

# BASE PACK FOR CAPRI

2025.1



Hardware requirements	
What is needed?	
Therapeutic tasks database	
Range of motion	
Speed	
Movement precision	
Functional movements	
Divided attention	22
Memory	24
Problem solving	26
Specialized	30

# 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**





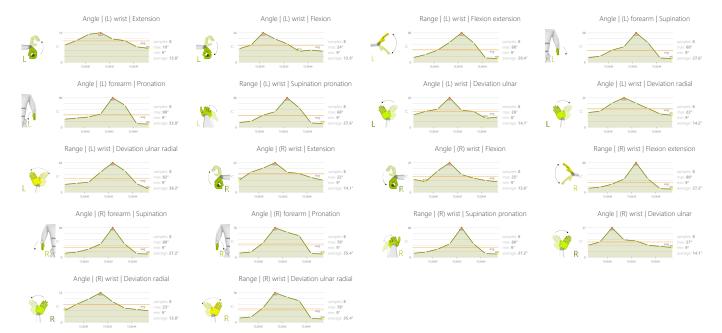








## **RESULTS**



#### **ADJUSTMENTS**

• Time to complete action

# **OBJECTIVES**

• Range of motion examination

#### INSTRUCTION FOR PATIENT

Try to achieve best result





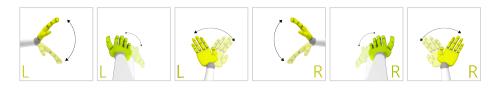




# SPEED TEST

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

# **CONTROL MODES**



## **RESULTS**



## **ADJUSTMENTS**

• Time to complete action

## **OBJECTIVES**

- Speed of movement
- Repetitive movements

#### INSTRUCTION FOR PATIENT

Perform the specified movement pattern as many times as possible.





# MOVEMENT PRECISION

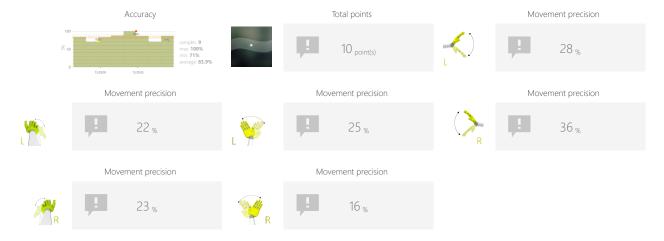
## GRAPH

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

#### **OBJECTIVES**

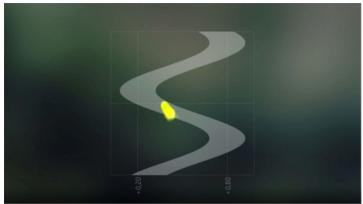
- Movement precision
- Activity in a given rhythm
- Repetitive movements

#### INSTRUCTION FOR PATIENT

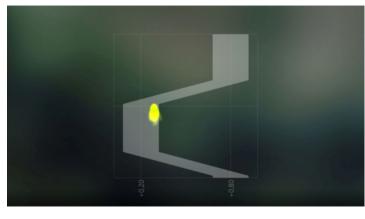
Try to stay within the borders.



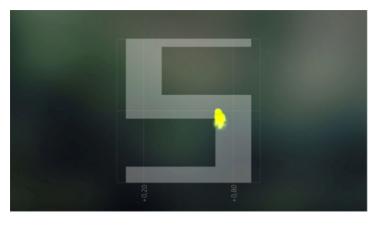














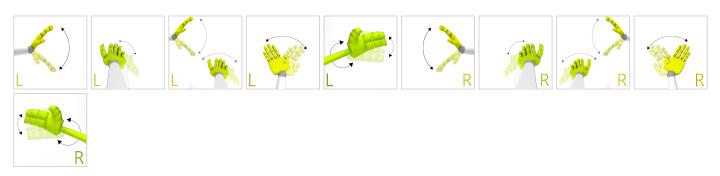




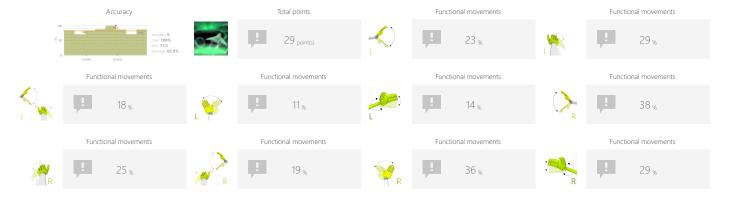
#### **AIRPLANE**

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

#### **OBJECTIVES**

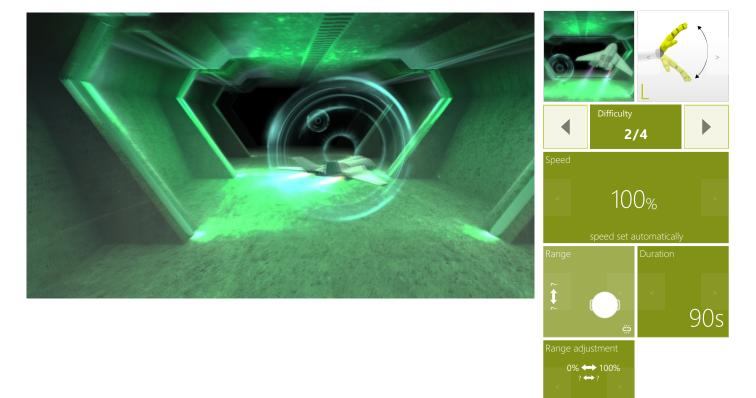
- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space

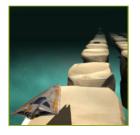
#### INSTRUCTION FOR PATIENT

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









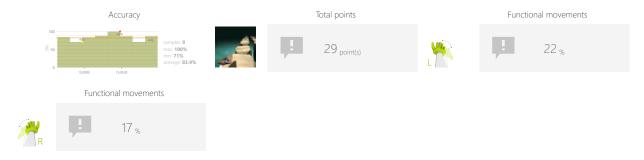
## **STONES**

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**



#### **OBJECTIVES**

- Perceptivity
- Dynamics of planned movements
- Reaction to the positive visual stimuli
- Response to negative visual stimuli

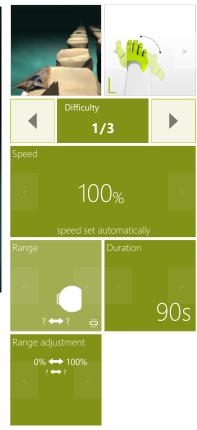
#### INSTRUCTION FOR PATIENT

Make the the spaceship collect the colorful creatures and avoid the rocks.

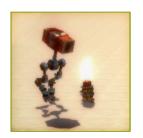












## **HAMMER**

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**



#### **OBJECTIVES**

- Planning and Strategy
- Speed of decision making

#### **INSTRUCTION FOR PATIENT**

Hit the burning barrels as quickly as you can. Then return to the center.











# **RUNAWAY**

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**



#### **OBJECTIVES**

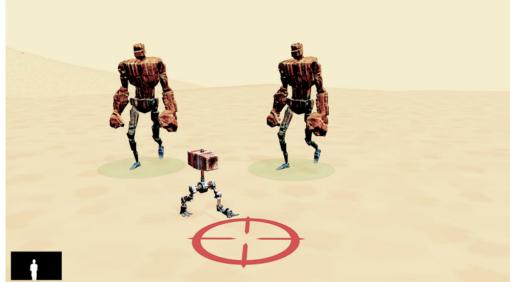
- Predicting the trajectory of objects in 3D space
- Response to negative visual stimuli
- Focusing
- Perceptivity

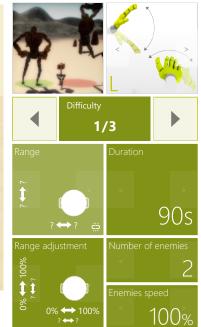
#### INSTRUCTION FOR PATIENT

Keep away from the big robots.

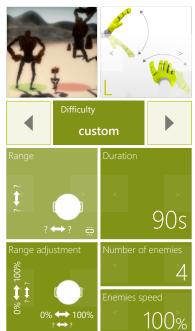














## **AUTOMATIC CANNON**

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**





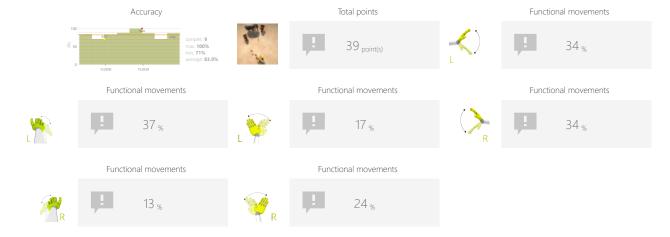








#### **RESULTS**



#### **ADJUSTMENTS**

- Task duration
- Enable distractors
- Time between cannonballs
- Time between enemies
- Enemies speed

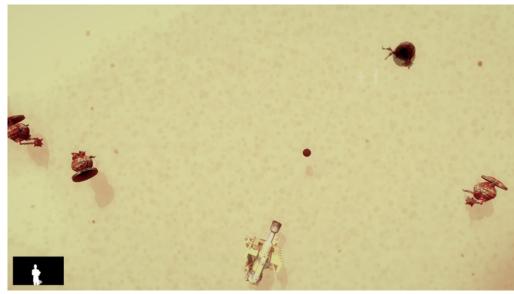
#### **OBJECTIVES**

- Divided attention
- Spontaneous movements
- Predicting the trajectory of objects

#### INSTRUCTION FOR PATIENT

Control cannon(s) to destroy robots, but avoid hitting the elephant!









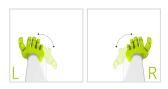




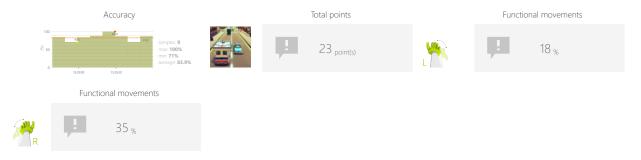
## **AMBULANCE**

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**



#### **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.

















# 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

#### **OBJECTIVES**

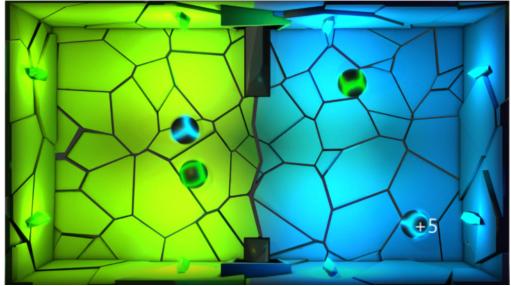
- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

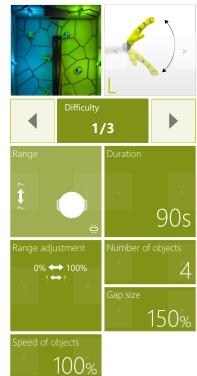
#### INSTRUCTION FOR PATIENT

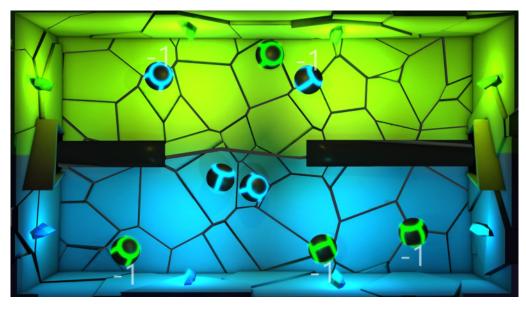
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.















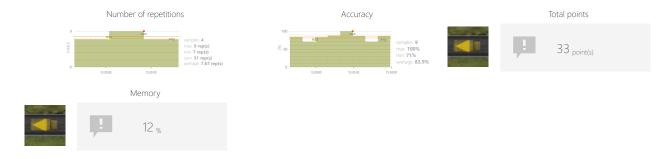
# MEMORY TRUCKS

Measure and train individual's skills to memorize information.

# **CONTROL MODES**



## **RESULTS**



#### **ADJUSTMENTS**

- Task duration
- Variations

## **OBJECTIVES**

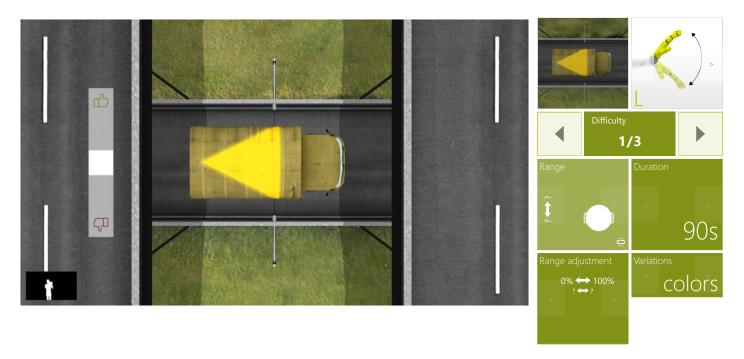
- Logical tasks
- Focusing
- Perceptivity

## 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.







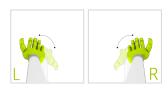


# PROBLEM SOLVING

## **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**



#### **OBJECTIVES**

- Perceptivity
- Visual motor coordination
- Logical tasks

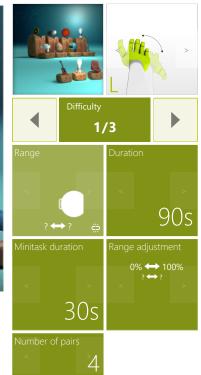
#### **INSTRUCTION FOR PATIENT**

Select the item which has a pair on the screen.











# PROBLEM SOLVING

## MAZE

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**



## **OBJECTIVES**

- Logical tasks
- Planned movements
- Planning and Strategy

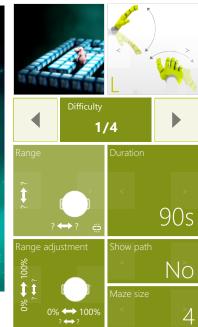
#### INSTRUCTION FOR PATIENT

Lead the hippo through the maze to the glowing target.

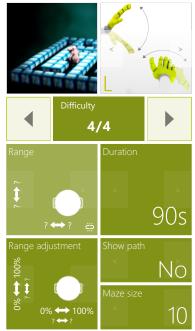














# SPECIALIZED BLOOD PRESSURE

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

# **CONTROL MODES**



## **OBJECTIVES**

• Monitor external parameters

#### INSTRUCTION FOR PATIENT

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

