VAST.Rehab
REHABILITATION IN VIRTUAL REALITY

BASE PACK FOR JUPITER

2021.4

Therapeutic tasks database 4

Range of motion 4

Speed 5

Movement precision 7

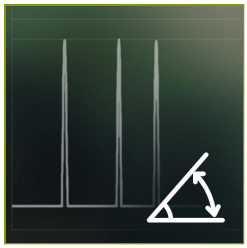
Functional movements 9

Strength 14

Divided attention 15

Memory 17

Specialized 19



RANGE OF MOTION

ANGLES EVALUATION

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

CONTROL MODES

OBJECTIVES

- Range of motion examination

INSTRUCTION FOR PATIENT

Try to achieve best result

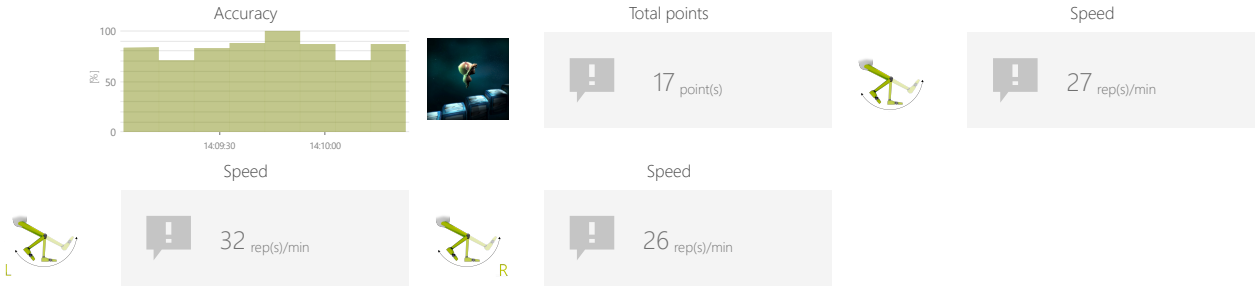
SPEED

STAIRS

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

CONTROL MODES

RESULTS



ADJUSTMENTS

- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Max time per floor
- Arm length
- Number of stairs
- Pause length

OBJECTIVES

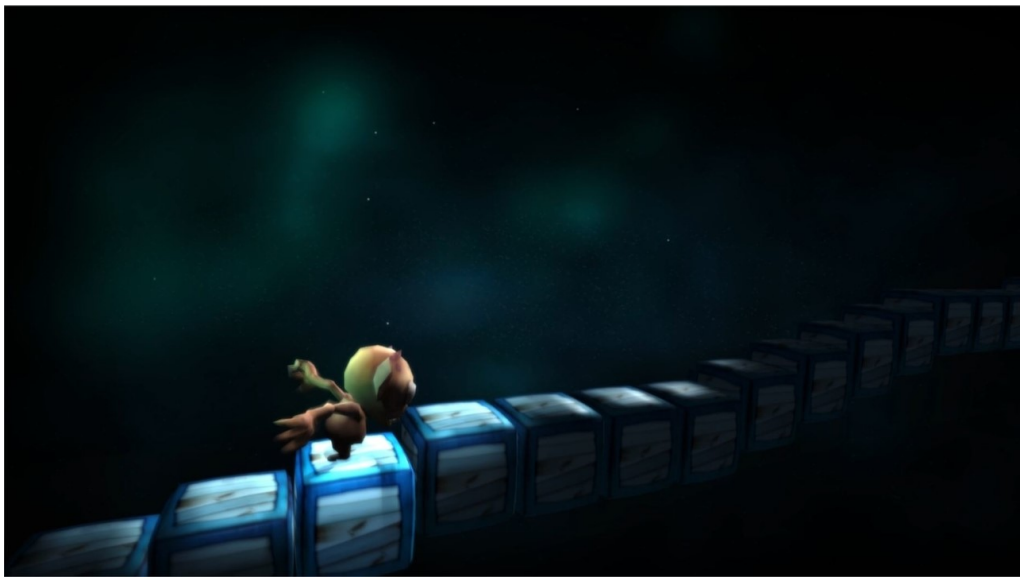
- Jumping
- Knees lifting
- Dynamics of planned movements

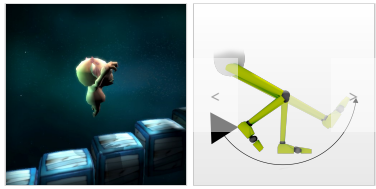
INSTRUCTION FOR PATIENT

Climb the stairs before they disappear

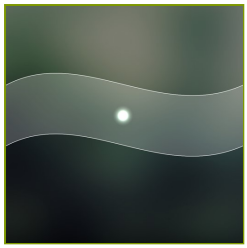
VAST.Rehab
REHABILITATION IN VIRTUAL REALITY

SAMPLE SETTINGS





VAST.Rehab
REHABILITATION IN VIRTUAL REALITY



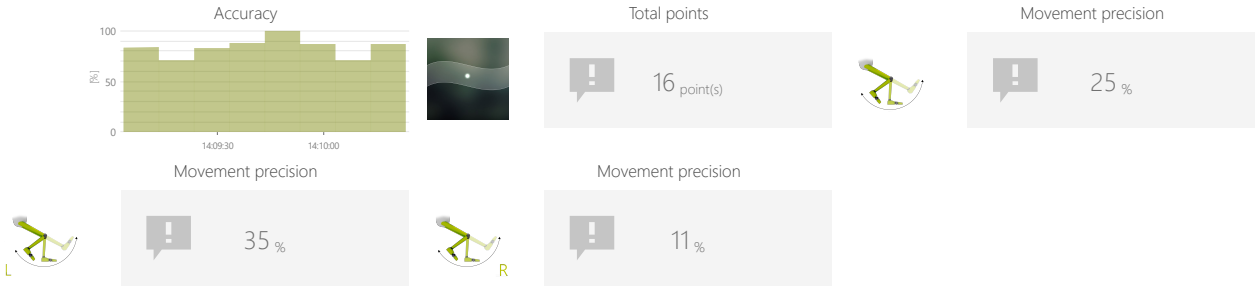
MOVEMENT PRECISION

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.)
- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Arm length

OBJECTIVES

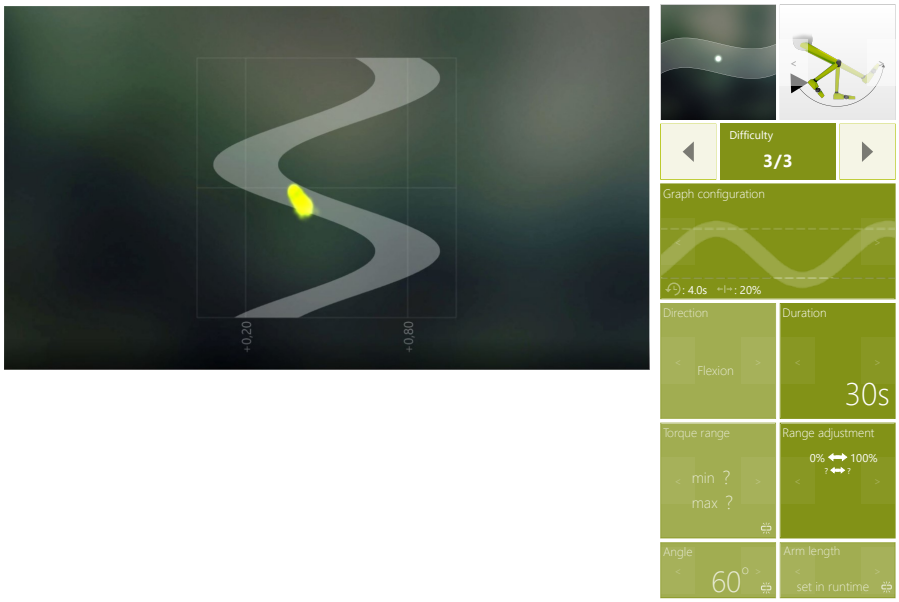
- Movement precision
- Activity in a given rhythm
- Repetitive movements
- Hands raising

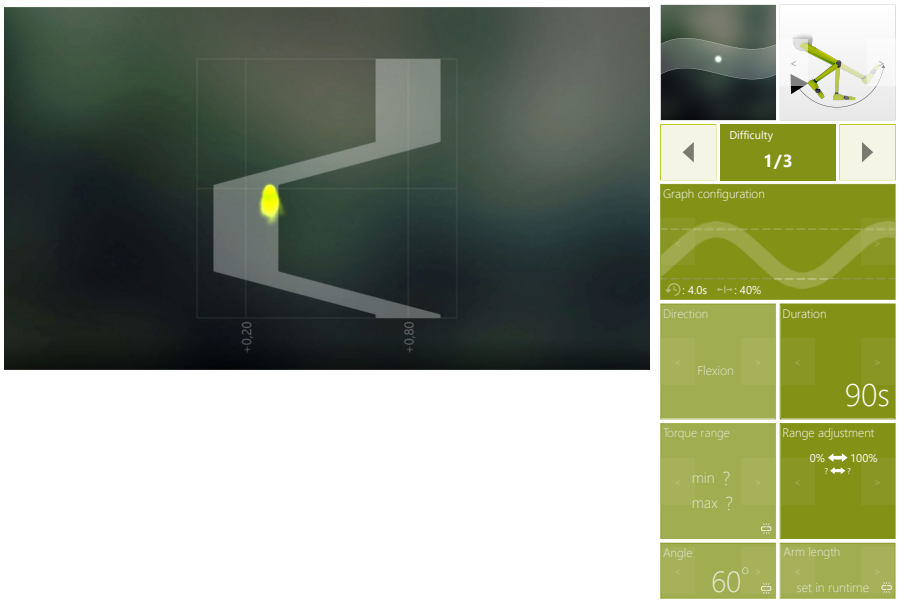
INSTRUCTION FOR PATIENT

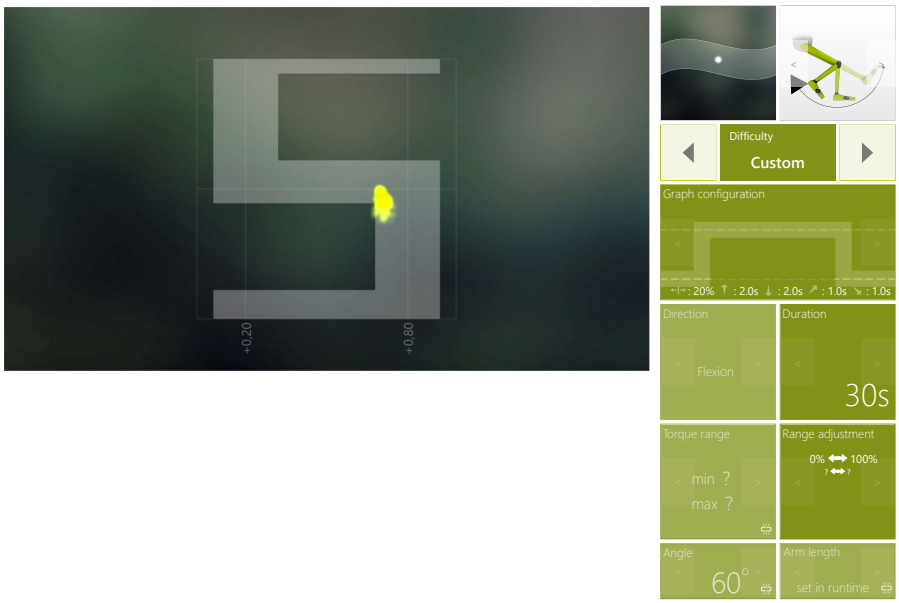
Try to stay within the borders

VAST.Rehab
REHABILITATION IN VIRTUAL REALITY

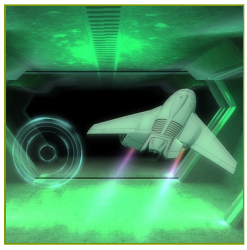
SAMPLE SETTINGS







VAST.Rehab
REHABILITATION IN VIRTUAL REALITY



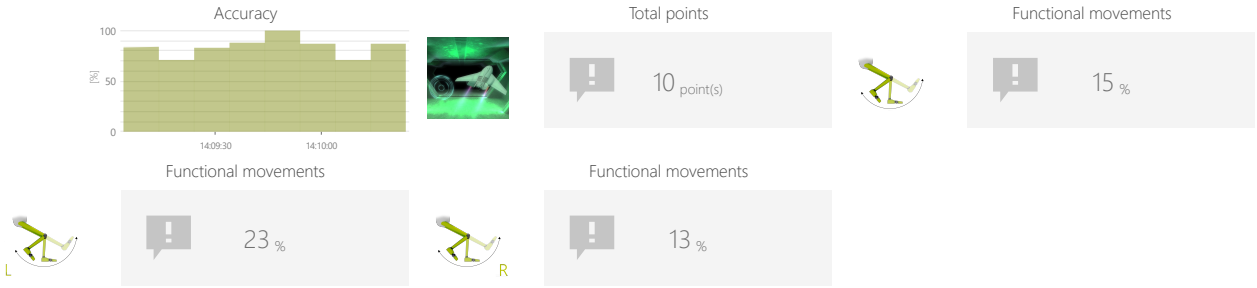
FUNCTIONAL MOVEMENTS

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

- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Arm length
- Player speed

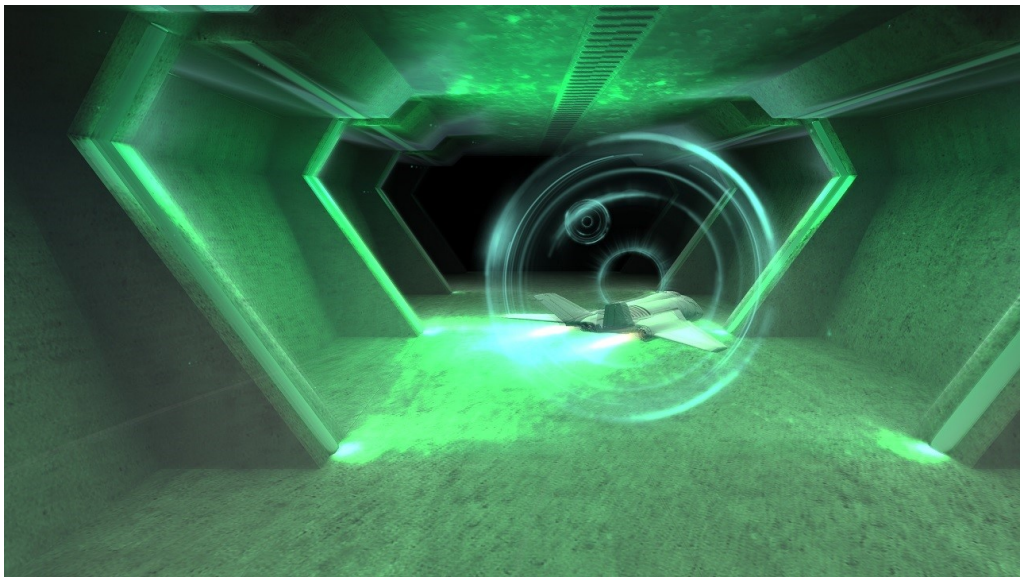
OBJECTIVES

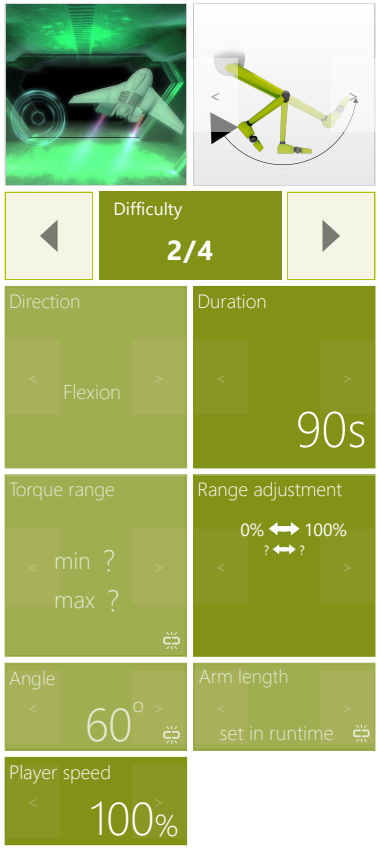
- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space
- Balance and equilibrium training

INSTRUCTION FOR PATIENT

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

SAMPLE SETTINGS





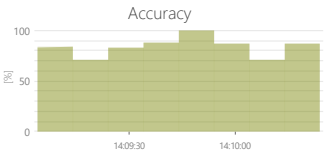
FUNCTIONAL MOVEMENTS

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



Total points

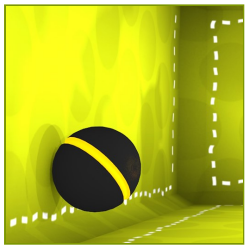
10 point(s)

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



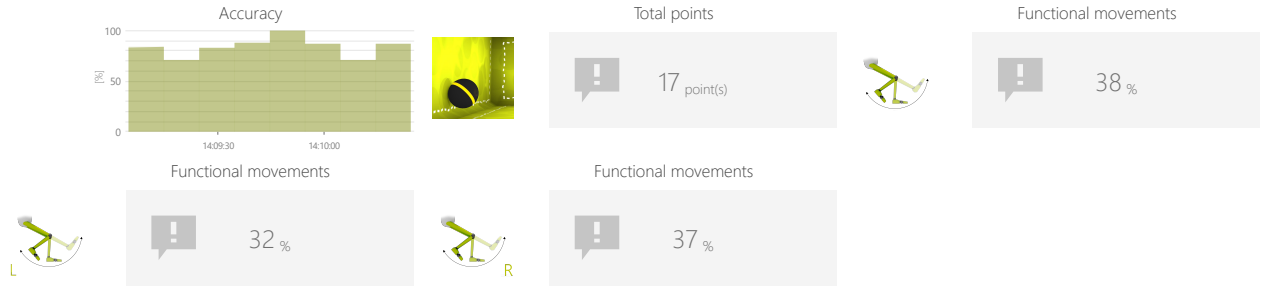
FUNCTIONAL MOVEMENTS

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

- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Arm length
- Reticle size
- Speed of objects

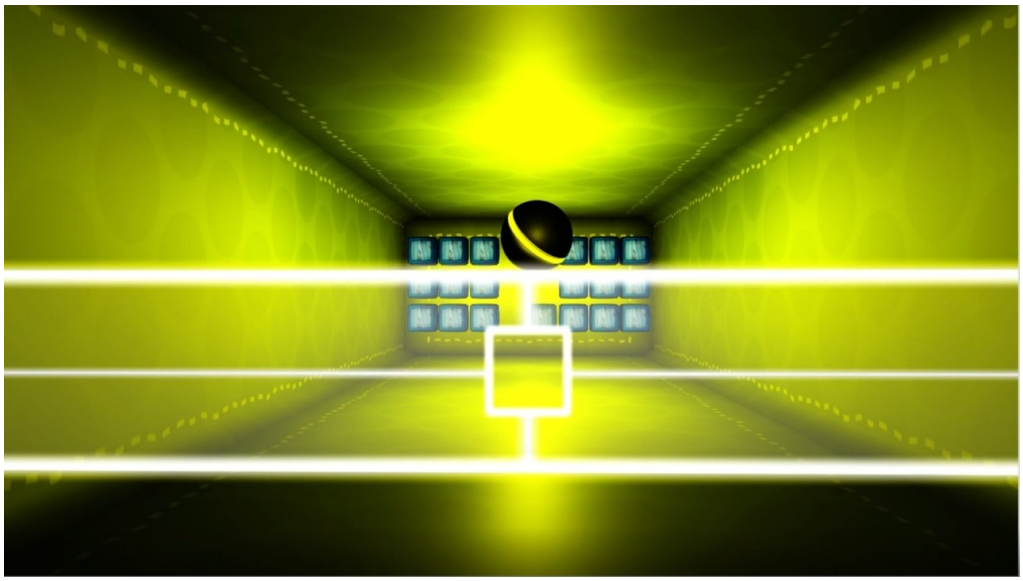
OBJECTIVES

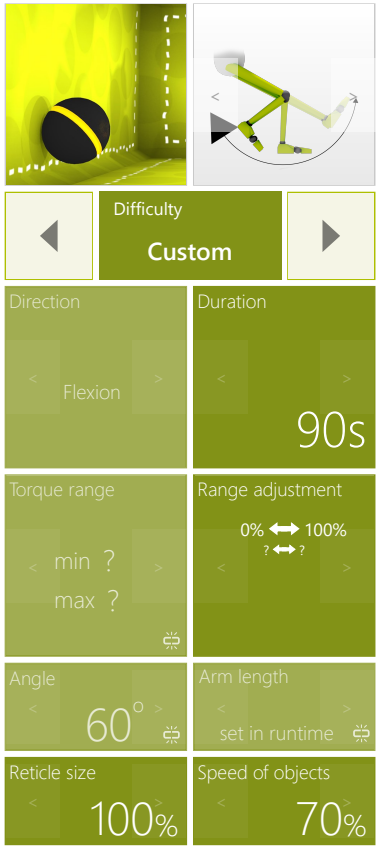
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

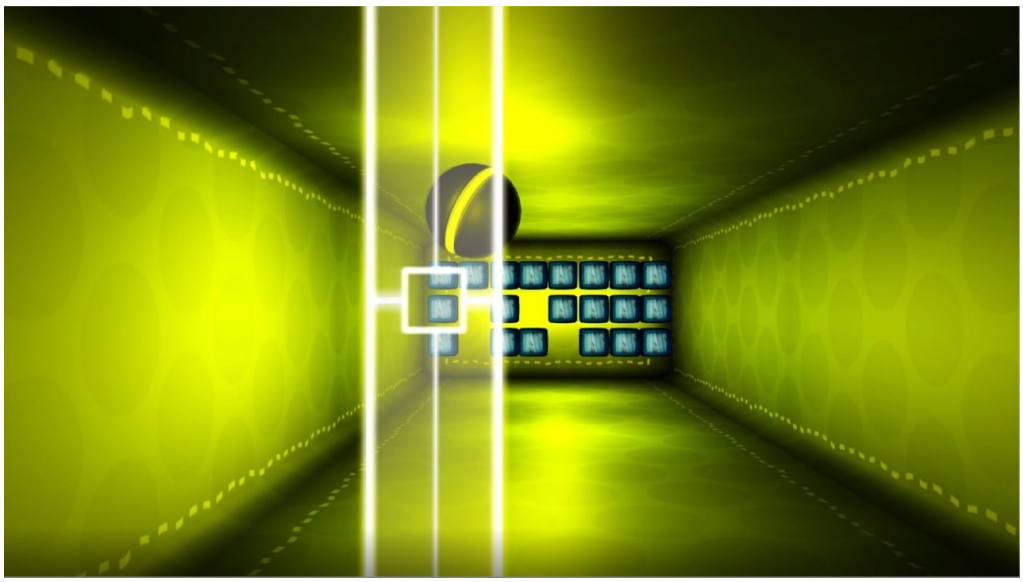
INSTRUCTION FOR PATIENT

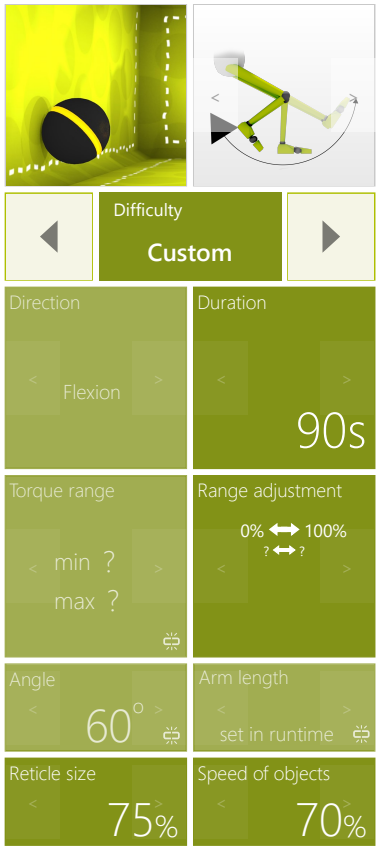
Destroy as many boxes as you can

SAMPLE SETTINGS







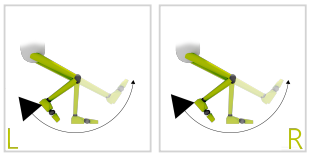


STRENGTH

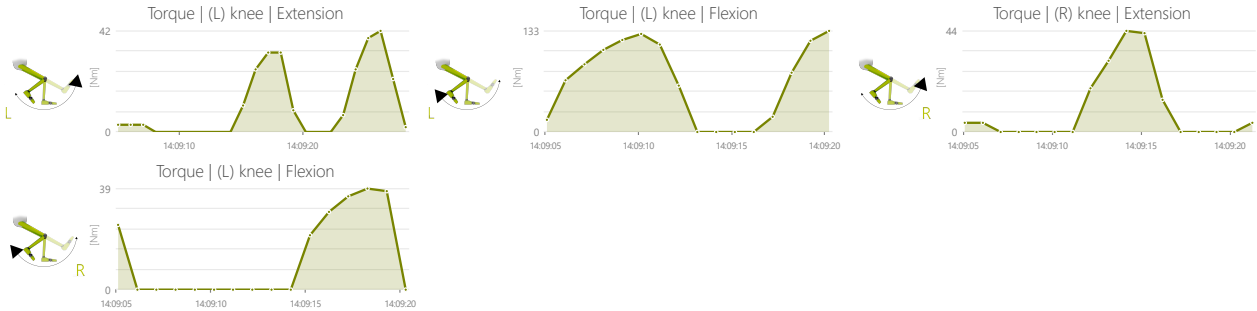
STRENGTH TEST

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

CONTROL MODES



RESULTS



ADJUSTMENTS

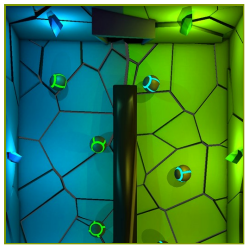
- Direction
- Torque range
- Time to complete action
- Angle
- Arm length

OBJECTIVES

- Strength examination
- Muscle strengthening

INSTRUCTION FOR PATIENT

Try to achieve best result



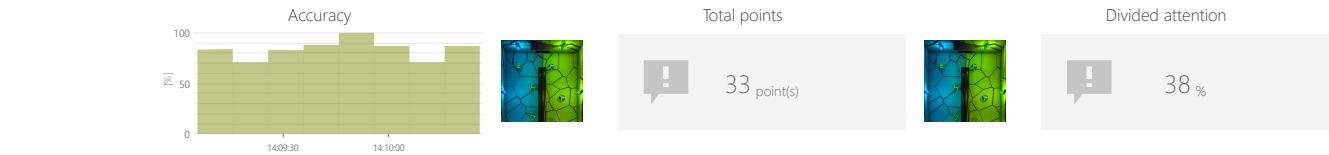
DIVIDED ATTENTION

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



ADJUSTMENTS

- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Arm length
- Number of objects
- Gap size
- Speed of objects

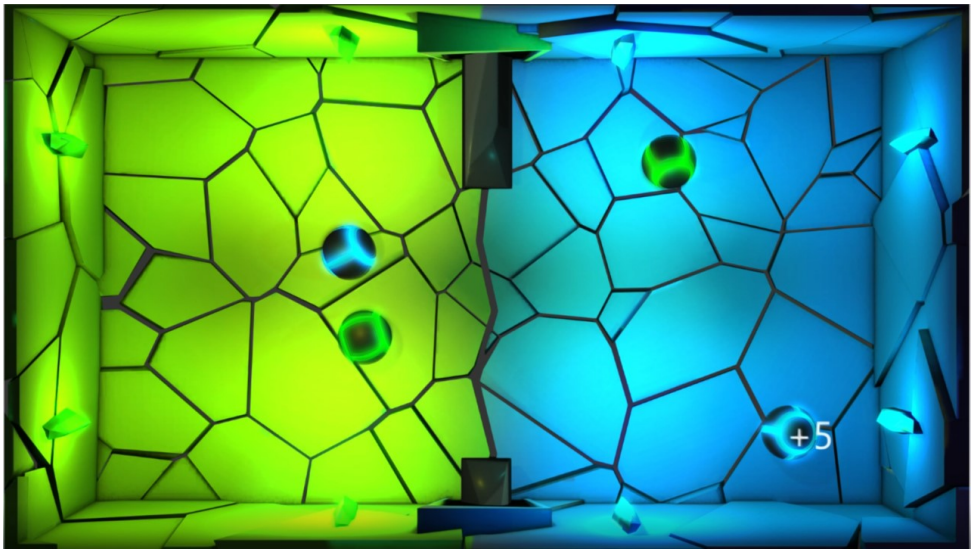
OBJECTIVES

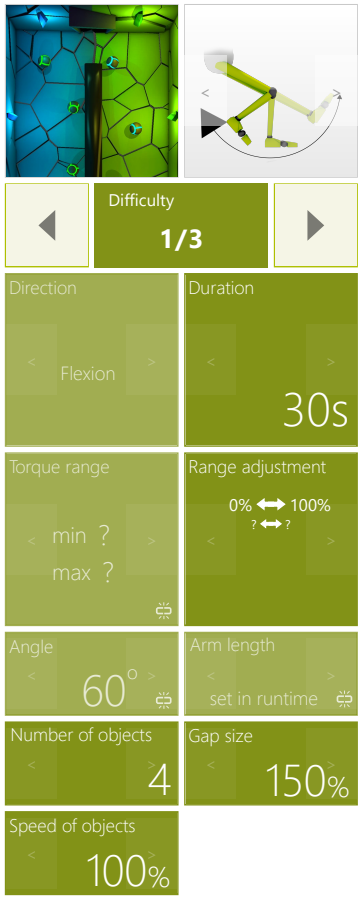
- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

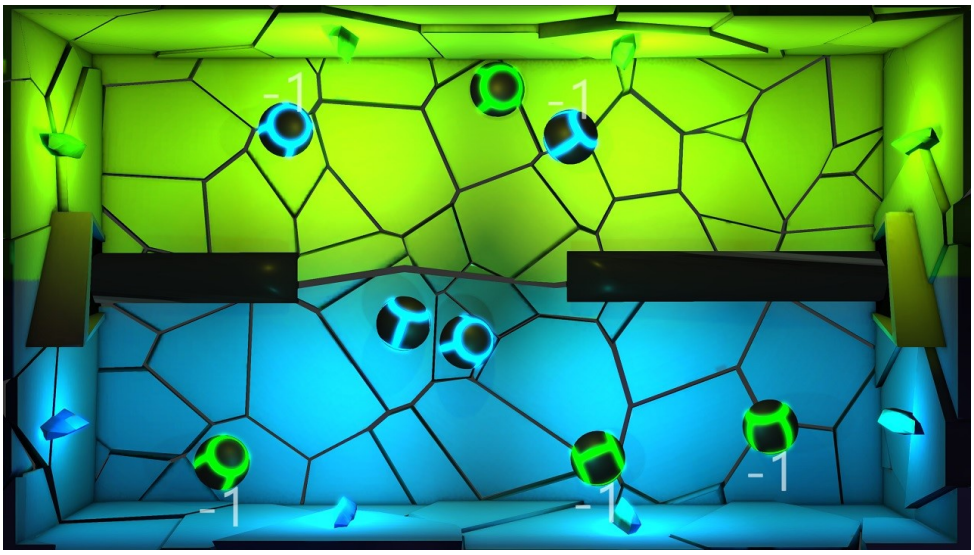
INSTRUCTION FOR PATIENT

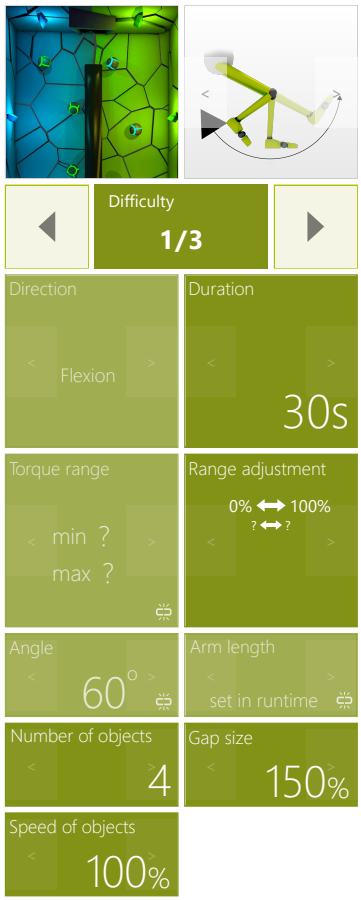
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.

SAMPLE SETTINGS

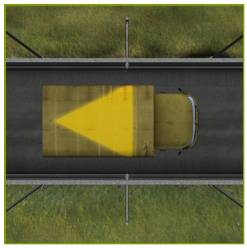








VAST.Rehab
REHABILITATION IN VIRTUAL REALITY



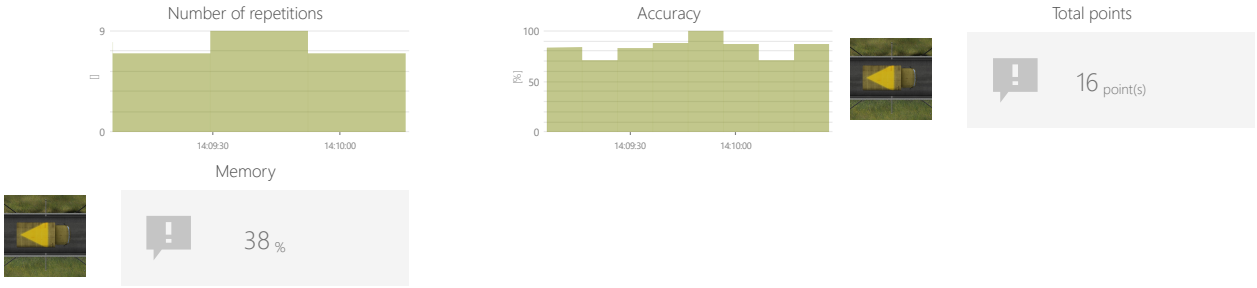
MEMORY

TRUCKS

Measure and train individual's skills to memorize information.

CONTROL MODES

RESULTS



ADJUSTMENTS

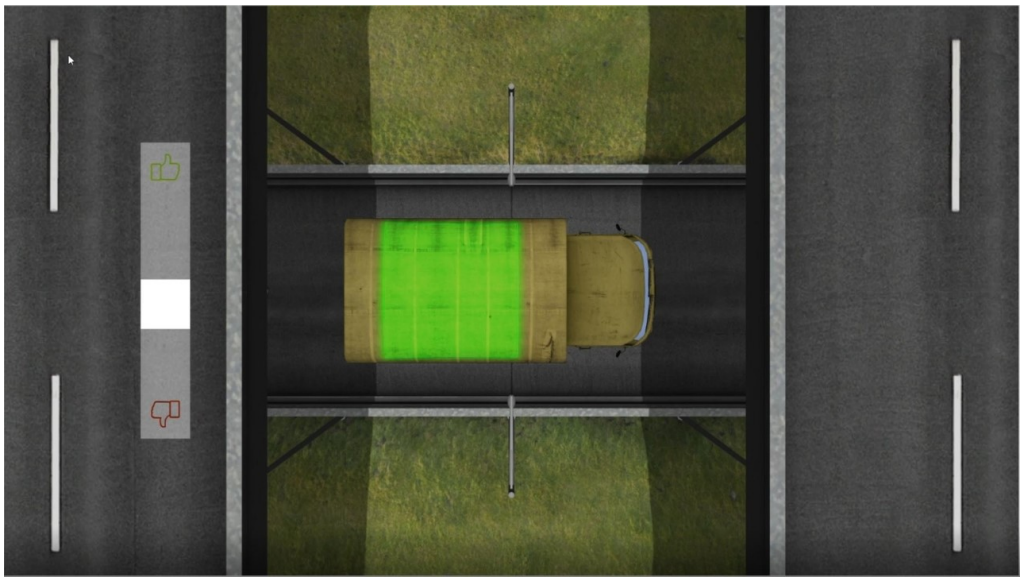
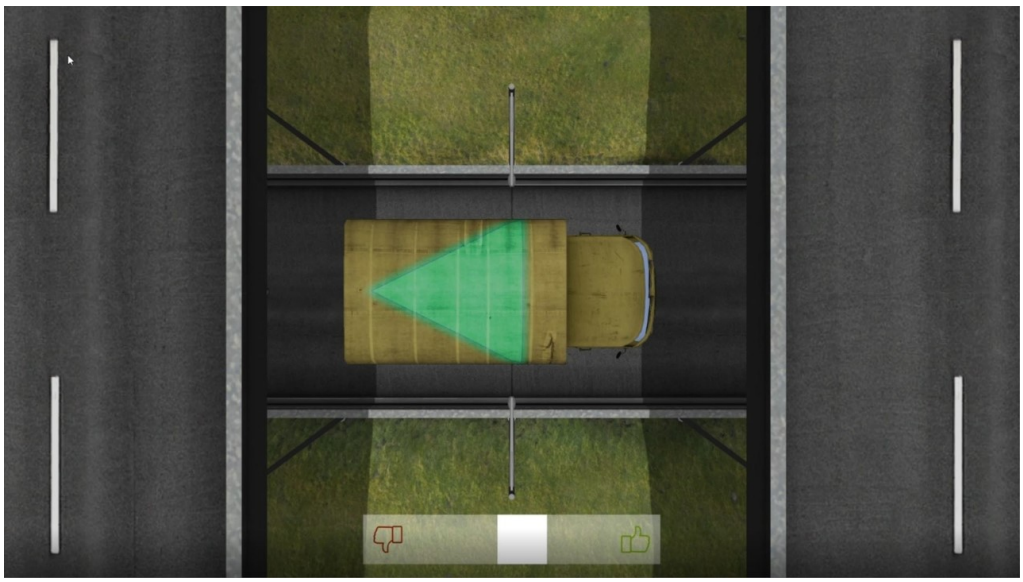
- Direction
- Task duration
- Torque range
- Range adjustment
- Angle
- Arm length
- Variations

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.

VAST.Rehab
REHABILITATION IN VIRTUAL REALITY

SAMPLE SETTINGS