VAST.Rehab
REHABILITATION IN VIRTUAL REALITY

BASE PACK FOR TELKO

2025.1

RANGE OF MOTION

TELKO RANGE TEST

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

CONTROL MODES

OBJECTIVES

INSTRUCTION FOR PATIENT

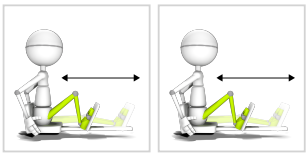
Perform desired number of repetitions

SPEED

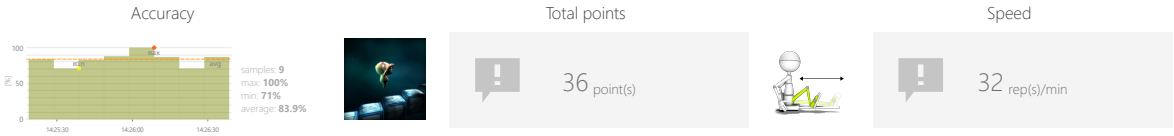
STAIRS

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

CONTROL MODES



RESULTS



ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Max time per floor
- Number of stairs
- Pause length
- Resistance

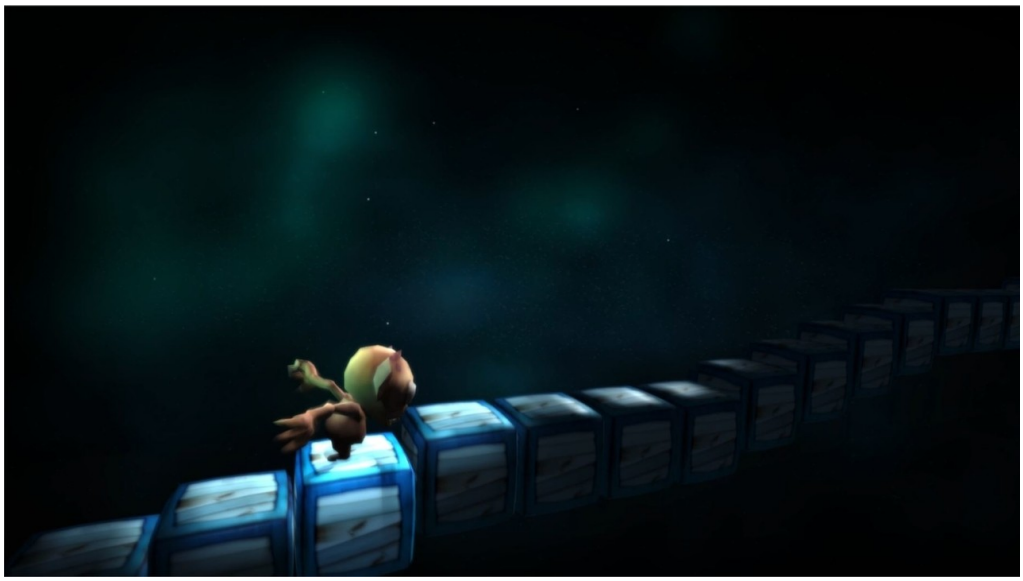
OBJECTIVES

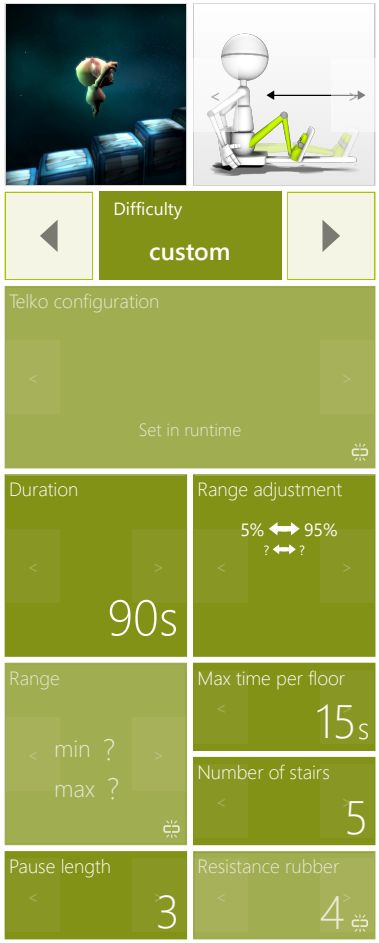
- Jumping
- Knees lifting
- Dynamics of planned movements

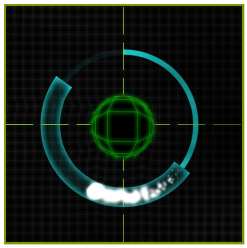
INSTRUCTION FOR PATIENT

Climb the stairs before they disappear.

SAMPLE SETTINGS





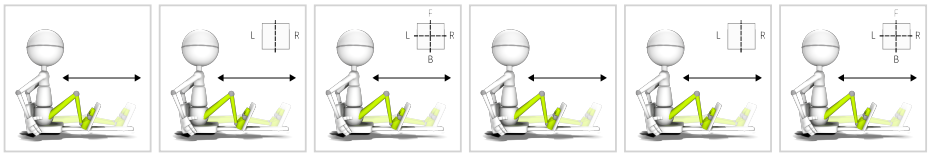


BALANCE

GRID

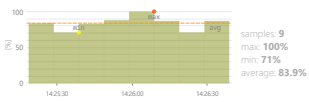
Measure and train individual's skills to perform specific movement patterns while keeping predefined weight distribution.

CONTROL MODES

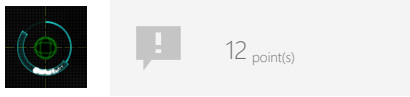


RESULTS

Accuracy



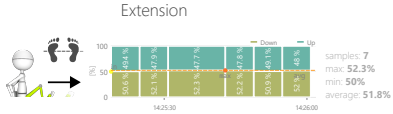
Total points



Weight distribution | Horizontal | Legs | Extension

Legs | Flexion | Horizontal | Balance

Weight distribution | Vertical | Legs | Extension



Weight distribution | Vertical | Legs | Flexion

ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Period
- Resistance

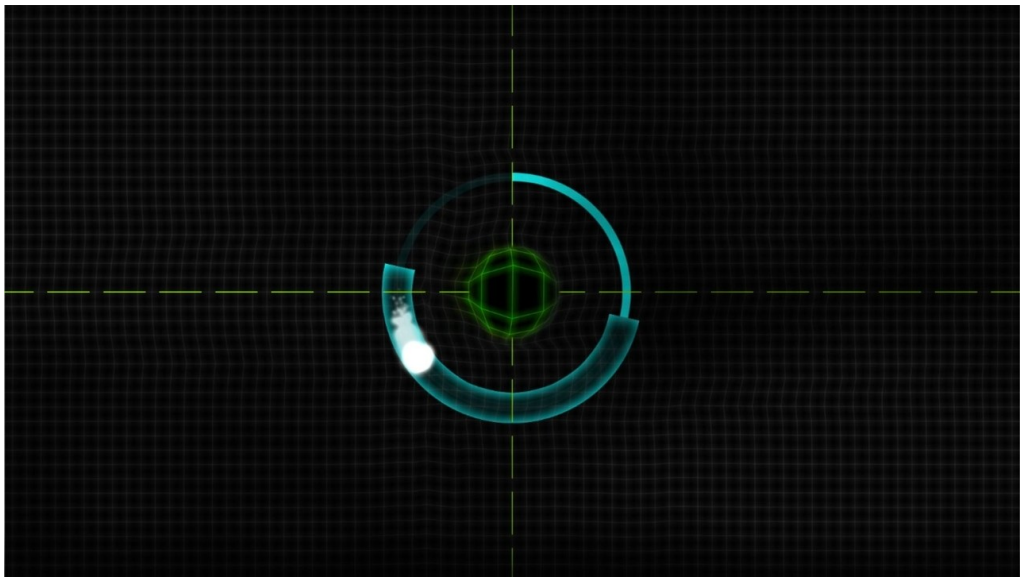
OBJECTIVES

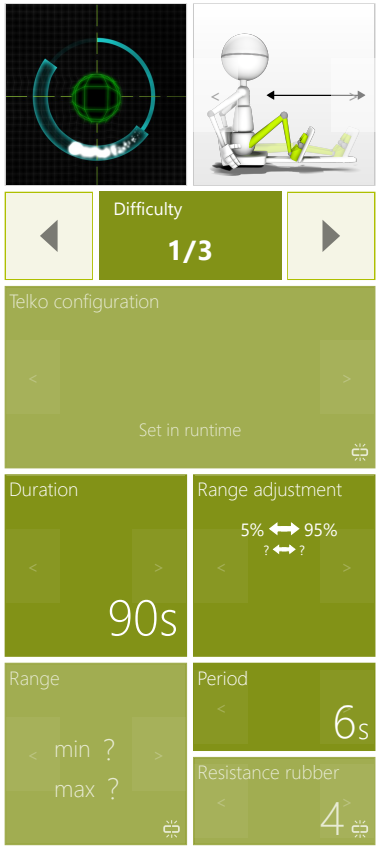
- Balance and equilibrium training
- 3D space movements reproduction
- Activity in a given rhythm

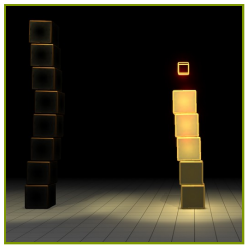
INSTRUCTION FOR PATIENT

Keep the white glowing point inside the blue area and make sure the emerging bump stays in the middle of the reticle.

SAMPLE SETTINGS





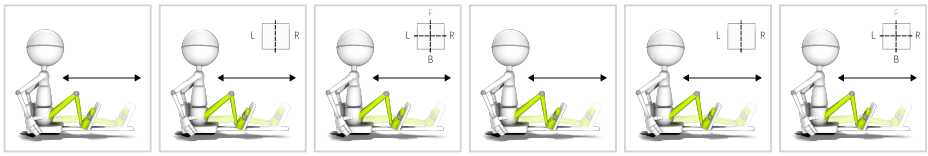


BALANCE

BLOCK BUILDER

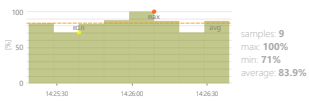
Measure and train individual's skills to perform specific movement patterns while keeping predefined weight distribution.

CONTROL MODES

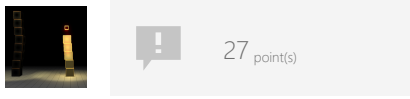


RESULTS

Accuracy



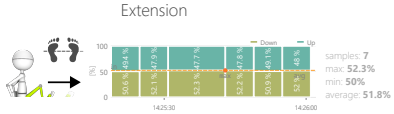
Total points



Weight distribution | Horizontal | Legs | Extension

Legs | Flexion | Horizontal | Balance

Weight distribution | Vertical | Legs | Extension



Weight distribution | Vertical | Legs | Flexion

ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Stack height
- Resistance

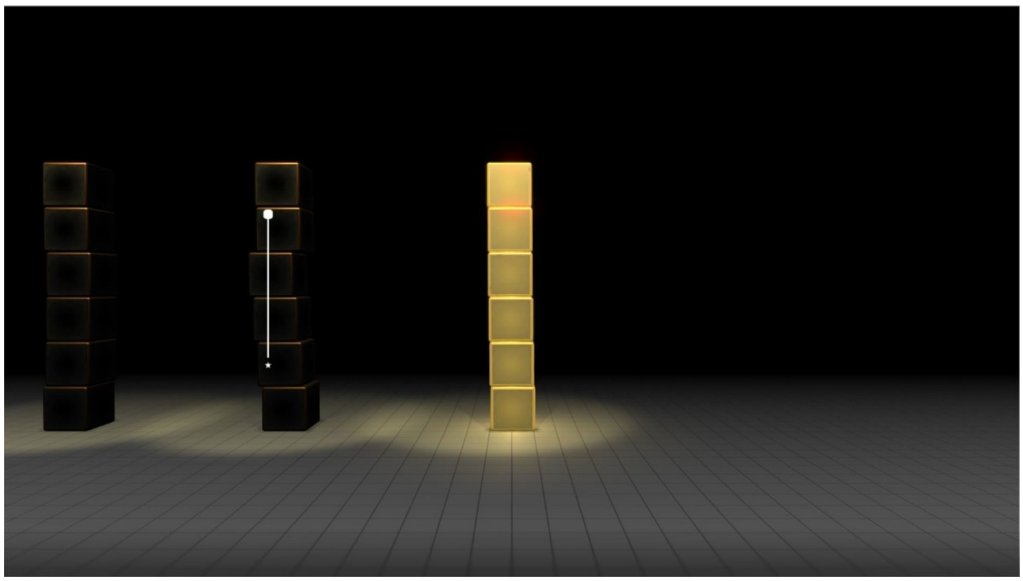
OBJECTIVES

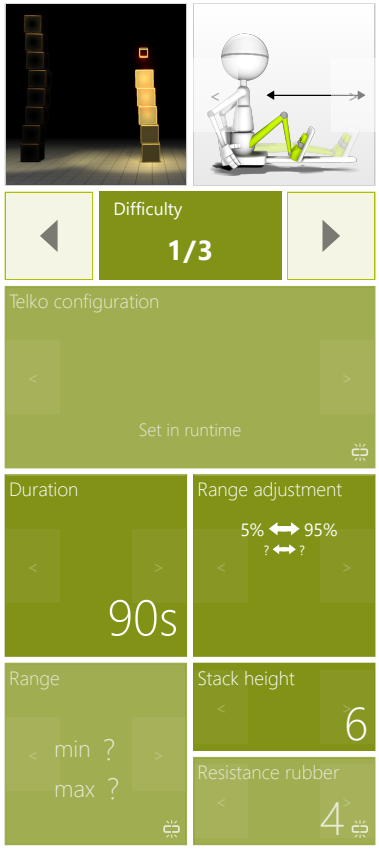
- Movement precision
- Muscle strengthening
- Balance and equilibrium training

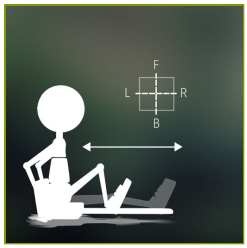
INSTRUCTION FOR PATIENT

Build as many stacks as you can. Keep your body balanced.

SAMPLE SETTINGS





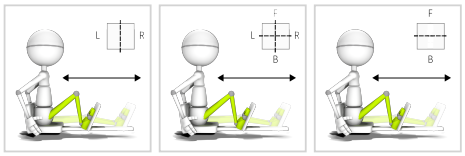


BALANCE

TELKO WEIGHT DISTRIBUTION TEST

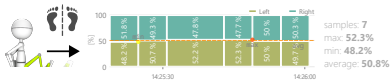
Measure and train individual's skills to perform specific movement patterns while keeping predefined weight distribution.

CONTROL MODES



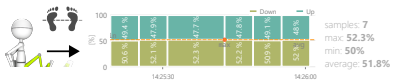
RESULTS

Weight distribution | Horizontal | Legs | Extension



Legs | Flexion | Horizontal | Balance

Weight distribution | Vertical | Legs | Extension

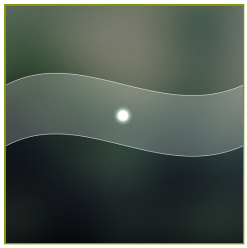


Weight distribution | Vertical | Legs | Flexion

OBJECTIVES

INSTRUCTION FOR PATIENT

Perform desired number of repetitions

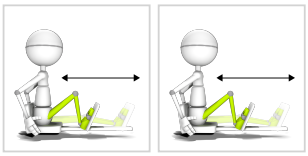


MOVEMENT PRECISION

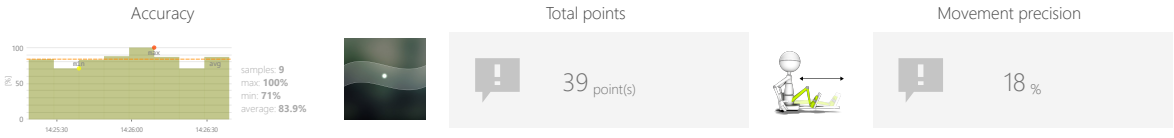
GRAPH

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.)
- Individual's position
- Task duration
- Range adjustment
- Range
- Resistance

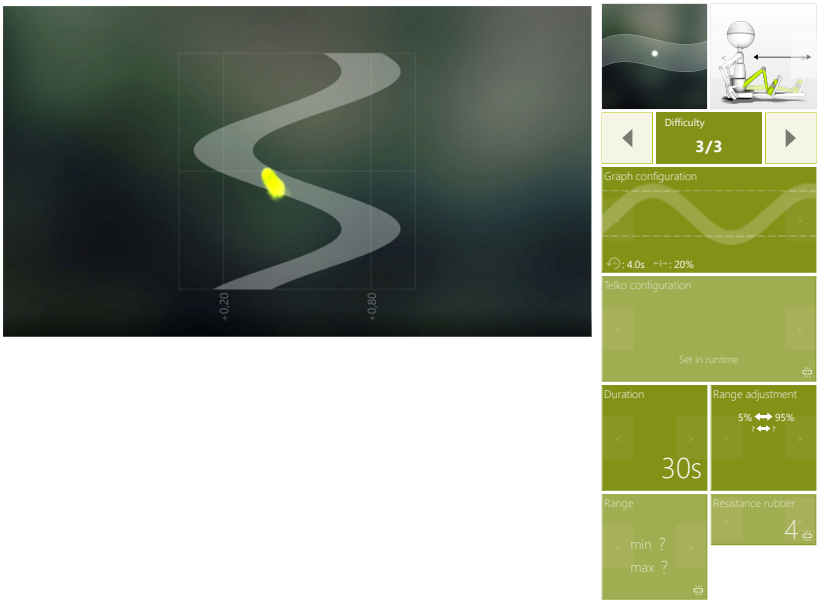
OBJECTIVES

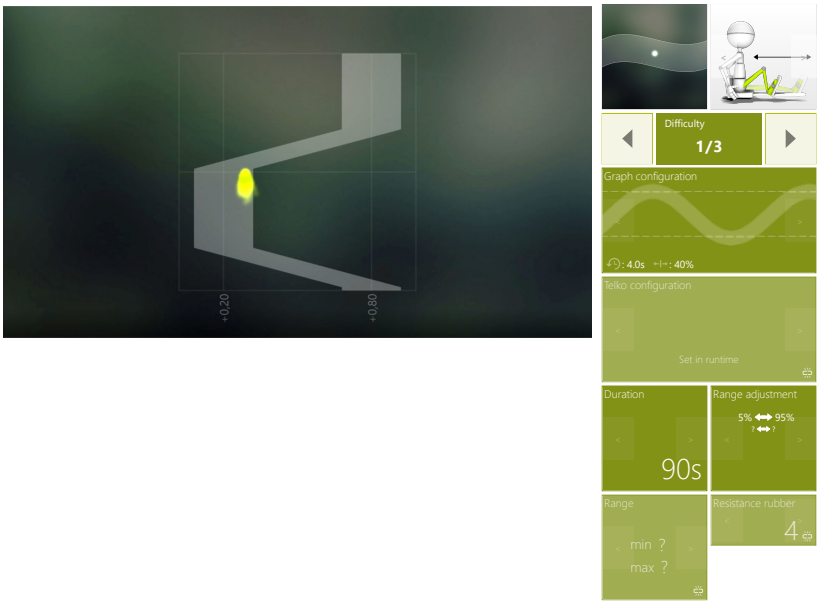
- Movement precision
- Activity in a given rhythm
- Repetitive movements
- Hands raising

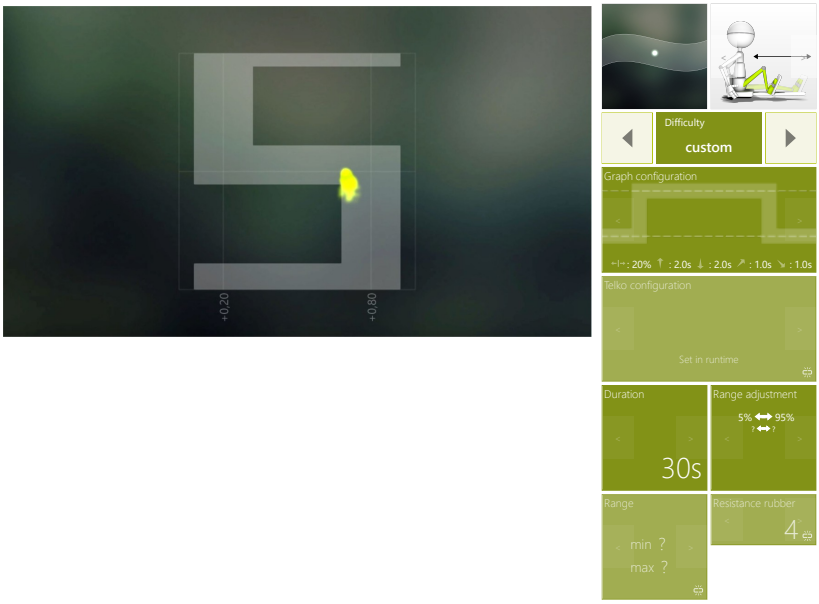
INSTRUCTION FOR PATIENT

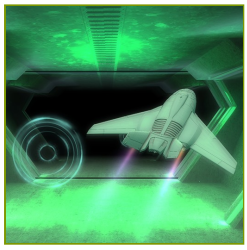
Try to stay within the borders.

SAMPLE SETTINGS







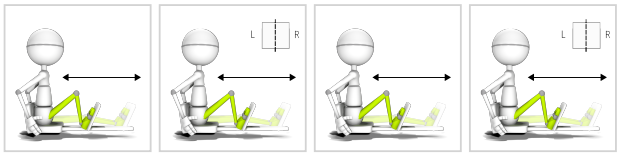


FUNCTIONAL MOVEMENTS

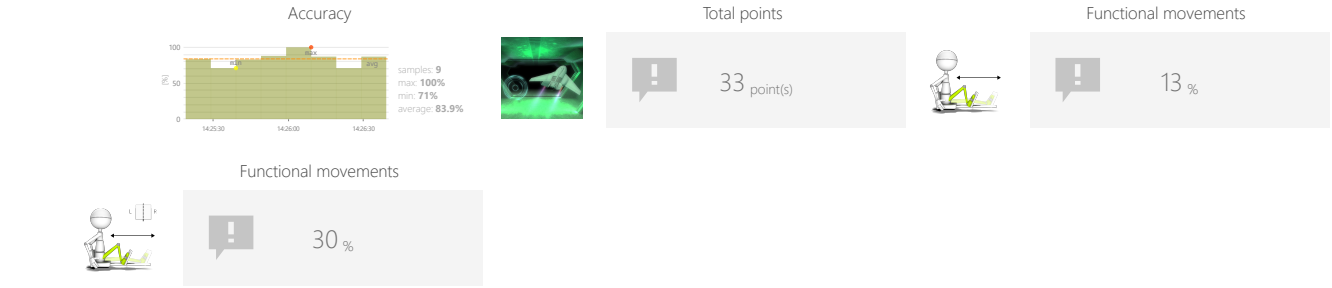
AIRPLANE

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
- Individual's position
- Task duration
- Range adjustment
- Range
- Resistance

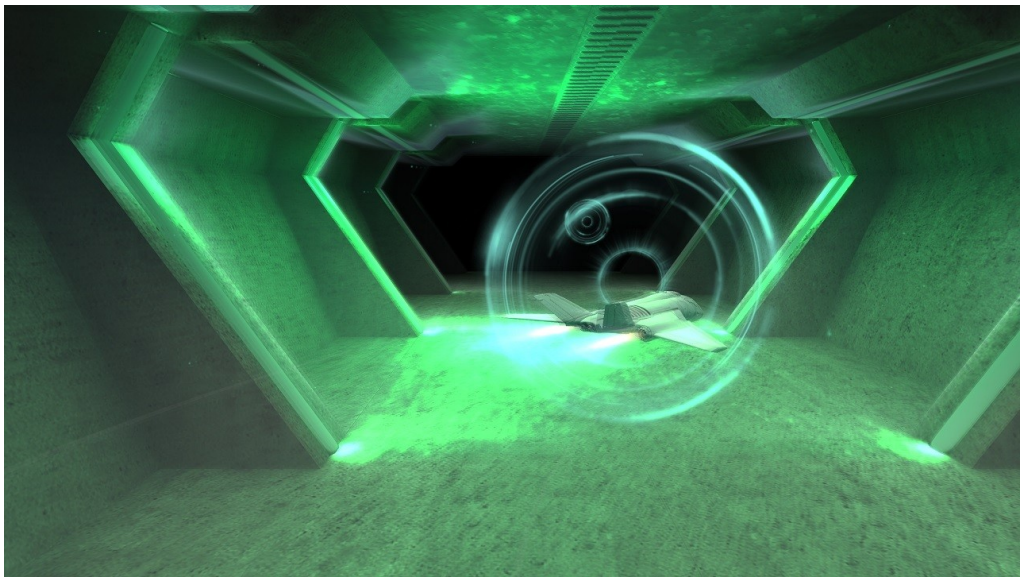
OBJECTIVES

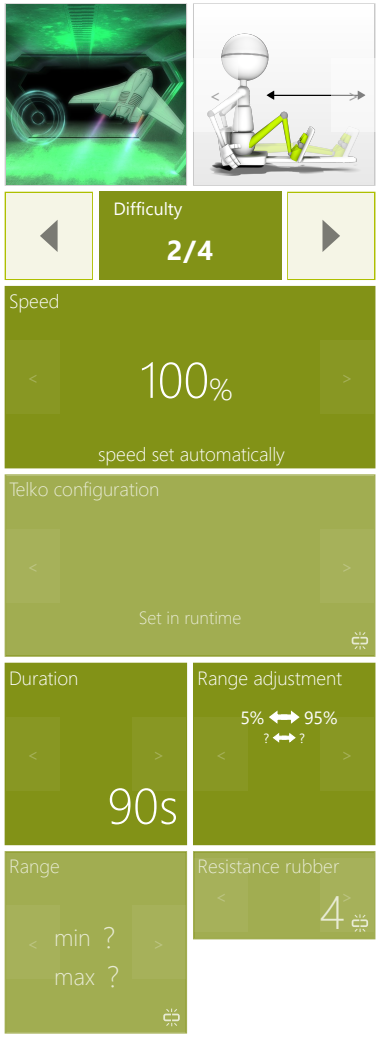
- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space
- Balance and equilibrium training

INSTRUCTION FOR PATIENT

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

SAMPLE SETTINGS



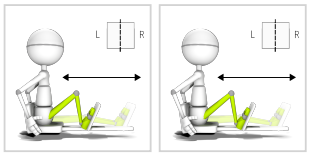


FUNCTIONAL MOVEMENTS

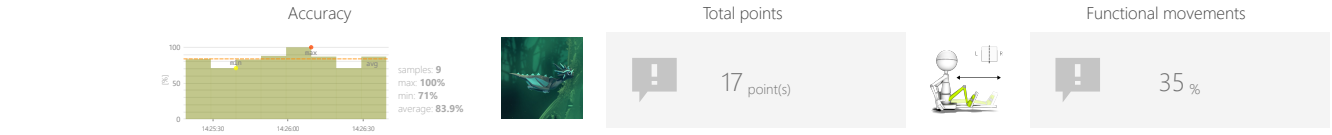
DRAGON

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

- Individual's position
- Task duration
- Balance 1D
- Range adjustment
- Range
- Coins group size
- Distance between coins
- Gravity force
- Resistance

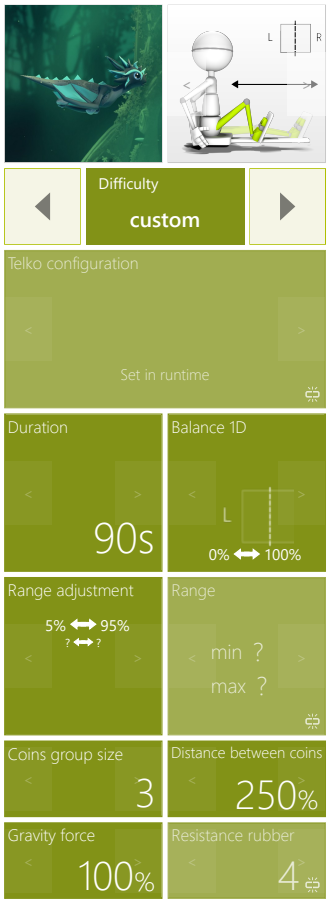
OBJECTIVES

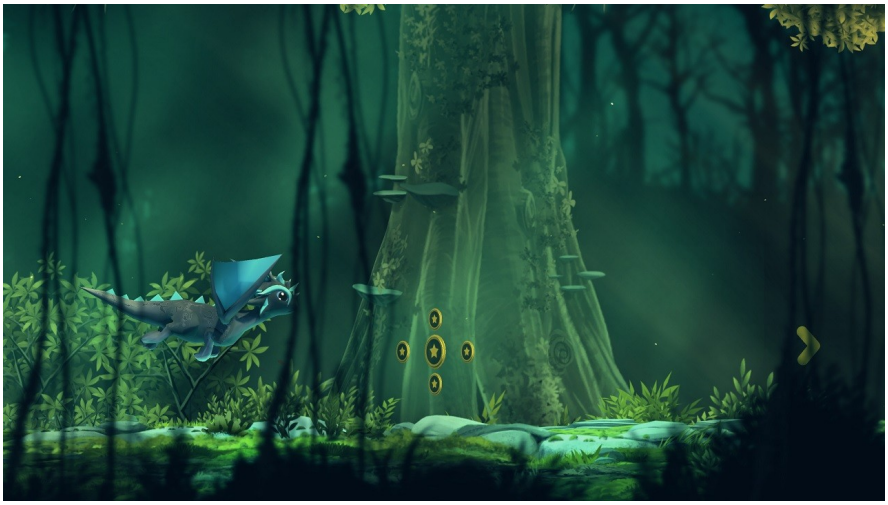
- Predicting the trajectory of objects
- Improve range of motion
- Visual motor coordination
- Muscle strengthening
- Planning and Strategy

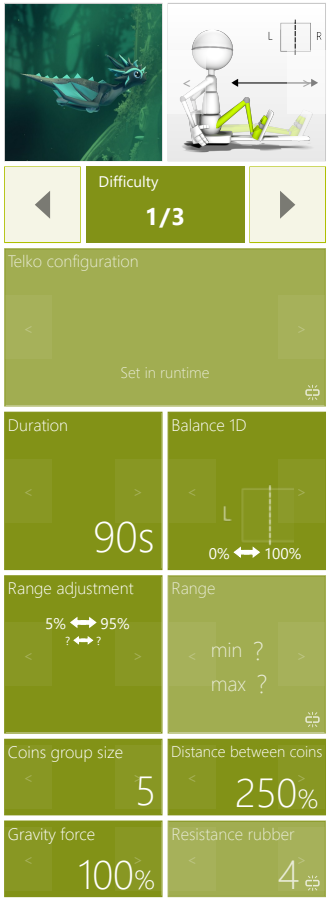
INSTRUCTION FOR PATIENT

Fly and collect the coins.

SAMPLE SETTINGS





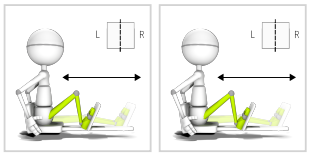


FUNCTIONAL MOVEMENTS

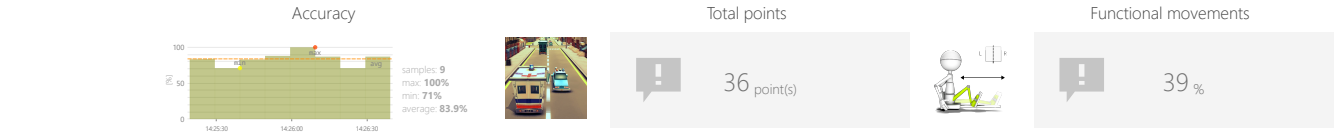
AMBULANCE

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



ADJUSTMENTS

- Speed
- Individual's position
- Task duration
- Balance 1D
- Range adjustment
- Range
- Distance between cars
- Resistance

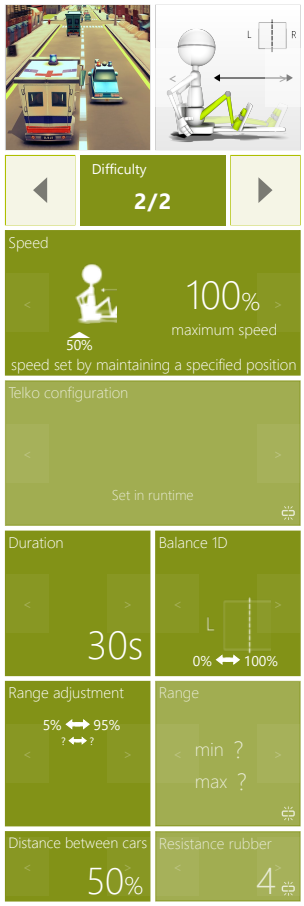
OBJECTIVES

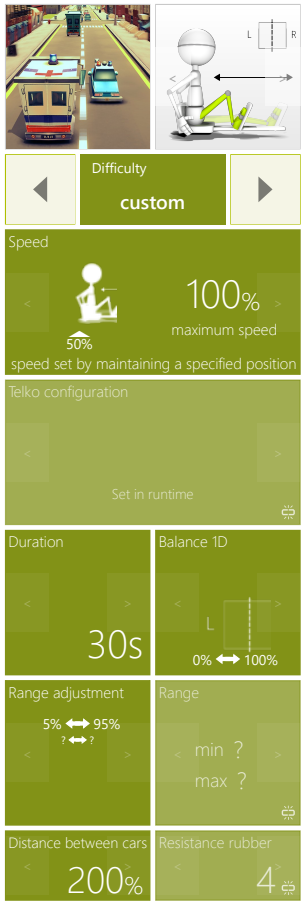
- Balance and equilibrium training
- Dynamics of planned movements
- Focusing
- Speed of decision making
- Visual motor coordination

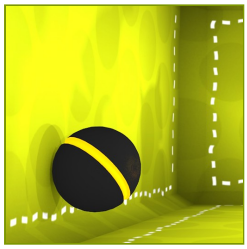
INSTRUCTION FOR PATIENT

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

SAMPLE SETTINGS





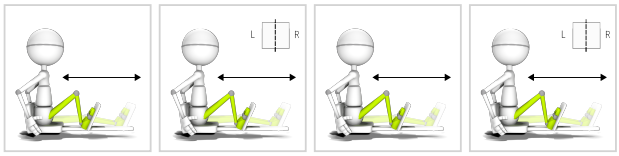


FUNCTIONAL MOVEMENTS

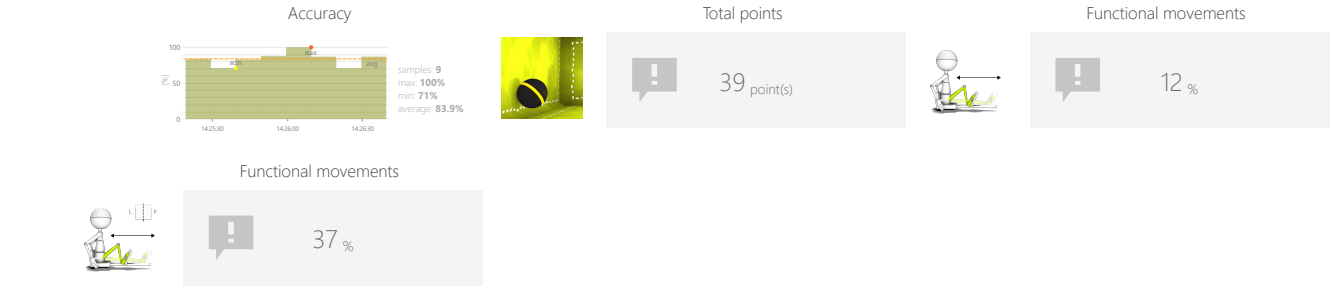
ARCANOID

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

- Individual's position
- Task duration
- Range adjustment
- Range
- Reticle size
- Speed of objects
- Resistance

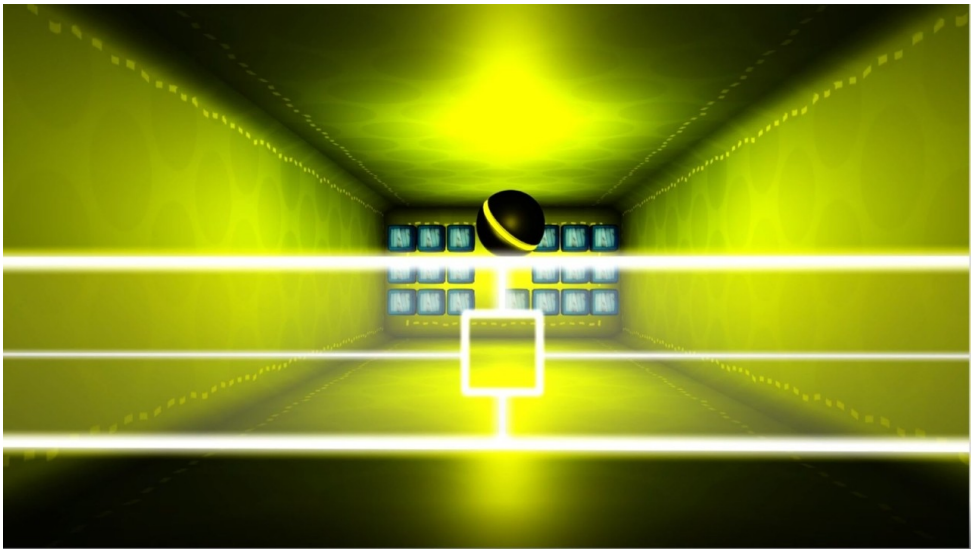
OBJECTIVES

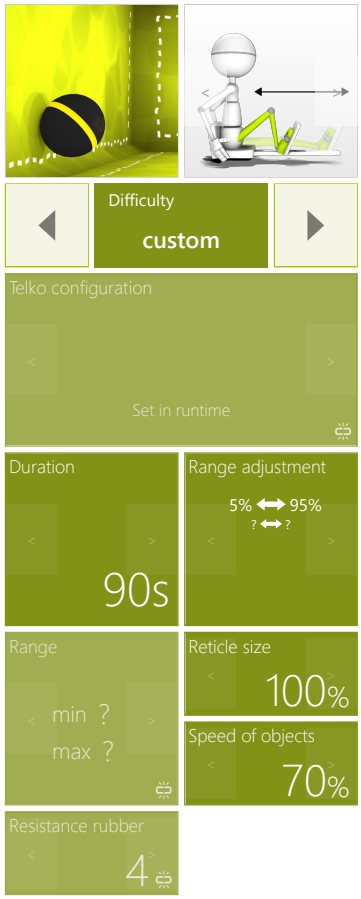
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

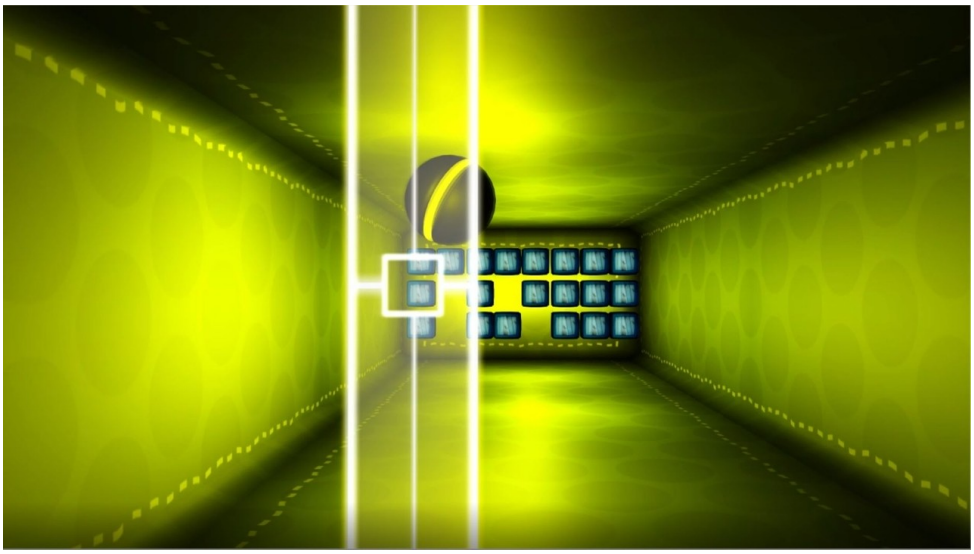
INSTRUCTION FOR PATIENT

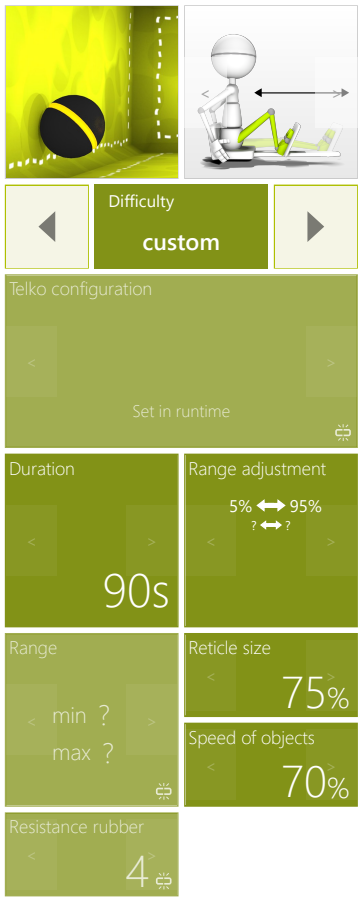
Destroy as many boxes as you can.

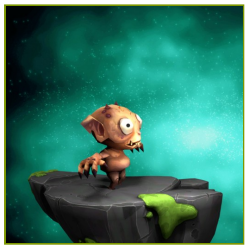
SAMPLE SETTINGS









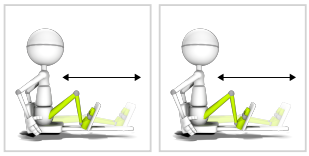


FUNCTIONAL MOVEMENTS

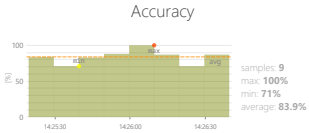
ROCKET JUMPING

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

18 point(s)

Functional movements

14 %

ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Time between objects
- Bomb format
- Speed of objects
- Resistance

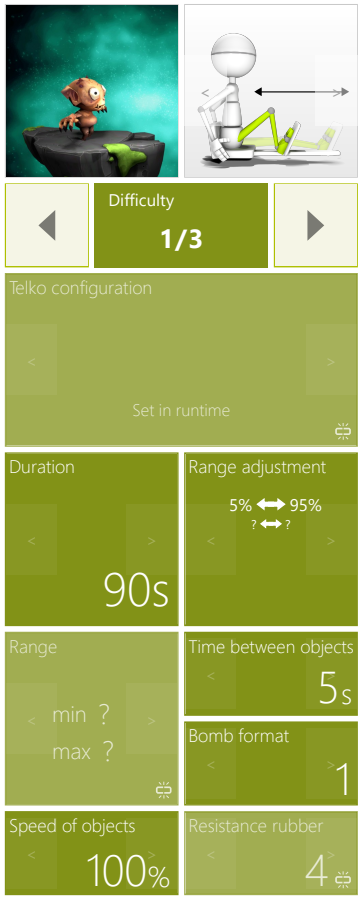
OBJECTIVES

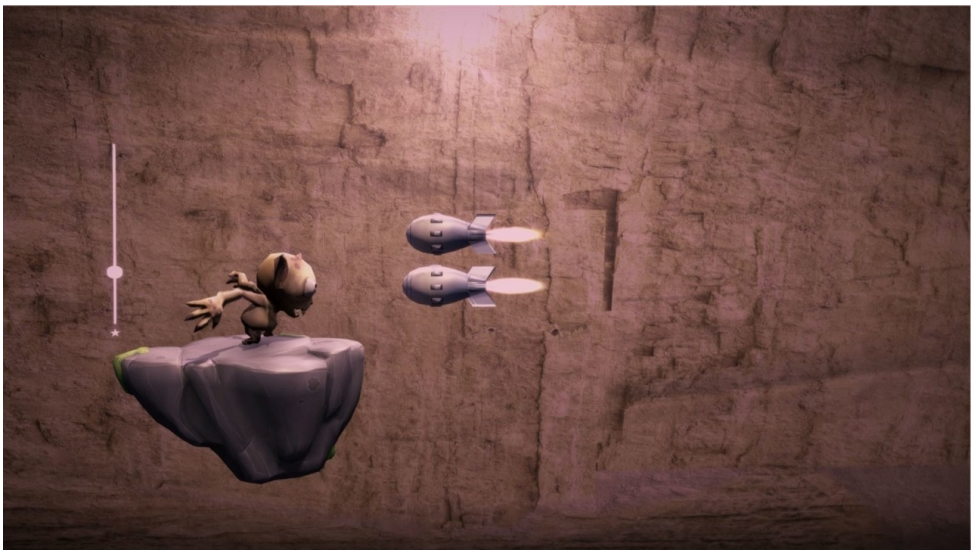
- Spontaneous movements
- Dynamic responses to emerging moving targets
- Predicting the trajectory of objects

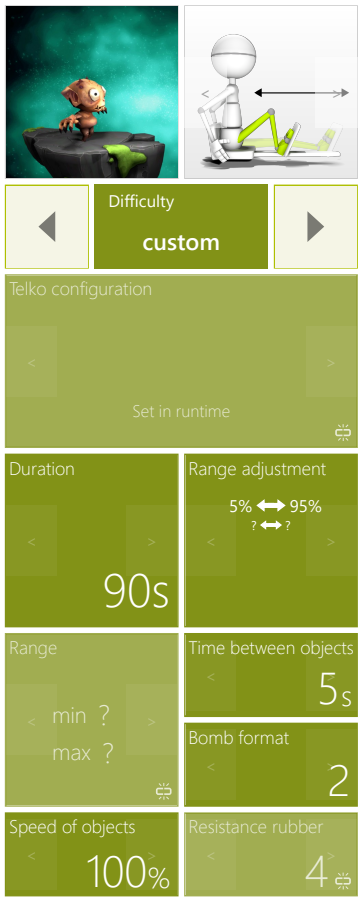
INSTRUCTION FOR PATIENT

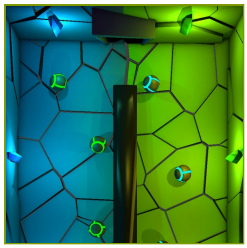
Help the creature jump over incoming rockets and avoid being hit.

SAMPLE SETTINGS







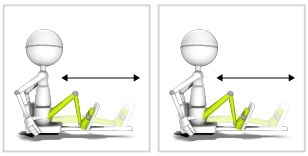


DIVIDED ATTENTION

SORTER

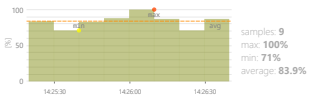
Measure and train individual's skills to successfully execute more than one action at a time, while paying attention to two or more channels of information.

CONTROL MODES



RESULTS

Accuracy



Total points

36 point(s)

Divided attention

17 %

ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Number of objects
- Gap size
- Speed of objects
- Resistance

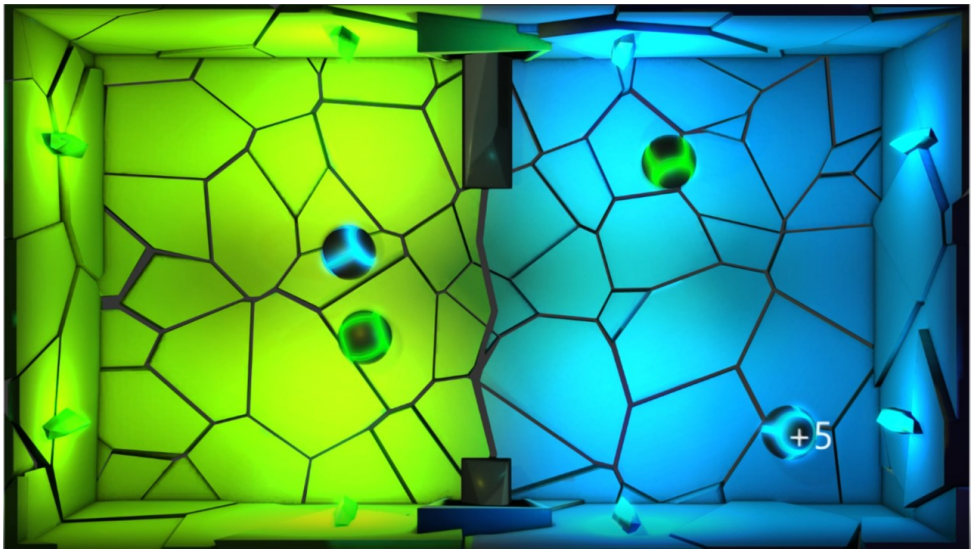
OBJECTIVES

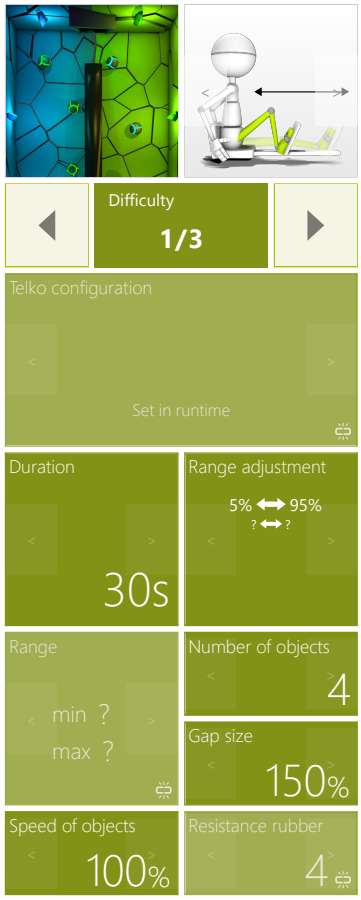
- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

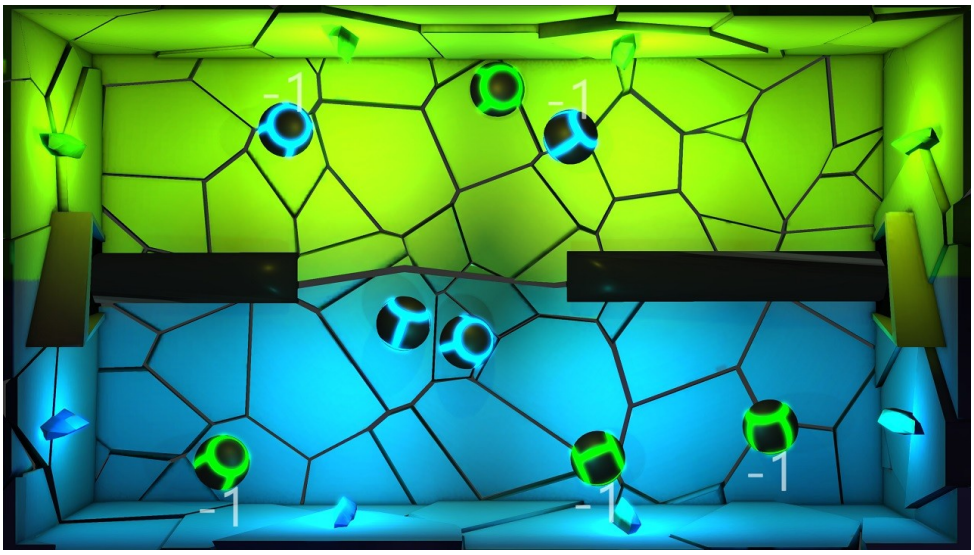
INSTRUCTION FOR PATIENT

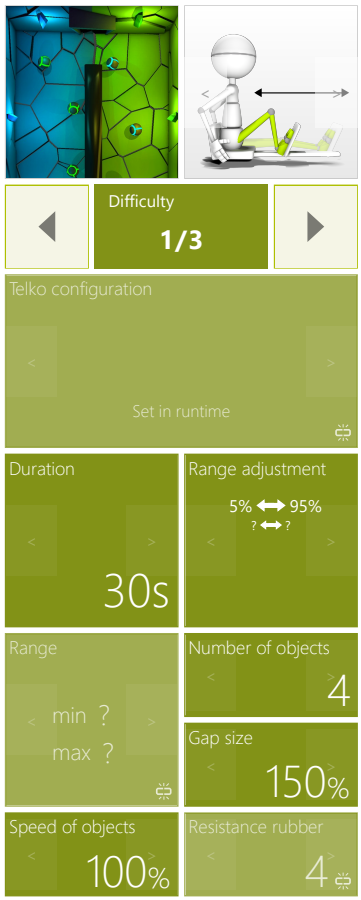
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.

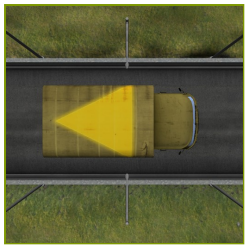
SAMPLE SETTINGS









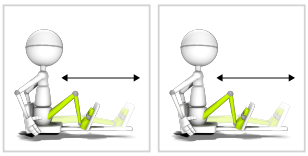


MEMORY

TRUCKS

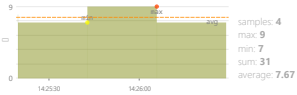
Measure and train individual's skills to memorize information.

CONTROL MODES



RESULTS

Number of repetitions



Accuracy

Total points

25 point(s)

Memory

12 %

ADJUSTMENTS

- Individual's position
- Task duration
- Range adjustment
- Range
- Resistance
- Variations

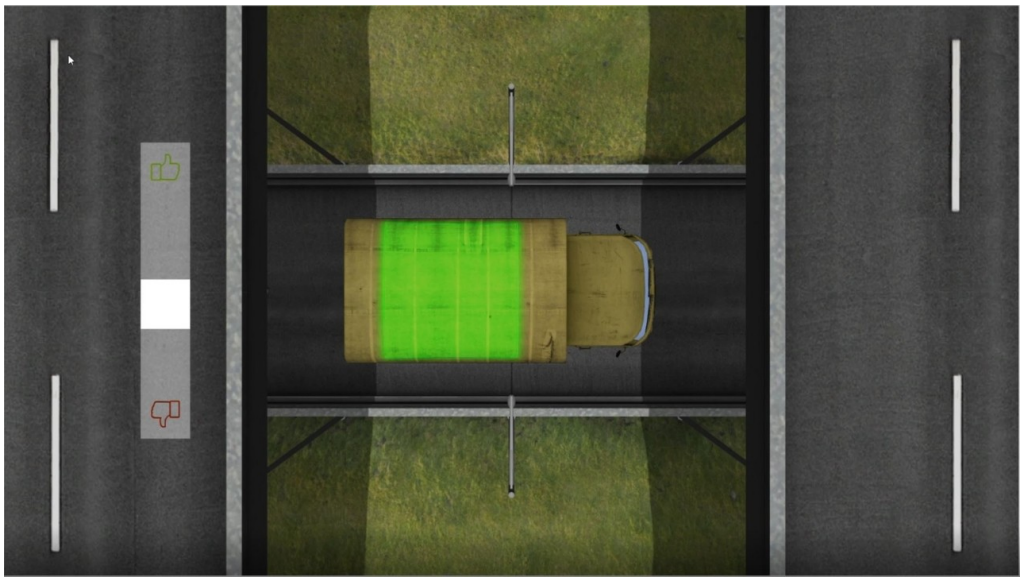
OBJECTIVES

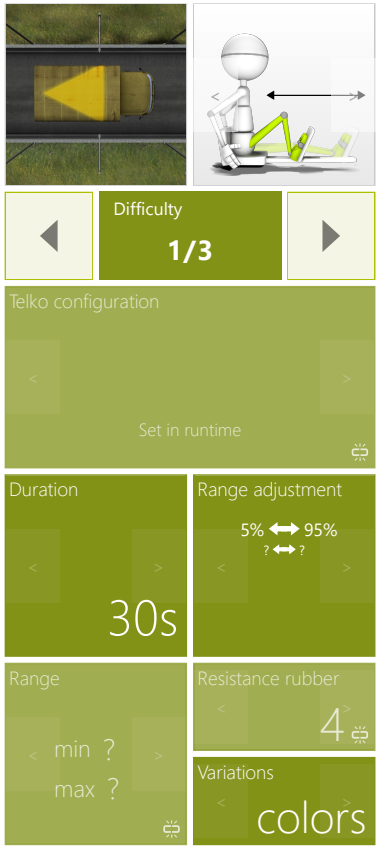
- Logical tasks
- Focusing
- Perceptivity

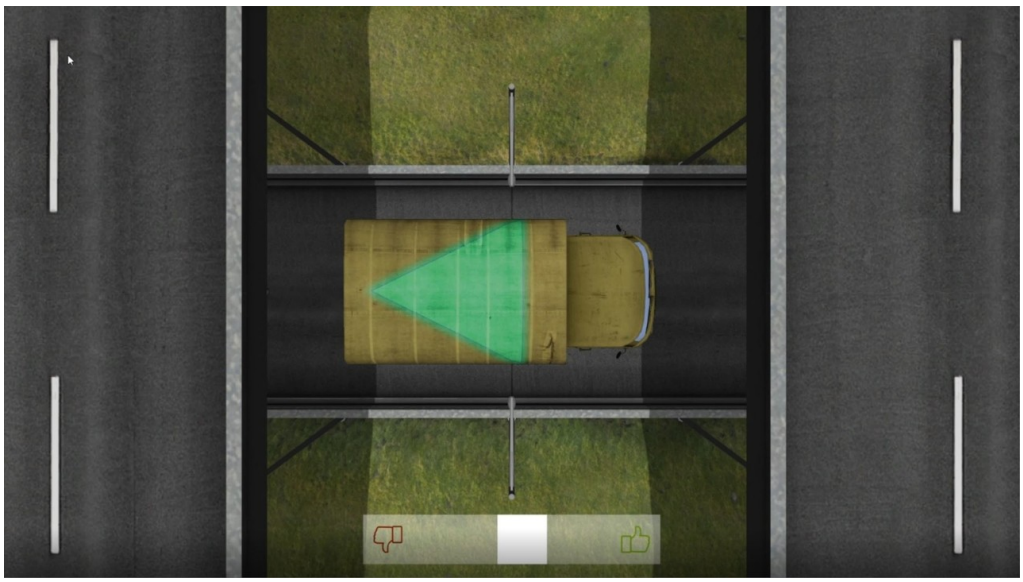
INSTRUCTION FOR PATIENT

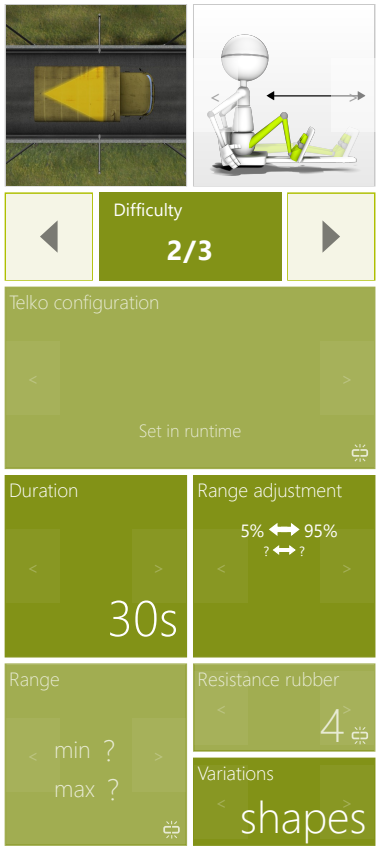
Remember the shape and/or its color on the roof of the car you see. Decide with thumbs up or down whether the next car has the same shape and/or color on the roof as the previous one.

SAMPLE SETTINGS





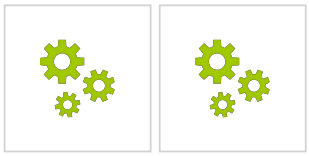




SPECIALIZED
BLOOD PRESSURE

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

CONTROL MODES



ADJUSTMENTS

- Individual's position
- Range adjustment
- Range
- Resistance

OBJECTIVES

- Monitor external parameters

INSTRUCTION FOR PATIENT

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