST

Measure and gently motivate to increase individual's force while performing predefined movement patterns.

CONTROL MODES



RESULTS

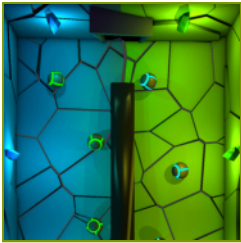


OBJECTIVES

- Strength examination
- Muscle strengthening

INSTRUCTION FOR PATIENT

Try to achieve best result



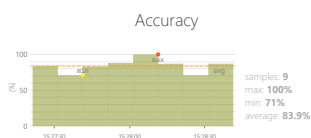
DIVIDED ATTENTION SORTER

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



Total points

14 point(s)

Divided attention

35 %

ADJUSTMENTS

- Task duration
- Black Rubbers
- Arm length
- Number of objects
- White Rubbers
- Gap size
- Speed of objects

OBJECTIVES

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

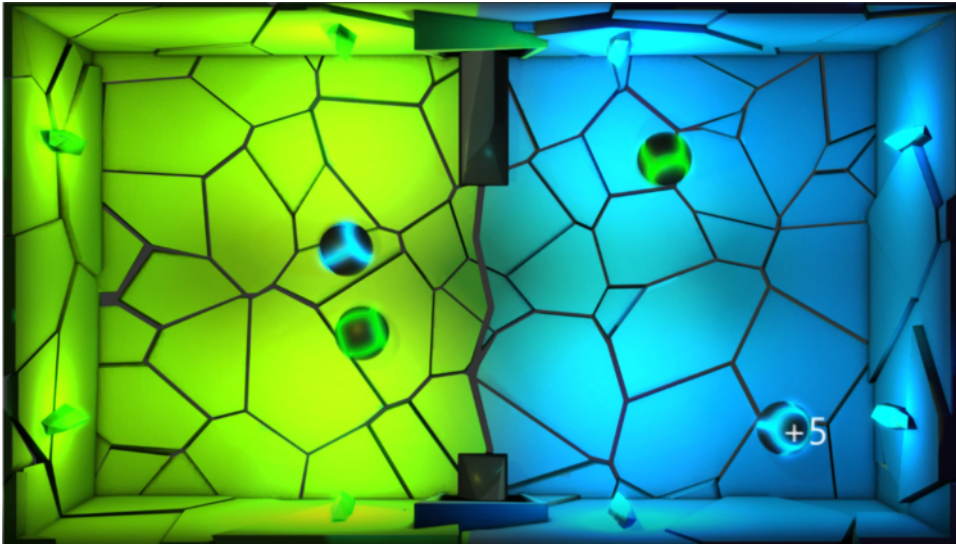
INSTRUCTION FOR PATIENT

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**

Direction
< Flexion >
⚙️

Duration
< 90s >

Torque range
< min ? >
max ?
⚙️

Range adjustment
0% ↔ 100%
? ↔ ?
< >

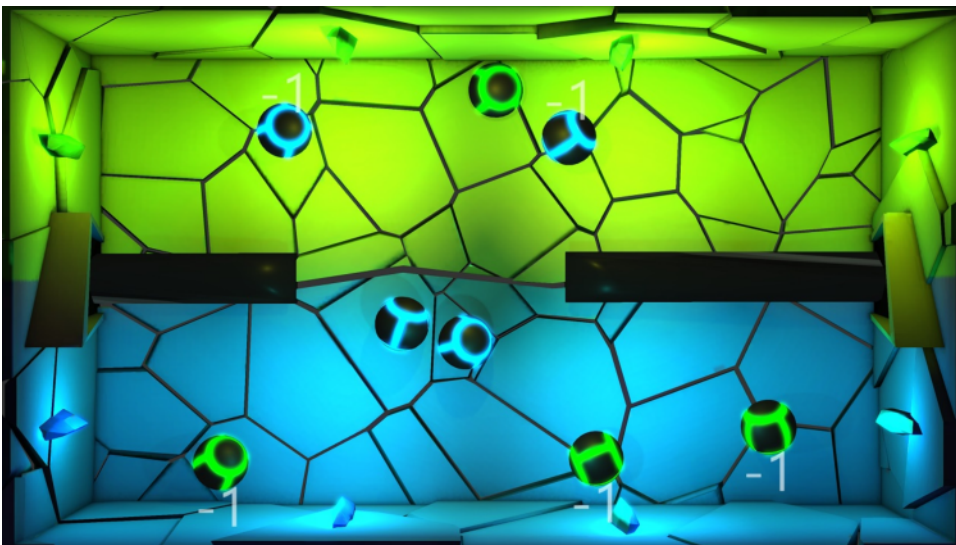
Angle
< 60° >
⚙️

Arm length
< set in runtime >
⚙️

Number of objects
< 4 >

Gap size
< 150% >

Speed of objects
< 100% >





Difficulty **custom**

Direction
< Flexion >
⚙️

Duration
< 90s >

Torque range
< min ? >
max ?
⚙️

Range adjustment
0% ↔ 100%
? ↔ ?
< >

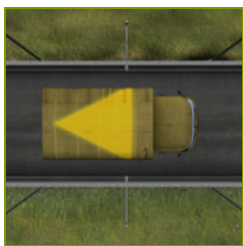
Angle
< 60° >
⚙️

Arm length
< set in runtime >
⚙️

Number of objects
< 8 >

Gap size
< 150% >

Speed of objects
< 100% >



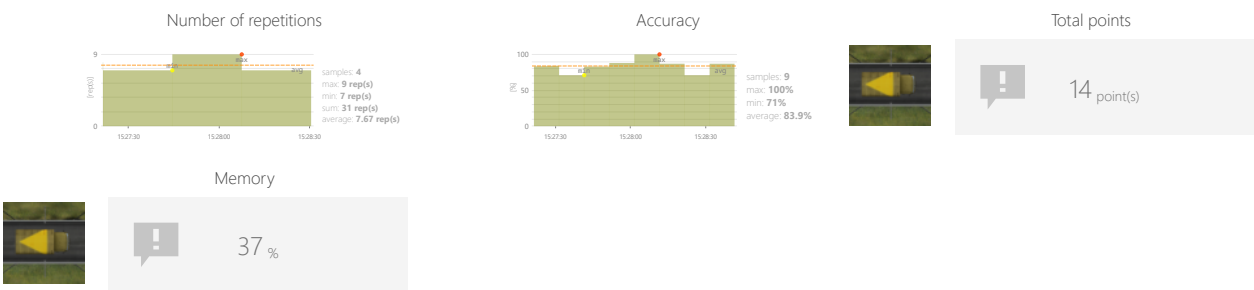
MEMORY TRUCKS

Measure and train individual's skills to memorize information.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Black Rubbers
- Arm length
- White Rubbers
- Variations

OBJECTIVES

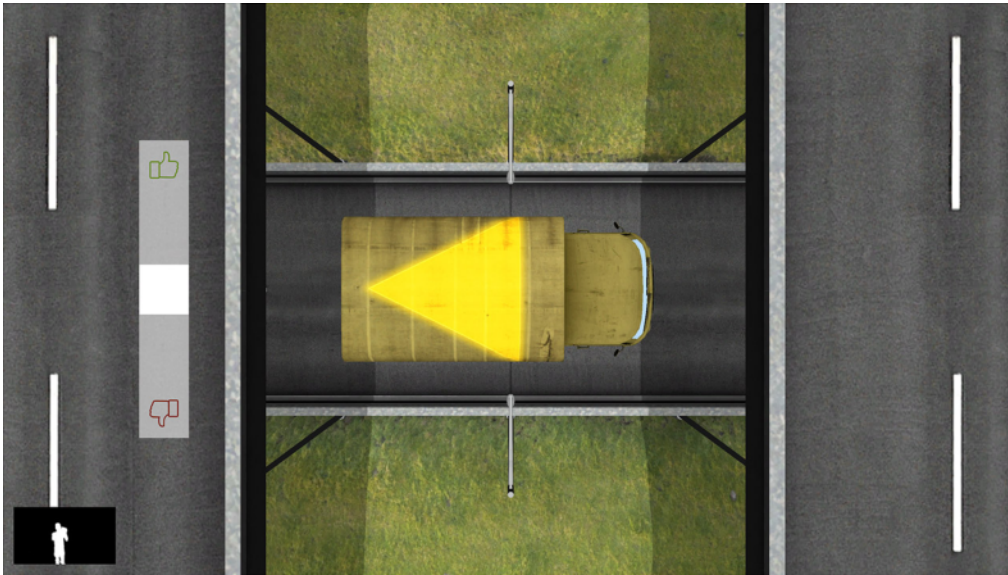
- Logical tasks
- Focusing
- Perceptivity


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





◀

Difficulty
1/3

▶

Direction

< Flexion >

↺

Duration

< 90s >

Torque range

< min ? >

< max ? >

↺

Range adjustment

0% ↔ 100%

? ↔ ?

Angle

< 60° >

↺

Arm length

< set in runtime >

↺

Variations

< colors >



SPECIALIZED

BLOOD PRESSURE

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

CONTROL MODES



ADJUSTMENTS

- Black Rubbers
- Arm length
- White Rubbers

OBJECTIVES

- Monitor external parameters

INSTRUCTION FOR PATIENT

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