

# 3D FULL BODY TRACKING

2024.1

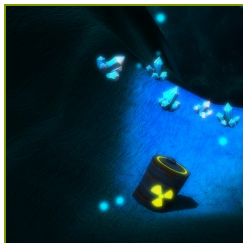
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Specialized	109



# 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
- INTEL i5 processor
- 8GB RAM
- nVidia RTX2060 graphic card
- ZED 2



# RANGE OF MOTION

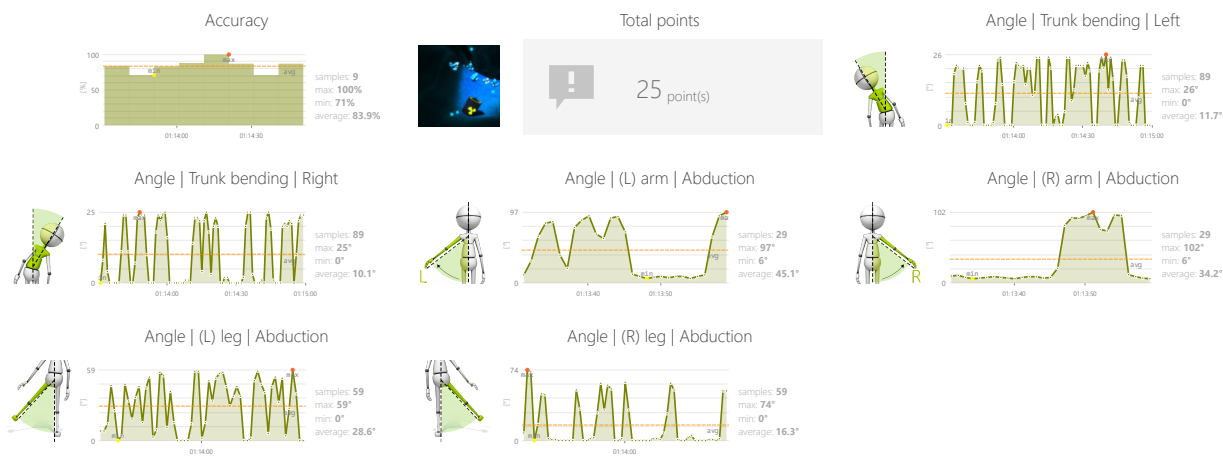
## CRYSTALS

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- automatic
- Task duration
- 

### OBJECTIVES

- Improve range of motion
- Perceptivity
- Response to negative visual stimuli
- Reaction to the positive visual stimuli

### INSTRUCTION FOR PATIENT

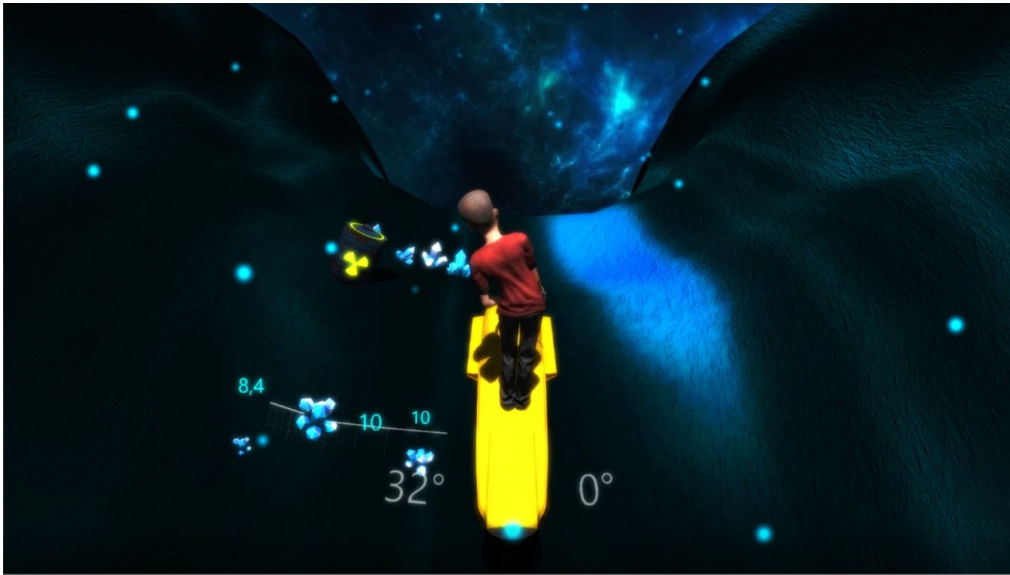
Collect the crystals and avoid the radioactive barrels

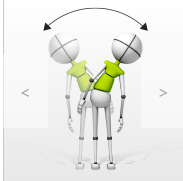
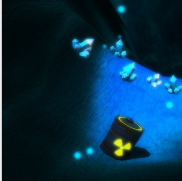


# RANGE OF MOTION

## CRYSTALS

### SAMPLE SETTINGS





◀

Difficulty  
**1/4**

▶

Speed


< 100% >

speed set automatically


Duration

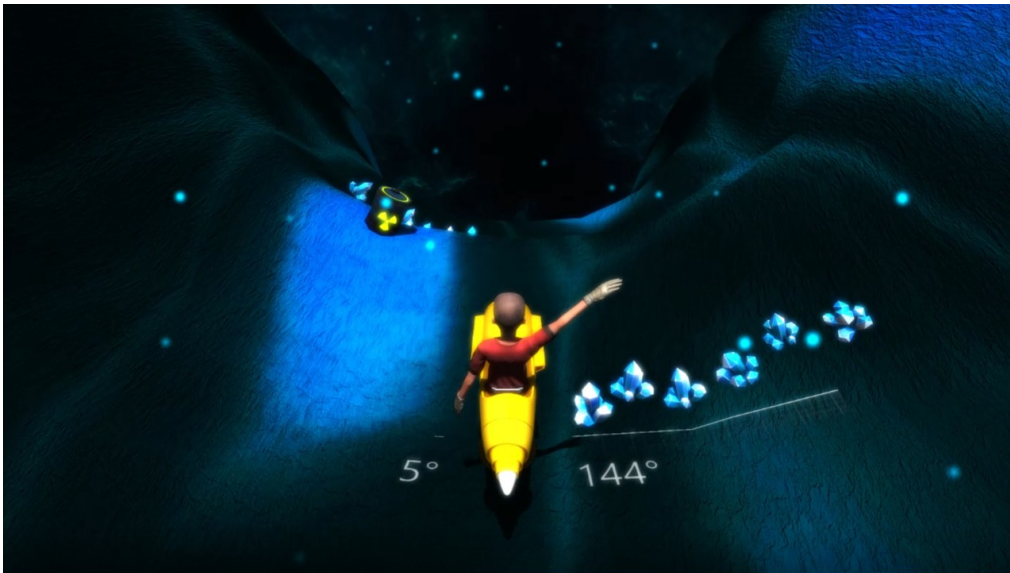
< 30s >

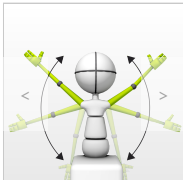
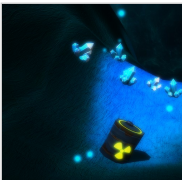
Angle

 40°

Angle

 40°





◀

Difficulty  
**1/4**

▶

Speed


< 100% >

speed set automatically


Duration

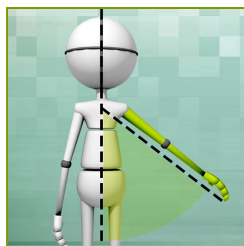
< 30s >

Angle

 180°

Angle

 180°

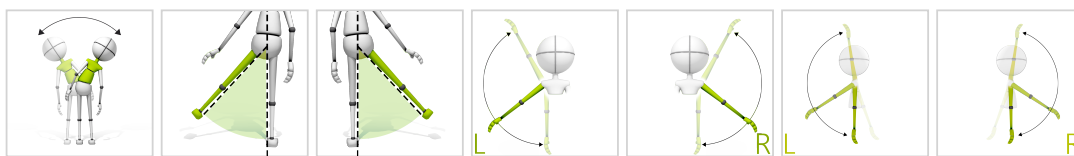


# RANGE OF MOTION

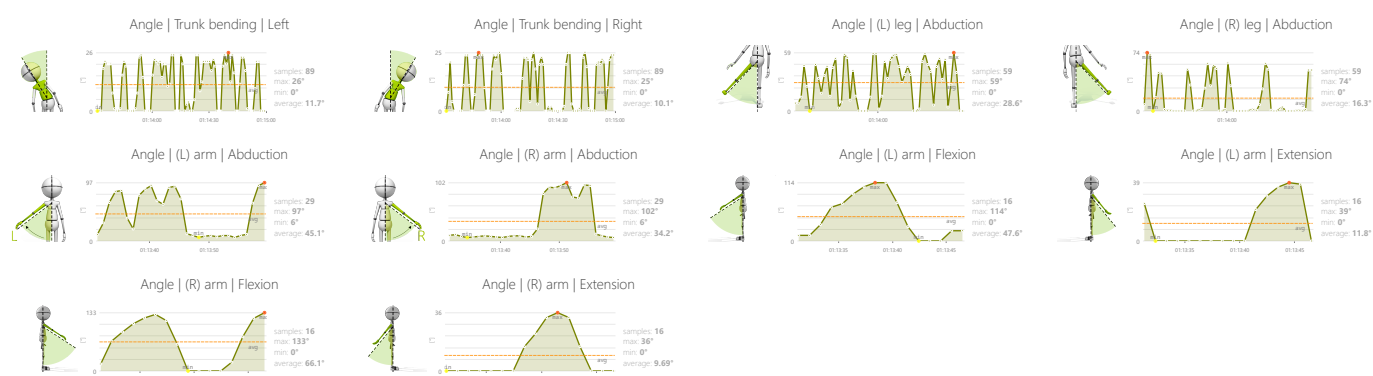
## ANGLES EVALUATION

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

## CONTROL MODES



## RESULTS



## OBJECTIVES

- Range of motion examination

## INSTRUCTION FOR PATIENT

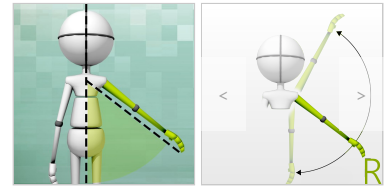
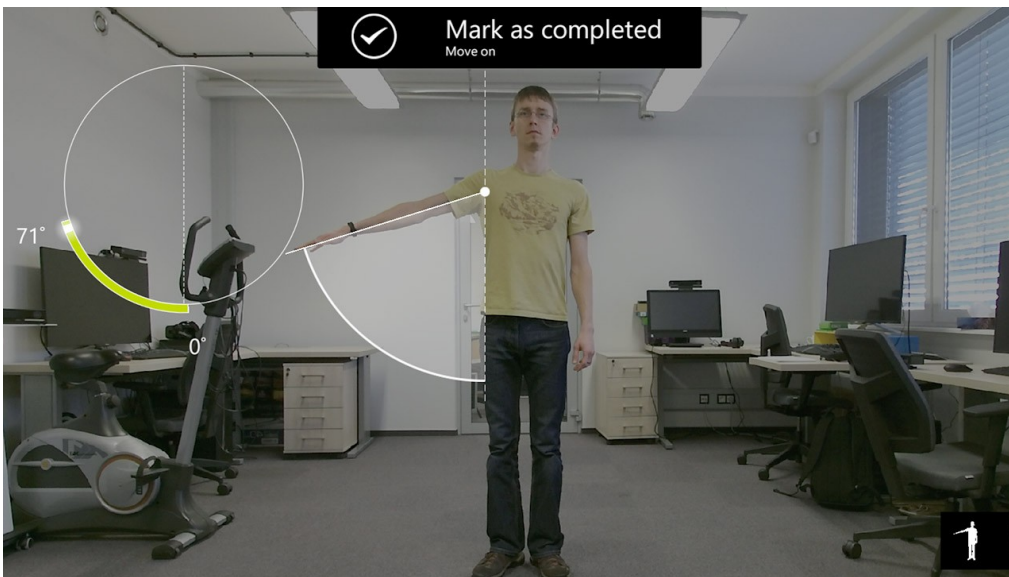
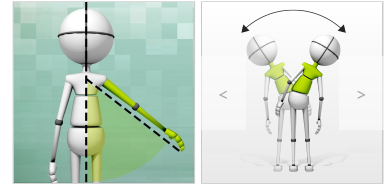
System will measure your range of motion



# RANGE OF MOTION

## ANGLES EVALUATION

### SAMPLE SETTINGS



## REACH TEST

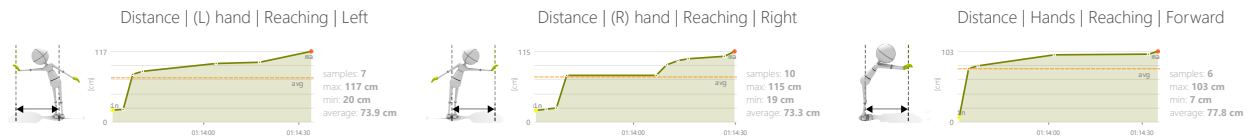
# RANGE OF MOTION

## REACH TEST

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

## CONTROL MODES

## RESULTS



## OBJECTIVES

- Range of motion examination (transverse plane)
- Test the limits of balance and equilibrium

## INSTRUCTION FOR PATIENT

Push the walls as far from you as you can keeping your legs in place

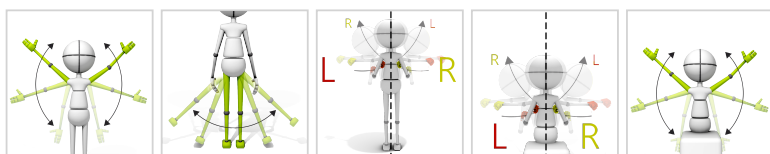


# MOVEMENT TIME

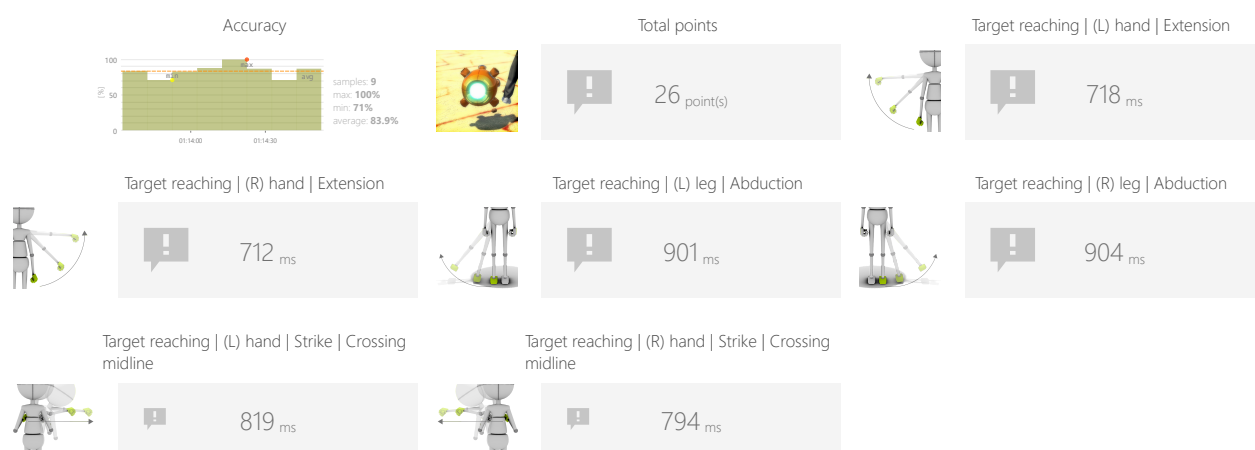
## REACT

Measure time taken to carry out a movement of a limb or other part of the body. It is measured from rest to target position.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Time to react
- Distance to targets

## OBJECTIVES

- Speed of movement
- Bilateral movements in response to bilateral stimuli
- Dynamic responses to emerging moving targets
- Movements times comparison (left and right limbs)

## INSTRUCTION FOR PATIENT

Hit the target as quickly as you can. Then set yourself in rest pose



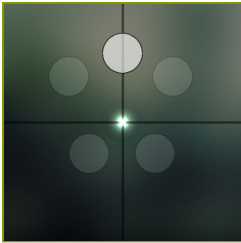


## SAMPLE SETTINGS



◀	Difficulty <b>1/2</b> ▶
Duration < 90s >	Time to react < 2s >
	Distance to targets < 75% >





# MOVEMENT TIME

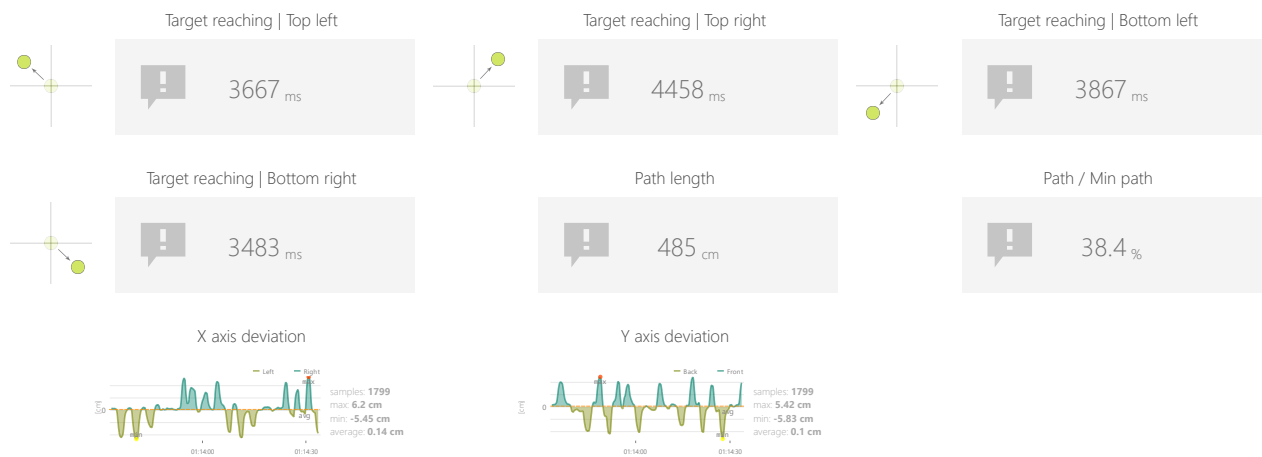
## DYNAMIC TEST

Measure time taken to carry out a movement of a limb or other part of the body. It is measured from rest to target position.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Range
- Show path
- Repetitions
- Positioning

## OBJECTIVES

- Test the limits of balance and equilibrium
- Dynamics of planned movements

## INSTRUCTION FOR PATIENT

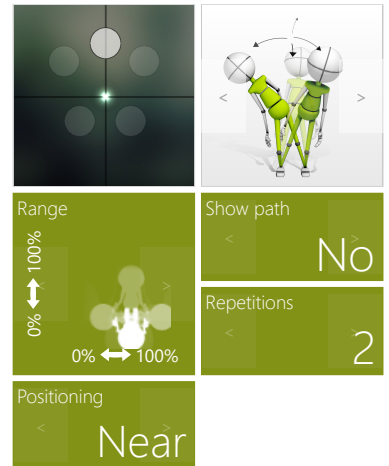
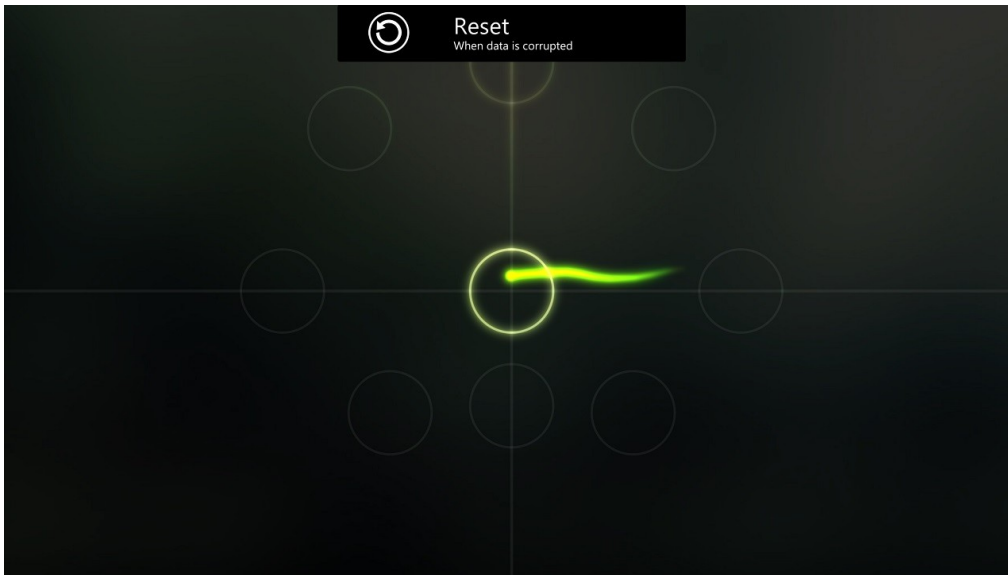
Move the dot to the highlighted target and hold it for a moment. Next target will be highlighted.

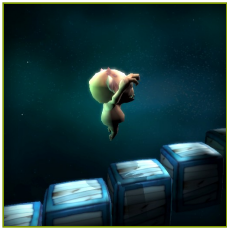


# MOVEMENT TIME

DYNAMIC TEST

## SAMPLE SETTINGS

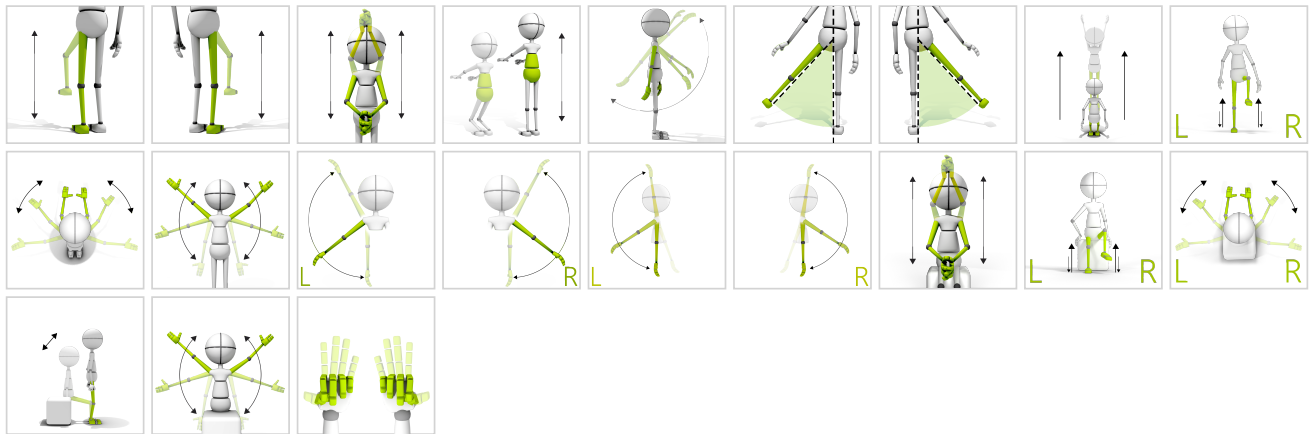




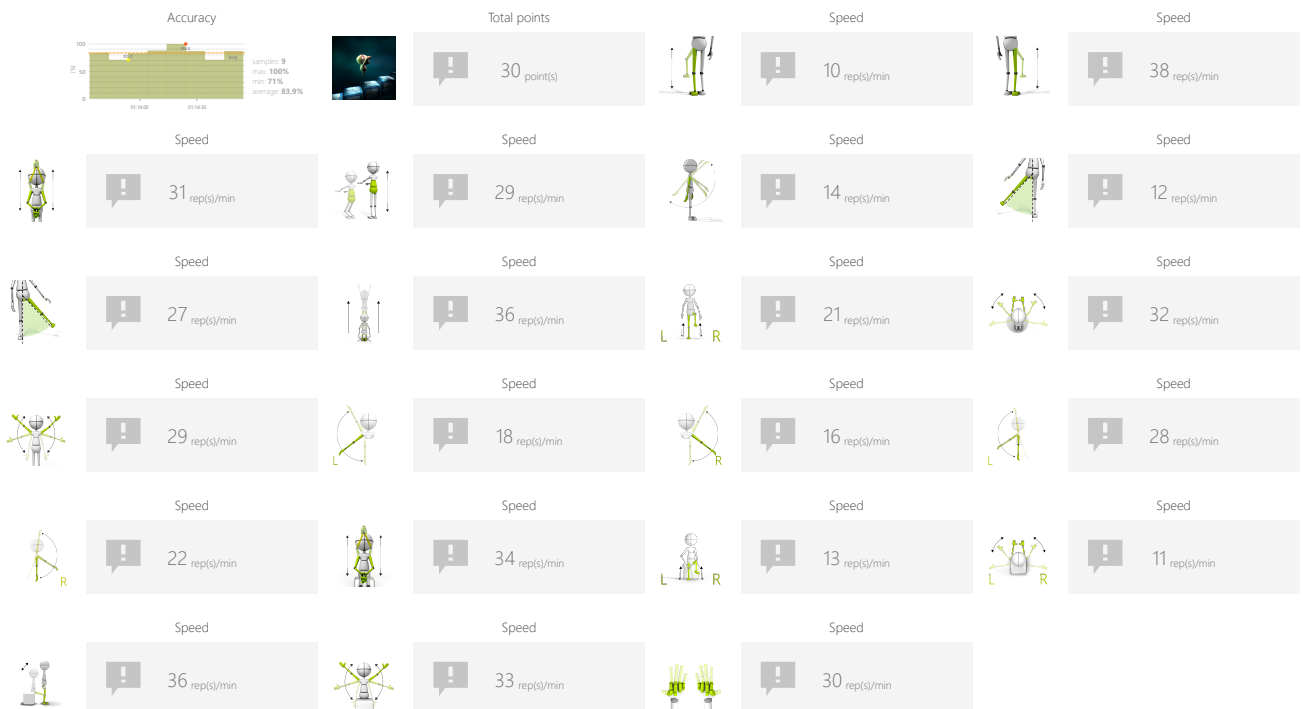
# SPEED STAIRS

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

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

## OBJECTIVES

- Jumping
- Knees lifting
- Dynamics of planned movements

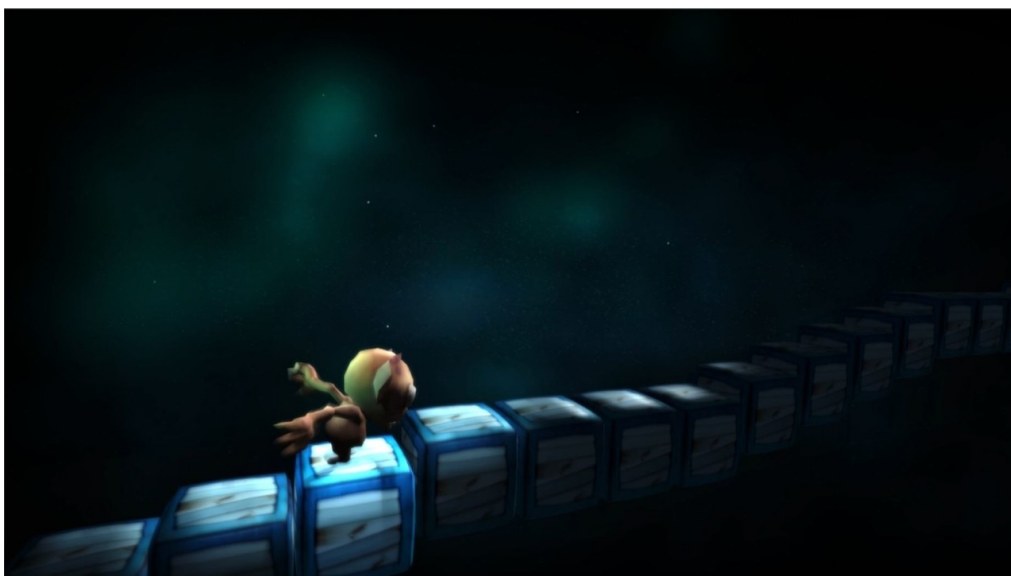
## INSTRUCTION FOR PATIENT

Climb the stairs before they disappear



# SPEED STAIRS

## SAMPLE SETTINGS



	Difficulty <b>custom</b>
Duration < 90s >	
Range 20% 80% 	
Max time per floor < 15s >	
Number of stairs < 5 >	
Pause length < 3 >	

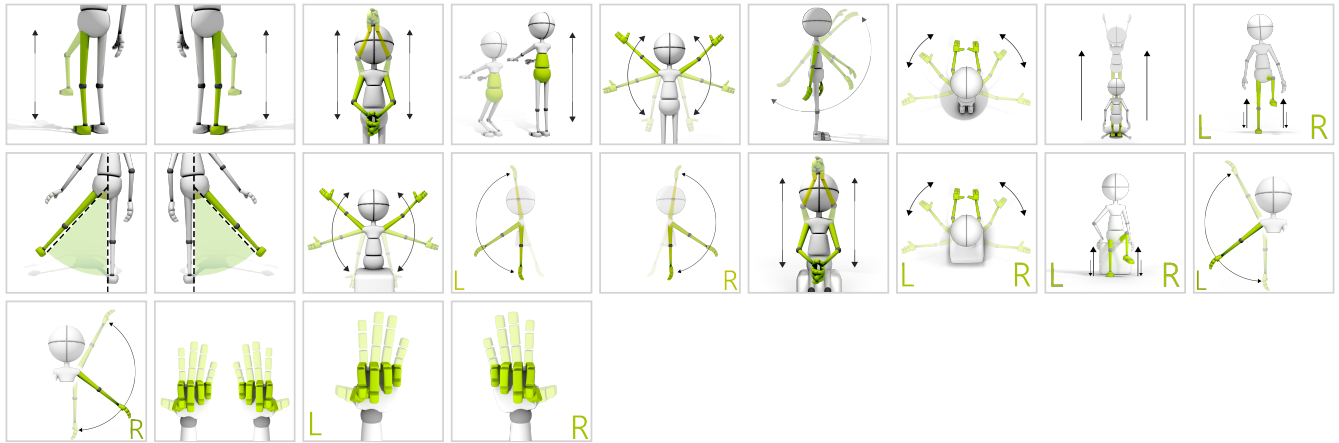


# SPEED

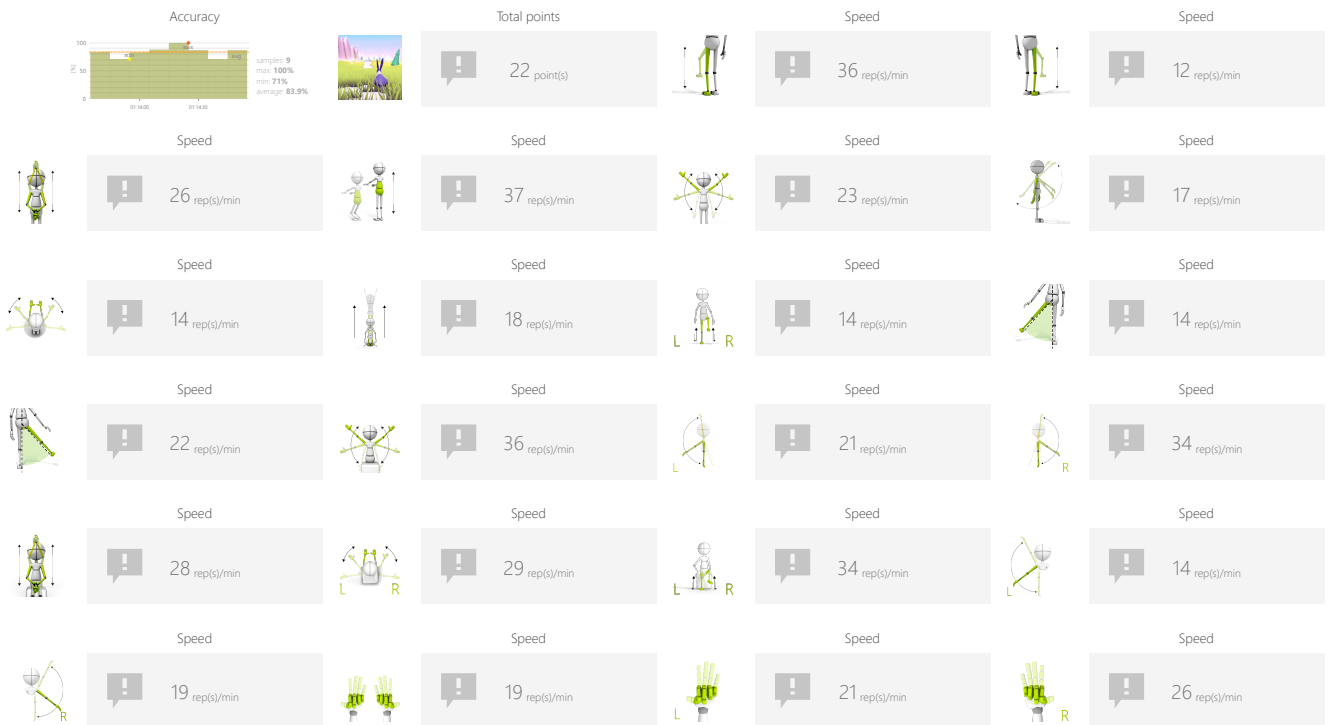
## RABBIT

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range

### OBJECTIVES

- Speed of movement
- Repetitive movements

### INSTRUCTION FOR PATIENT

Go through the entire route as fast as you can



# SPEED RABBIT

## SAMPLE SETTINGS



Duration <div>&lt; 90s &gt;</div>	Range <div>20% 80% ↑ ↓</div>

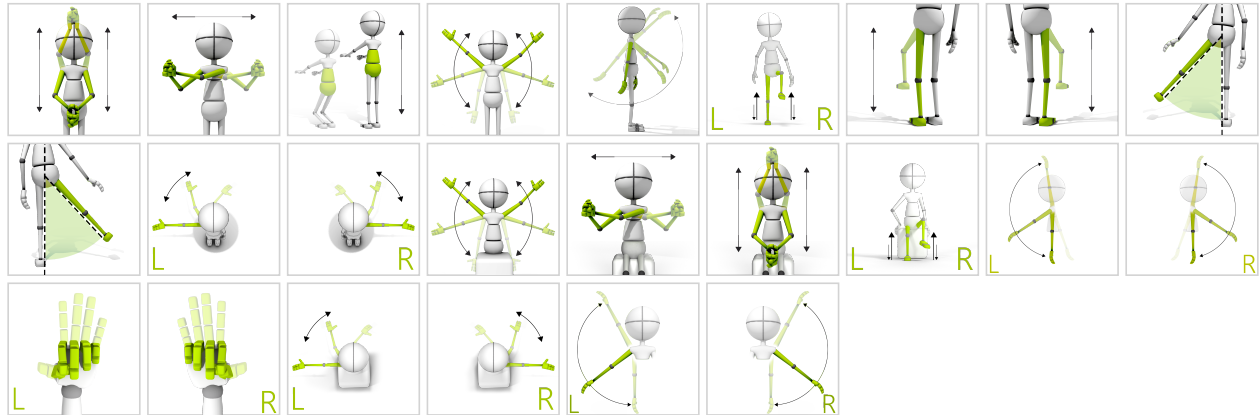


# SPEED

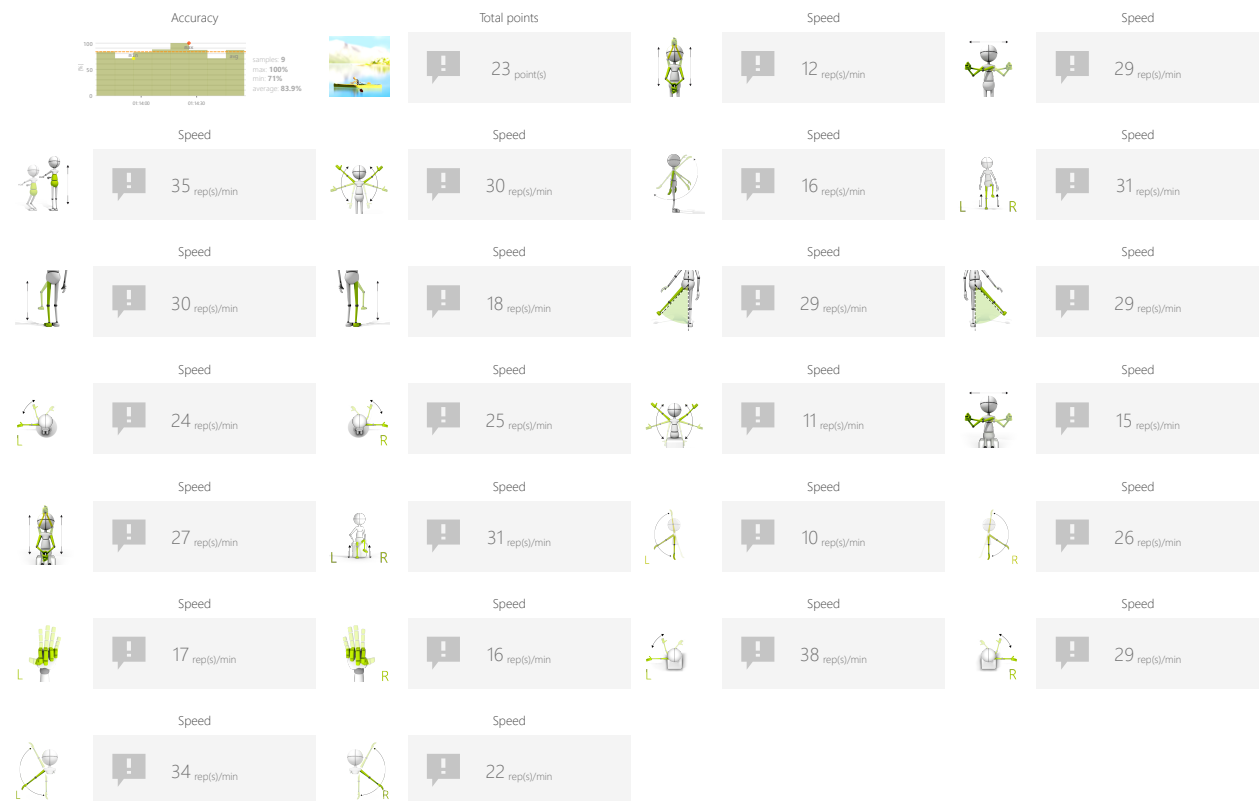
## KAYAK

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range

### OBJECTIVES

- Speed of movement
- Repetitive movements

### INSTRUCTION FOR PATIENT

Row as fast as you can



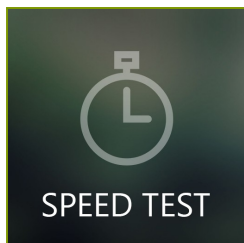
# SPEED KAYAK

## SAMPLE SETTINGS



<p>Duration</p> <p>&lt; 90s &gt;</p>	<p>Range</p> <p>20% 80%</p>



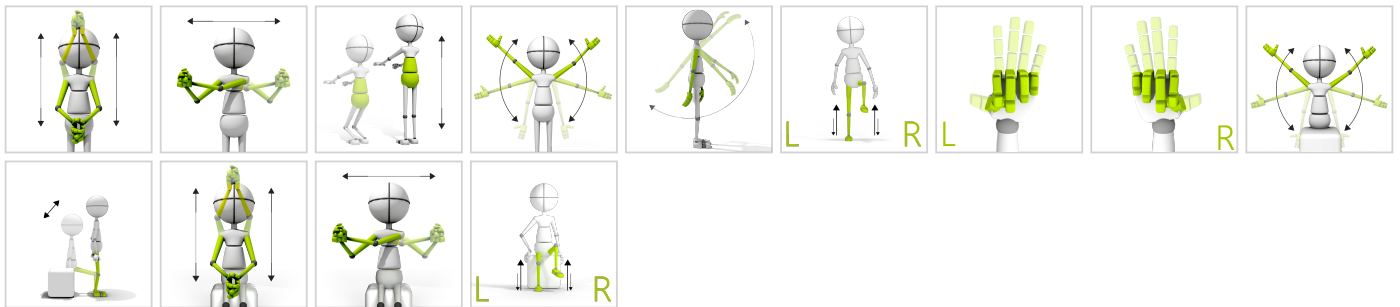


# SPEED

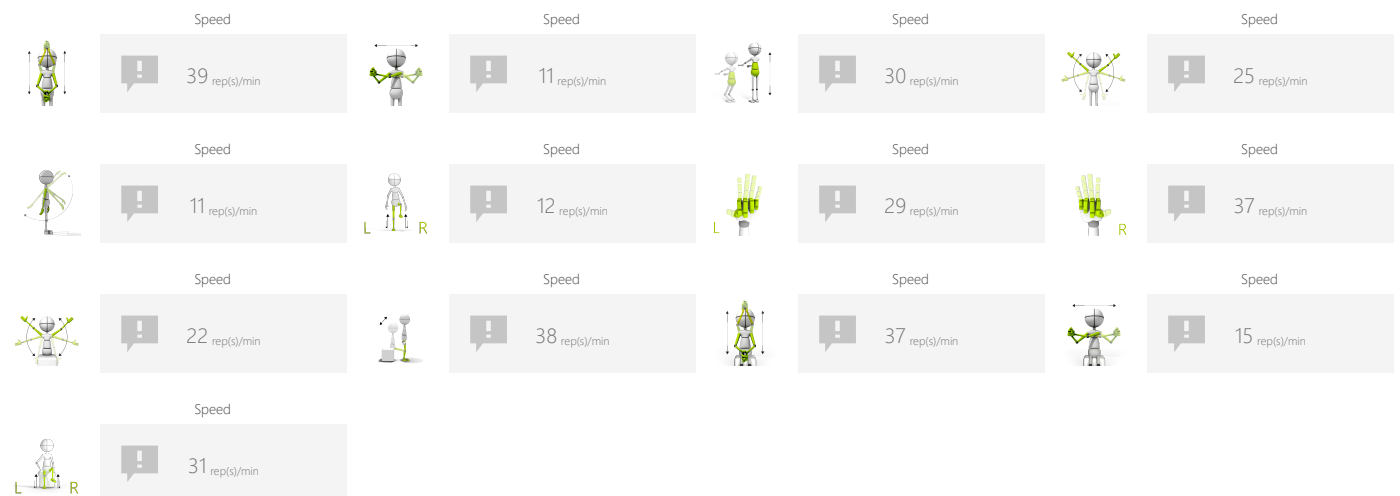
## SPEED TEST

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

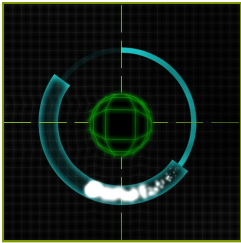
- Time to complete action
- Range

### OBJECTIVES

- Speed of movement
- Repetitive movements

### INSTRUCTION FOR PATIENT

Perform the specified movement pattern as many times as possible



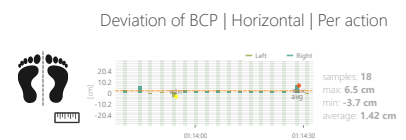
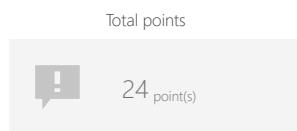
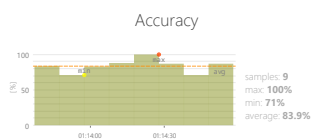
# BALANCE GRID

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Period
- Positioning

## OBJECTIVES

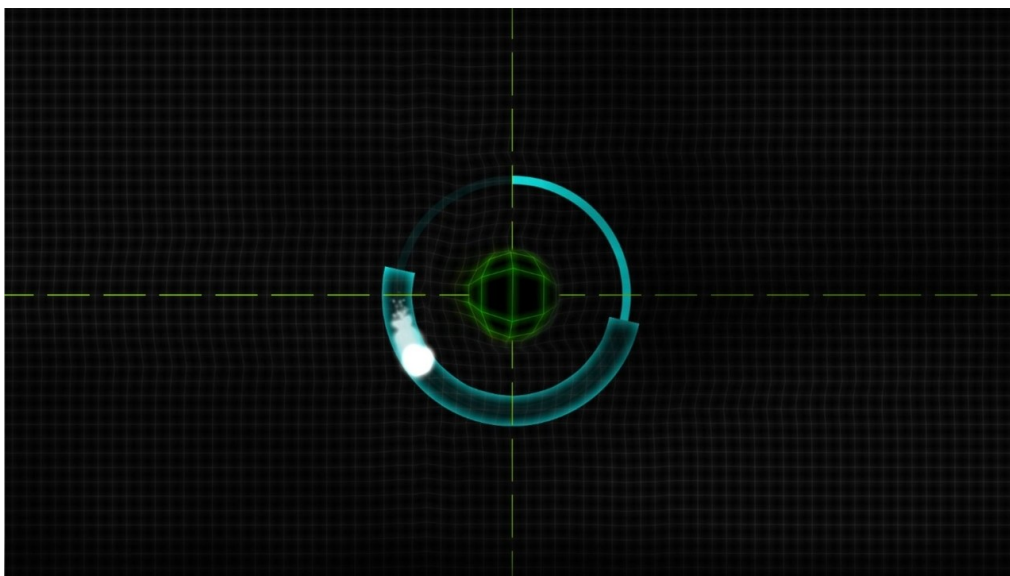
- Balance and equilibrium training
- 3D space movements reproduction
- Activity in a given rhythm

## INSTRUCTION FOR PATIENT

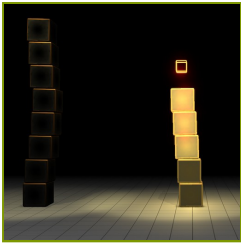
Keep the white glowing point inside the blue area and make sure the emerging bump stays in the middle of the reticle



## SAMPLE SETTINGS



◀	Difficulty <b>1/3</b>	▶
Duration < 90s >		Range 50% ↔ 5% 0% ↔ 100%
Period < 6s >		Positioning < Normal >

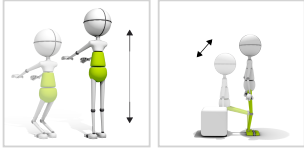


# BALANCE

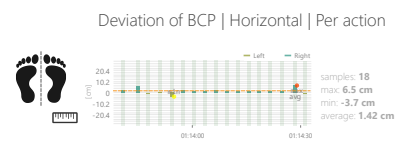
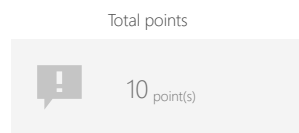
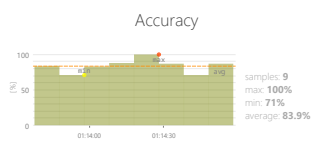
## BLOCK BUILDER

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Stack height
- Positioning

## OBJECTIVES

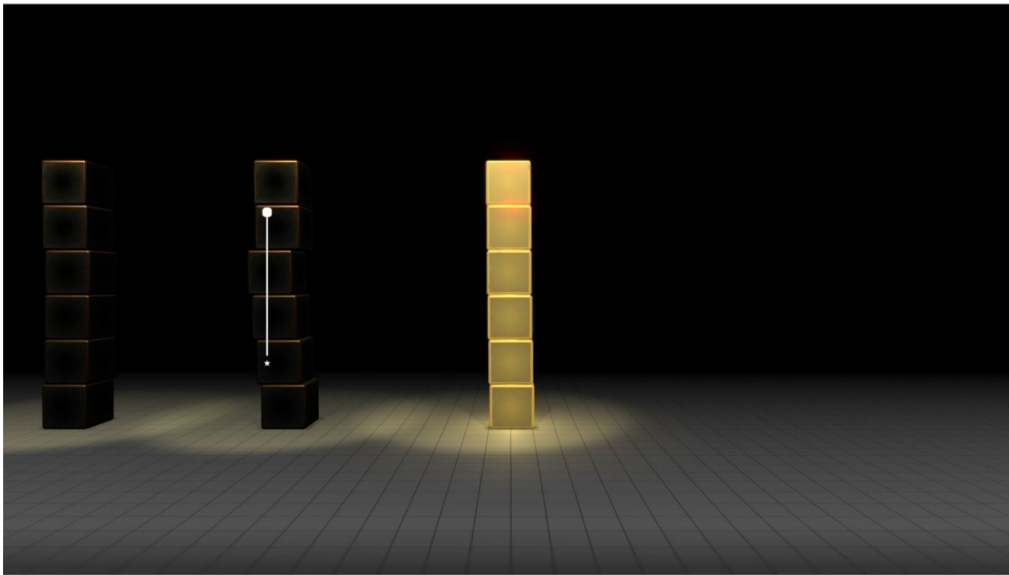
- Movement precision
- Muscle strengthening
- Balance and equilibrium training

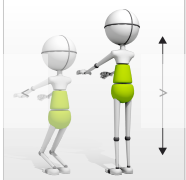
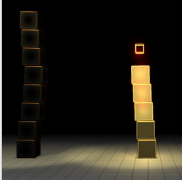
## INSTRUCTION FOR PATIENT

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



## SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

Duration

< 90s >

Range

5%  
50% ↔ 100%

Stack height

< 6 >

Positioning

< Normal >

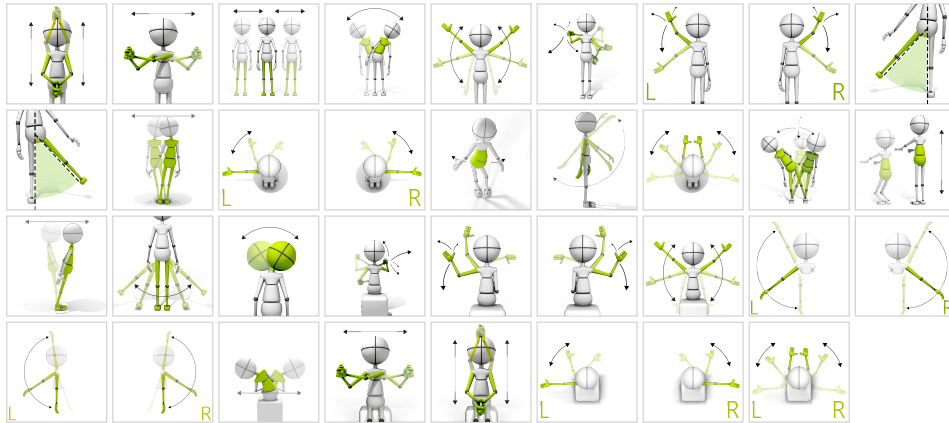


# MOVEMENT PRECISION

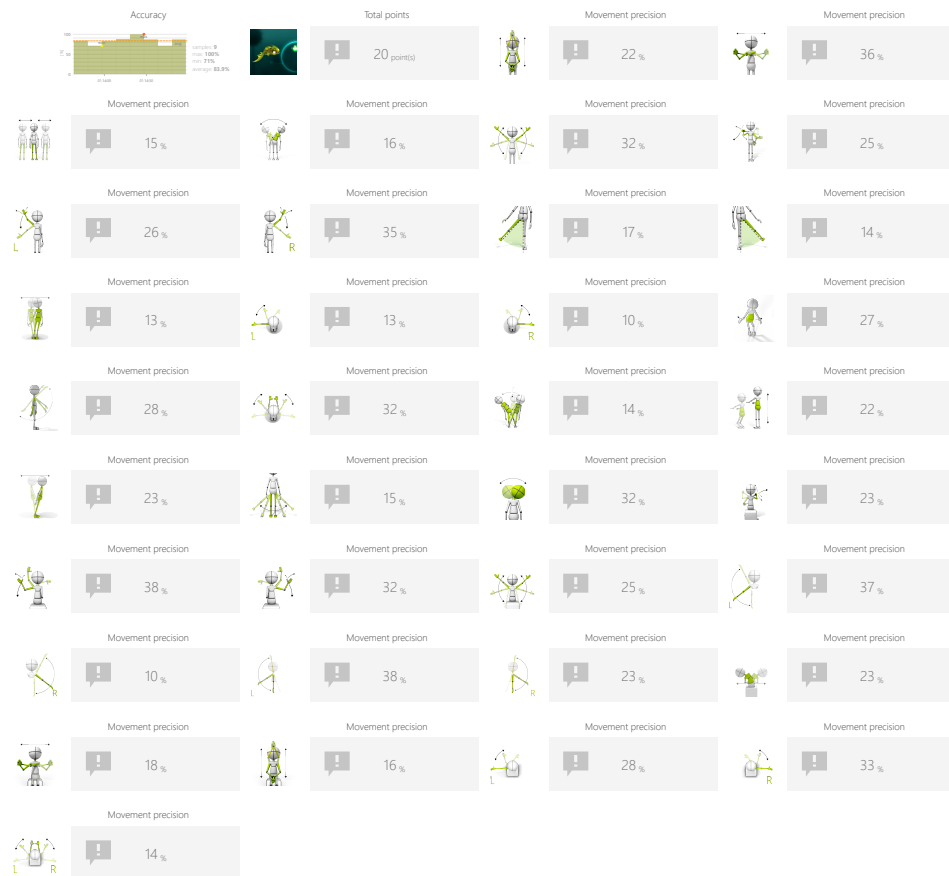
## FISH

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range
- Speed of objects

### OBJECTIVES

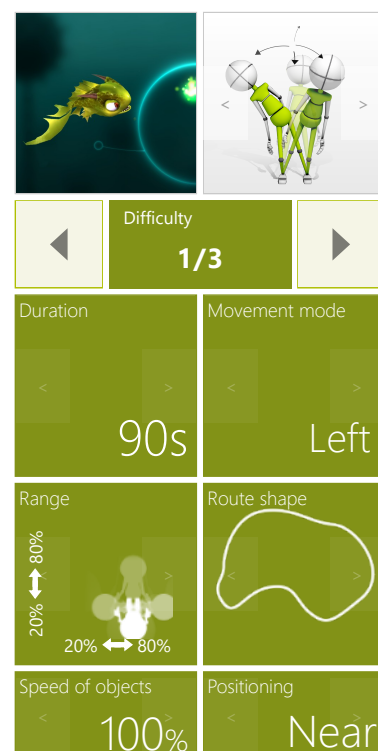
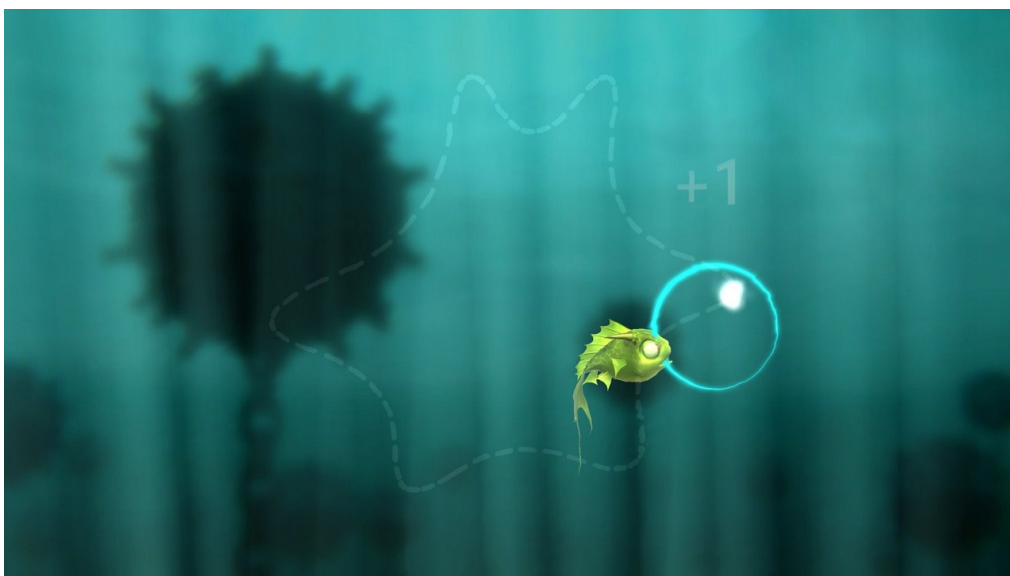
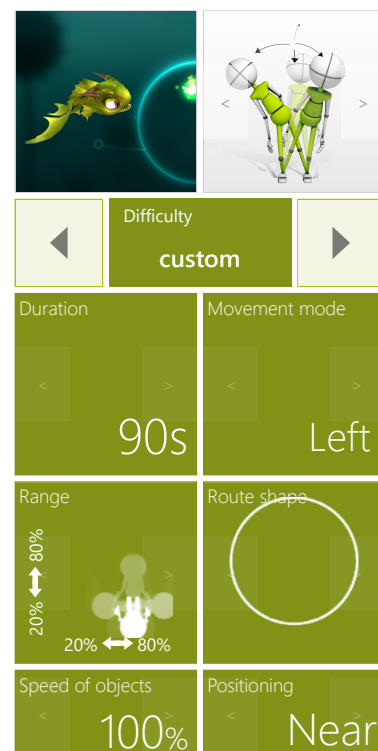
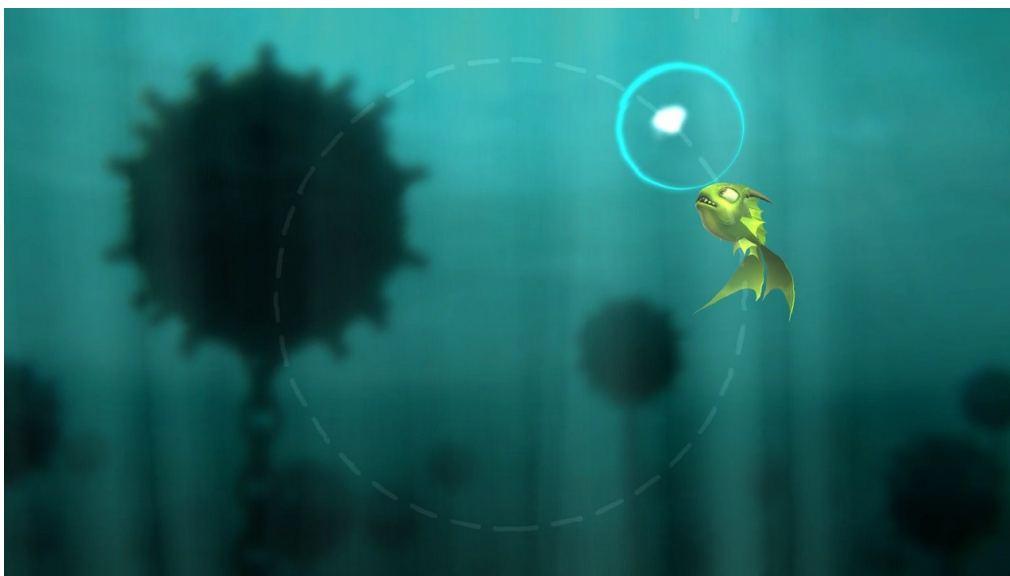
- 3D space movements reproduction
- Planned movements
- Muscle strengthening
- Movement precision
- Visual motor coordination

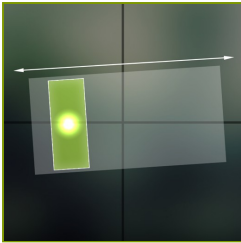
### INSTRUCTION FOR PATIENT

Move the blue circle to protect the sparks source from the fish.  
When the sparks source is inside the circle it is safe



## SAMPLE SETTINGS



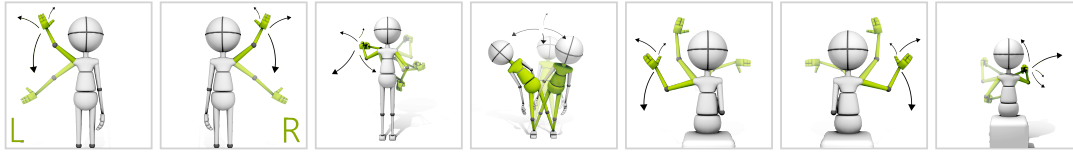


# MOVEMENT PRECISION

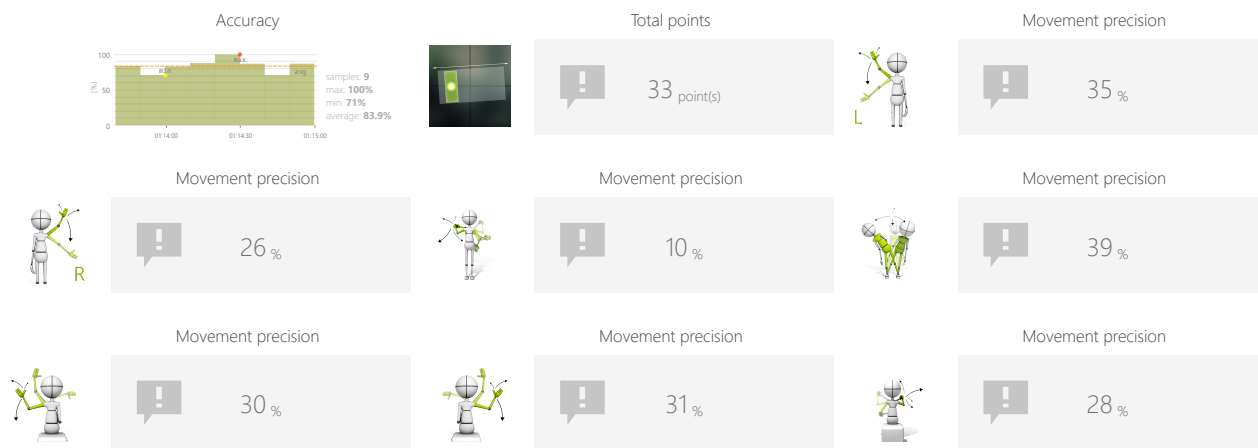
## PENDULUM

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

### CONTROL MODES



### RESULTS



### ADJUSTMENTS

- Task duration
- Range
- Show path
- Period
- Rotation
- Pendulum height
- Pendulum width

### OBJECTIVES

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

### INSTRUCTION FOR PATIENT

Try to synchronize yourself with the rectangle movements. Do your best to stay within the rectangle



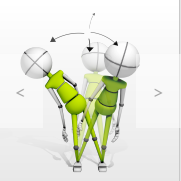
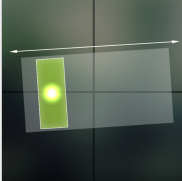


# MOVEMENT PRECISION

## PENDULUM

### SAMPLE SETTINGS





◀

Difficulty  
**1/2**

▶

Duration

< 90s >

Range

20% 80%  
20% 80%

Show path

< No >

Period

< 5s >

Rotation

< 0 >

Pendulum height

< 50% >

Pendulum width

< 100% >

Positioning

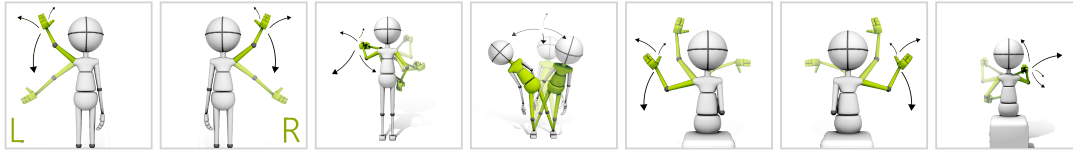
< Near >



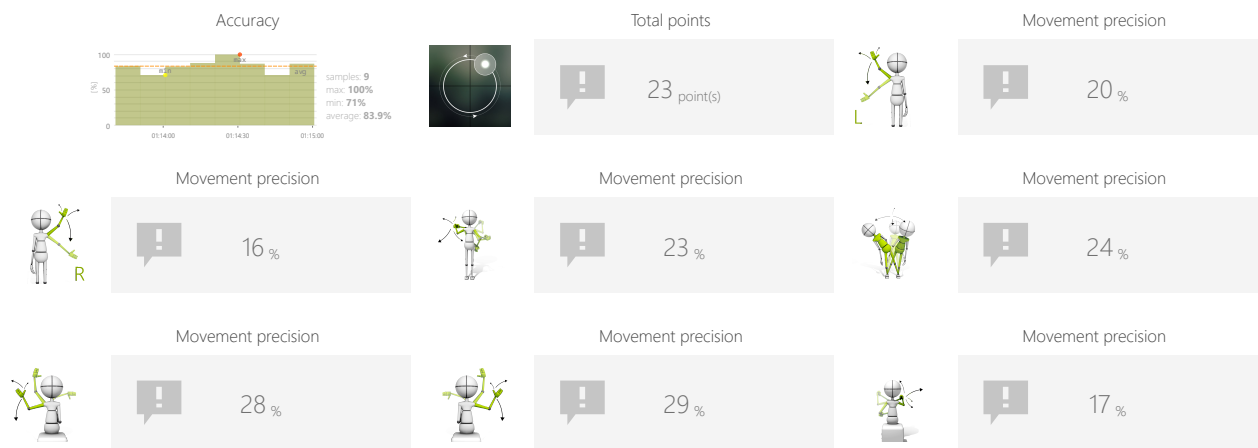
# MOVEMENT PRECISION TRACKING

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Inverse direction
- Show path
- Period
- Radius
- Target radius

## OBJECTIVES

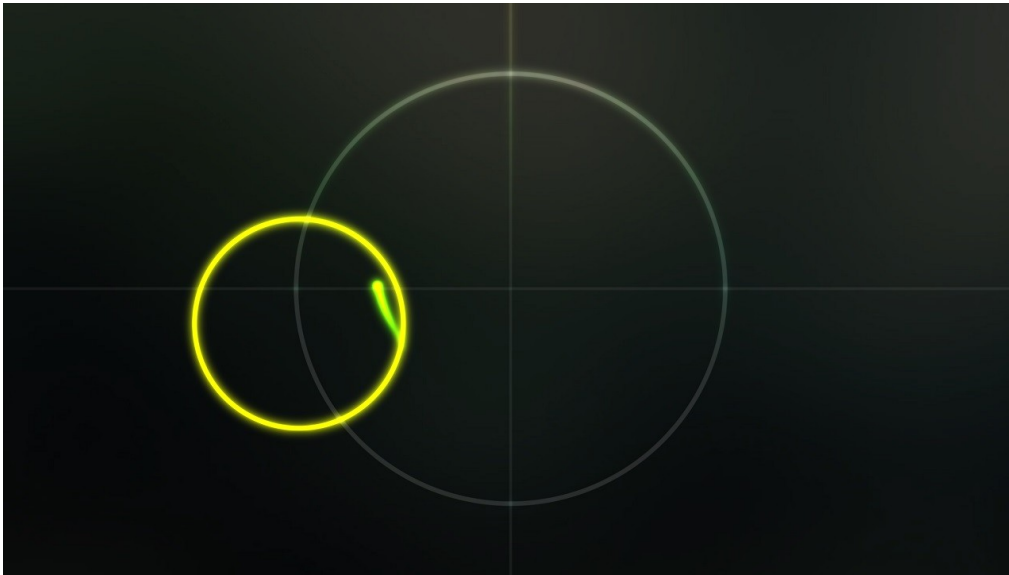
- 3D space movements reproduction
- Balance and equilibrium training
- Test the limits of balance and equilibrium


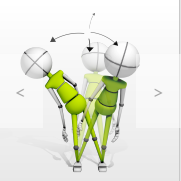
## INSTRUCTION FOR PATIENT

Try to synchronize yourself with the circle movements. Do your best to stay within the circle



## SAMPLE SETTINGS



	
<b>Duration</b> < 90s >	<b>Range</b> 20% 80% 20% 80%
<b>Inverse direction</b> < No >	<b>Show path</b> < No >
<b>Period</b> < 10s >	<b>Radius</b> < 75% >
<b>Target radius</b> < 75% >	<b>Positioning</b> < Near >

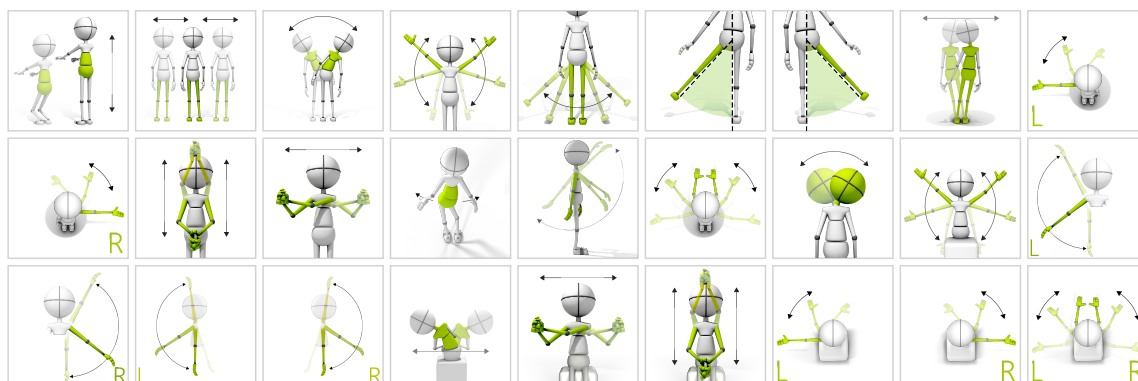


# MOVEMENT PRECISION

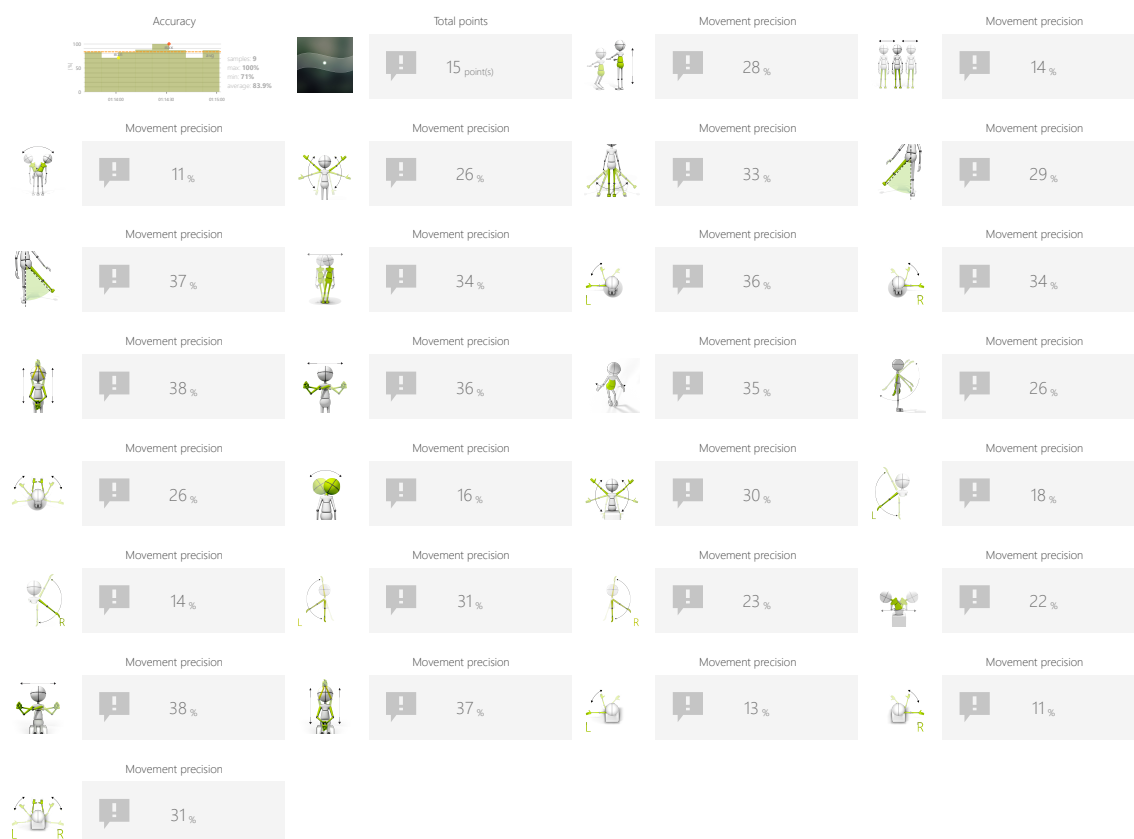
## GRAPH

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
- Range
- Positioning

## OBJECTIVES

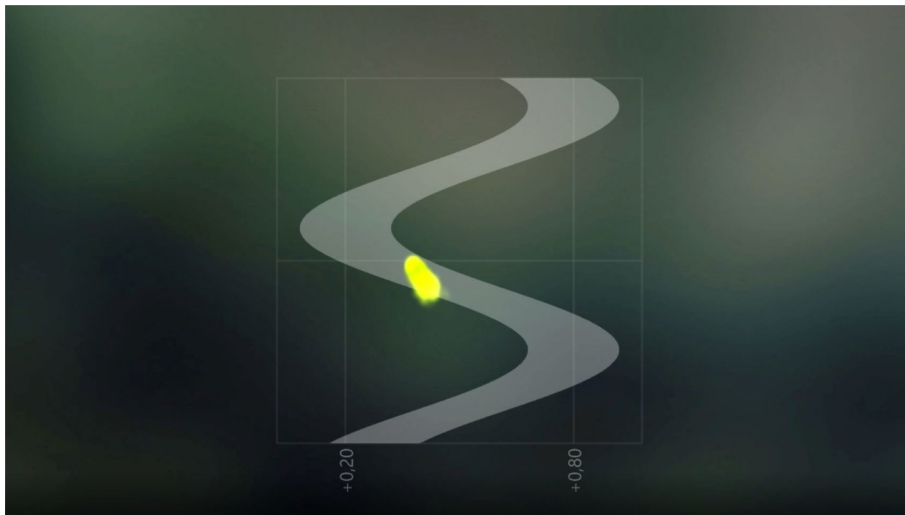
- Movement precision
- Activity in a given rhythm
- Repetitive movements
- Hands raising

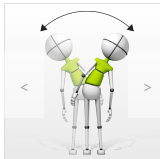
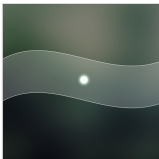
## INSTRUCTION FOR PATIENT

Try to stay within the borders



## SAMPLE SETTINGS






◀

Difficulty

▶

3/3

Graph configuration



⌚ : 4.0s ± : 20%

Duration

Range

◀

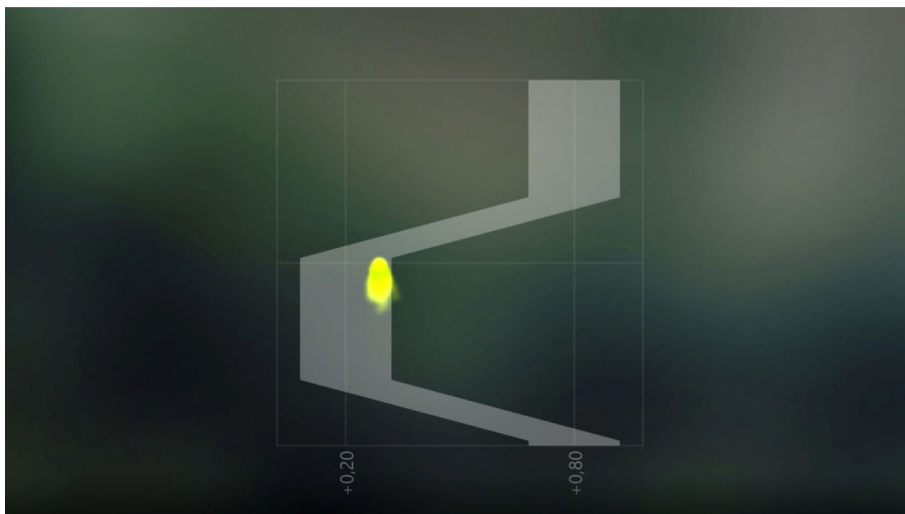
30s


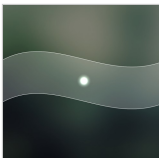
▶

◀

20% ↔ 80%

▶






◀

Difficulty

▶

1/3

Graph configuration



⌚ : 4.0s ± : 40%

Duration

Range

◀

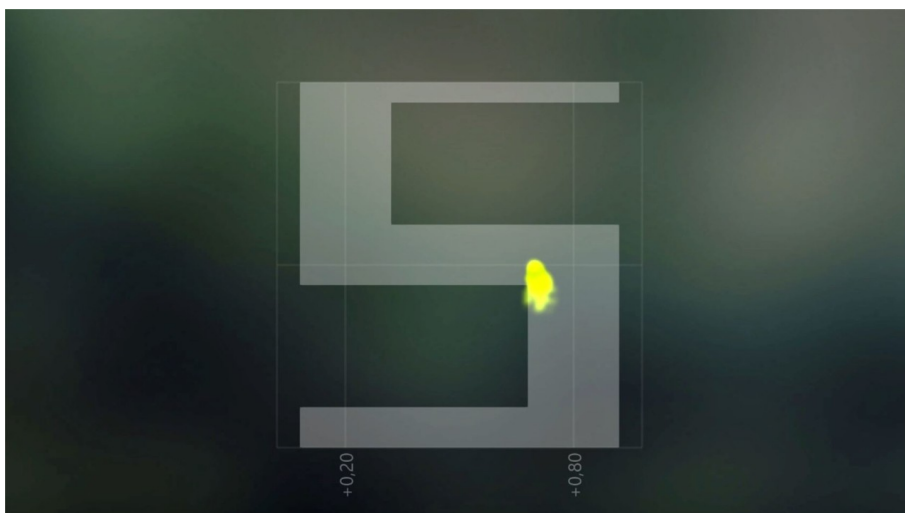
90s

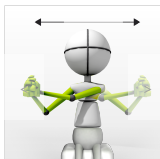
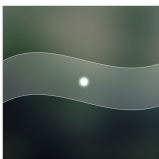
▶

◀

20% ↔ 80%

▶





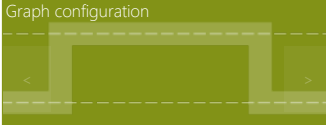
◀

Difficulty

▶

custom

Graph configuration



± : 20% ↑ : 2.0s ↓ : 2.0s ↗ : 1.0s ↘ : 1.0s

Duration

Range

◀

30s

▶

◀

20% ↔ 80%

▶

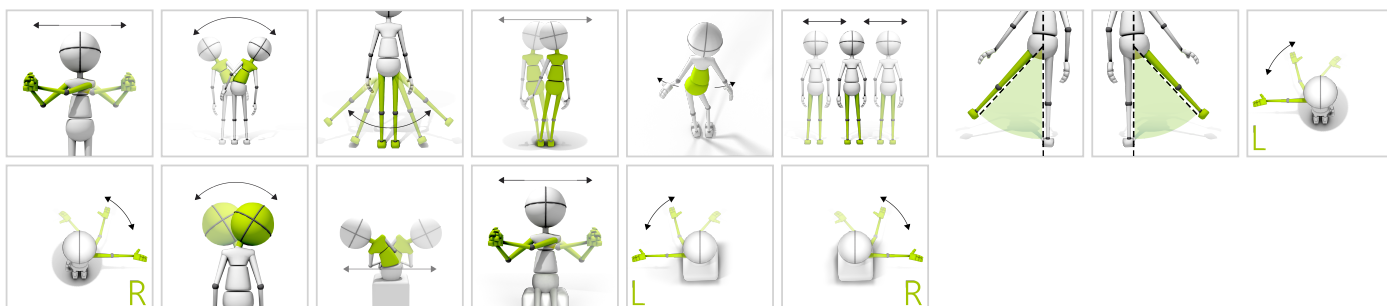


# MOVEMENT PRECISION

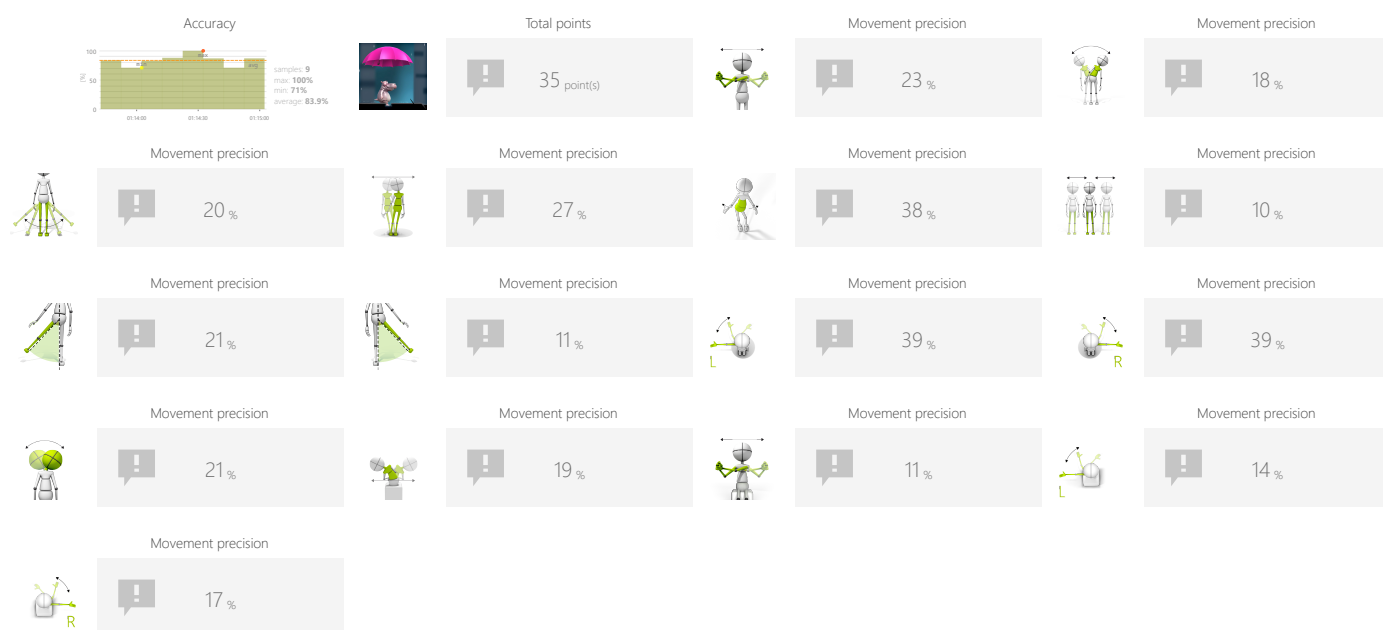
## UMBRELLA

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Path
- Range
- Umbrella size

## OBJECTIVES

- Movement precision
- Visual motor coordination

## INSTRUCTION FOR PATIENT

Don't let the hippo get wet - keep the umbrella above him!



# MOVEMENT PRECISION

## UMBRELLA

### SAMPLE SETTINGS



◀	Difficulty <b>1/3</b> ▶
Duration 60s	Path ⌚: 8.0s
Range 20% ↔ 80%	Umbrella size 150%



# FUNCTIONAL MOVEMENTS

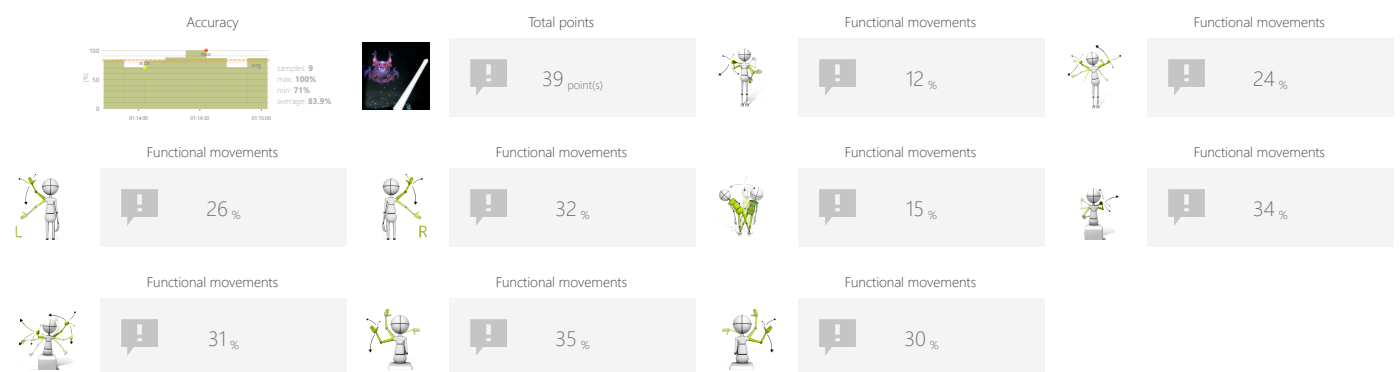
## VAMPIRES

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

- Positions to have targets on
- Task duration
- Time between objects
- Time to react

## OBJECTIVES

- Visual motor coordination
- Exercise with or without support from healthy limb
- Spontaneous movements in 3D space
- Speed of movement

## INSTRUCTION FOR PATIENT

Use your sword to knock down flying vampires who want to bite you!





## SAMPLE SETTINGS



◀	Difficulty <b>1/3</b>	▶
Active positions 		Duration < 90s >
Time between objects < 2s >		Time to react < 2s >



◀	Difficulty <b>1/3</b>	▶
Active positions 		Duration < 90s >
Time between objects < 2s >		Time to react < 2s >



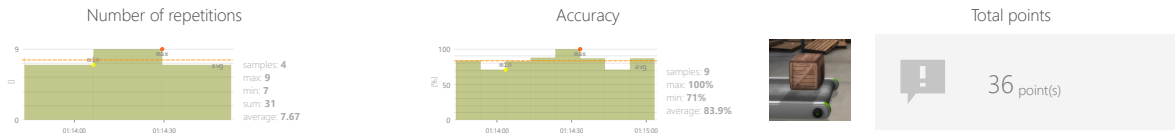
# FUNCTIONAL MOVEMENTS

## PRODUCTION LINE

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

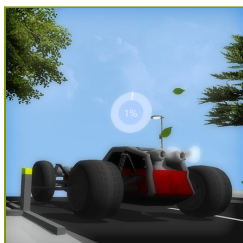


## OBJECTIVES

- Planned movements
- Repetitive movements
- Hands raising
- Sideways walking
- Both hands grabbing

## INSTRUCTION FOR PATIENT

Move boxes from one line to another by precisely gripping and releasing them, lifting them up, lowering them and moving with them.

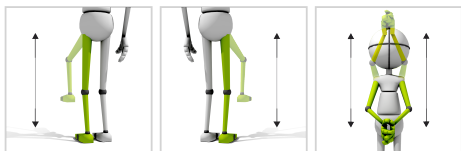


# FUNCTIONAL MOVEMENTS

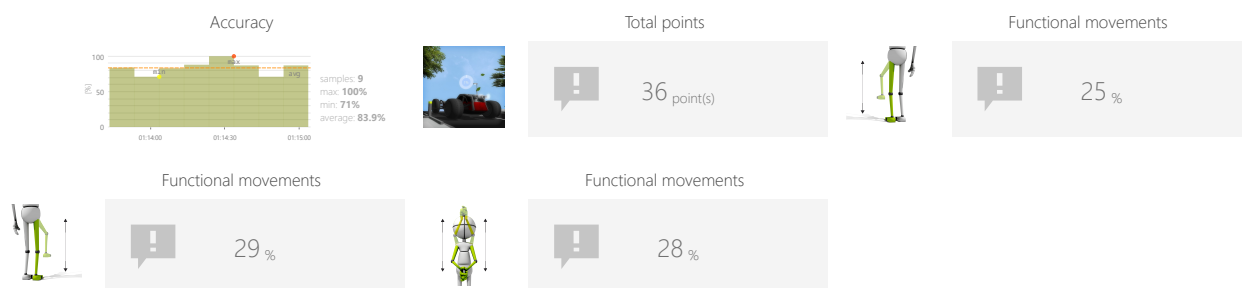
## PUMPER

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
- Time to complete action
- Range

## OBJECTIVES

- Speed of movement
- Knees lifting
- Hands raising
- Dynamics of planned movements

## INSTRUCTION FOR PATIENT

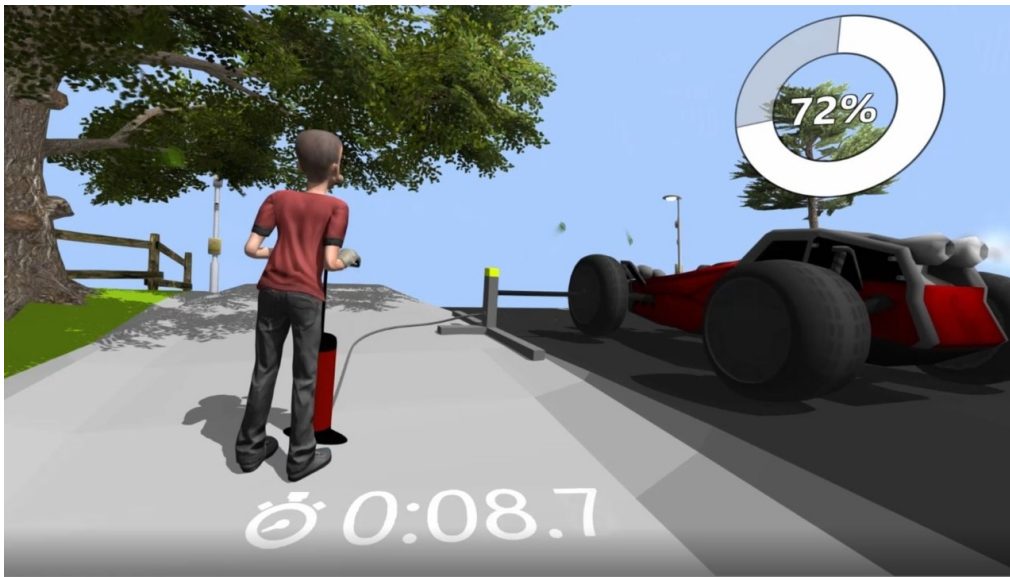
Pump the wheels as quickly as you can

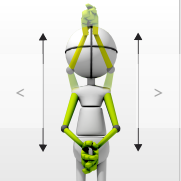
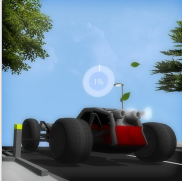


# FUNCTIONAL MOVEMENTS

PUMPER

## SAMPLE SETTINGS





◀


Difficulty  
1/2

▶

Duration  
90s

Minitask duration  
30s

Range  
20% 80%

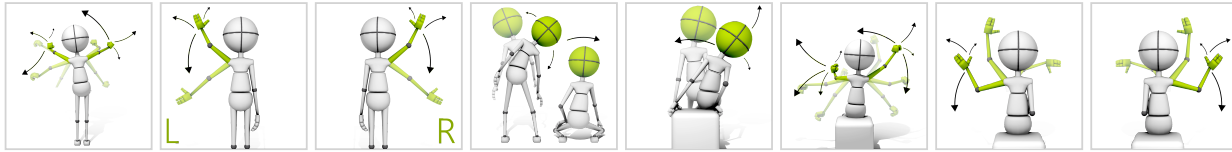




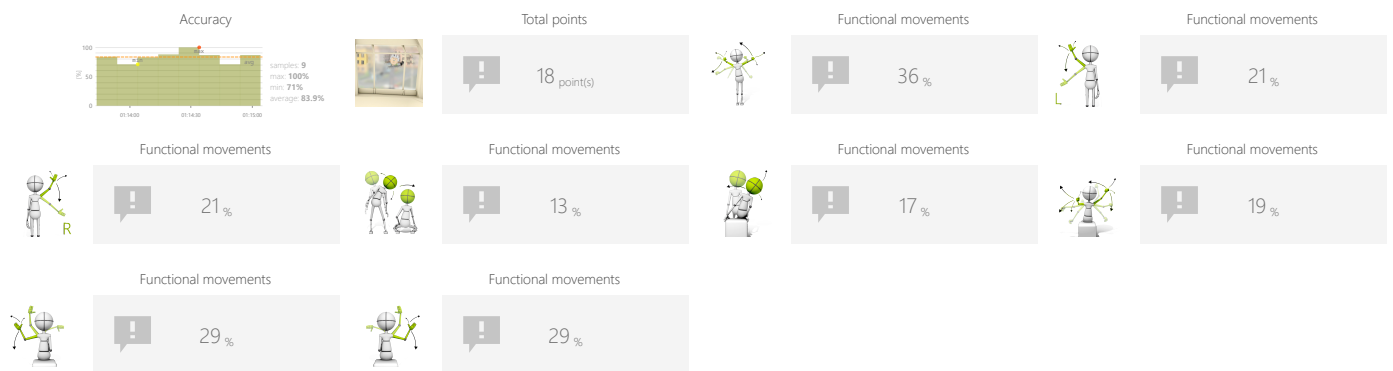
# FUNCTIONAL MOVEMENTS CLEANER

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
- Time to complete action
- Force centered position
- Positioning

## OBJECTIVES

- Visual motor coordination
- Exercise with or without support from healthy limb
- Improve range of motion
- Movement awareness
- Mirrored feedback exercises

## INSTRUCTION FOR PATIENT

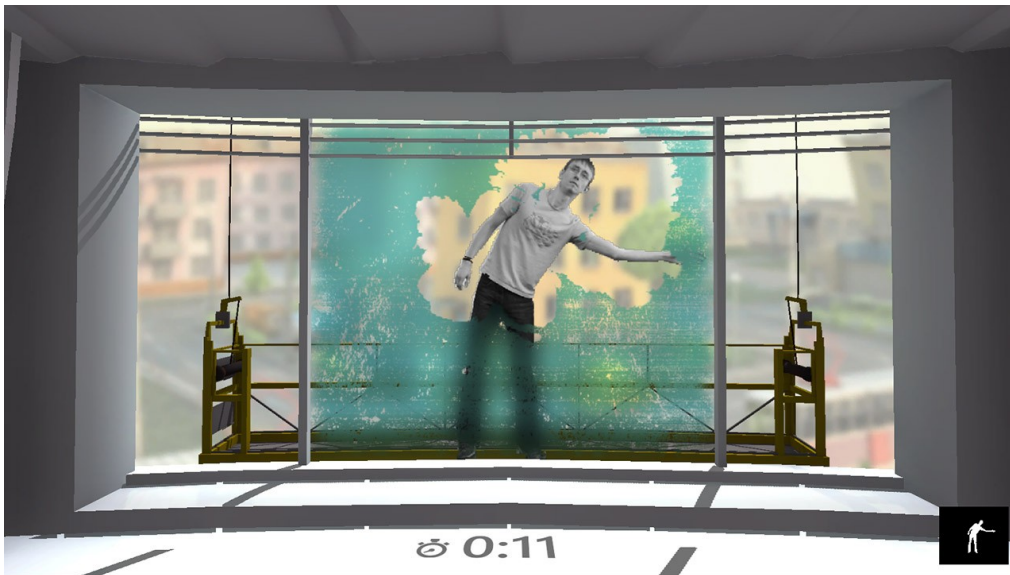
Clean the largest possible window area as quickly as possible.



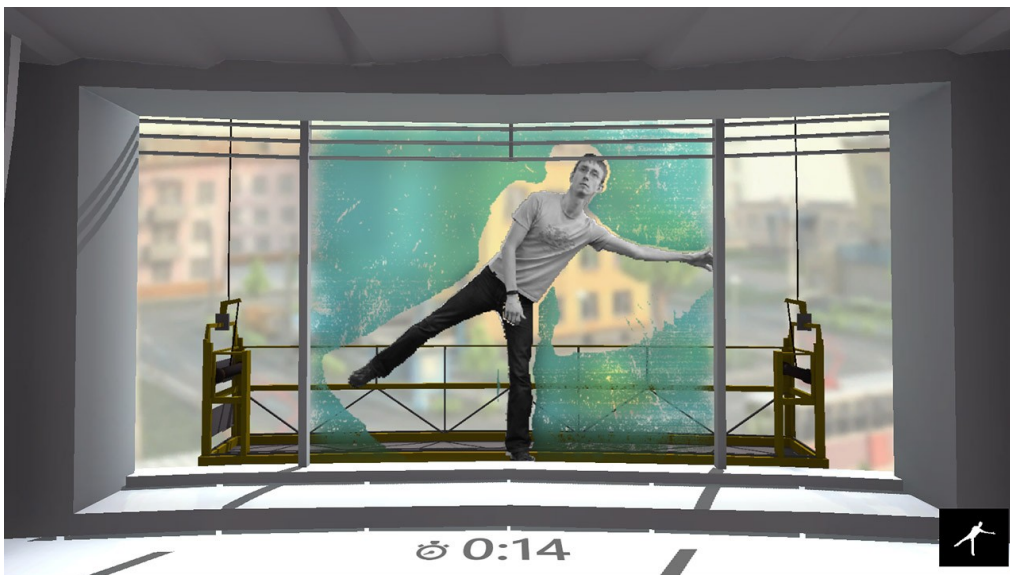
# FUNCTIONAL MOVEMENTS

CLEANER

## SAMPLE SETTINGS

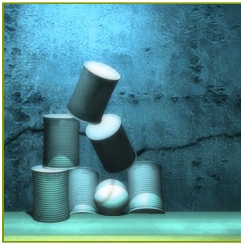


◀	Difficulty <b>1/3</b>	▶
Duration 90s		Minitask duration 20s
Force centered position No		Positioning Normal



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Minitask duration 20s
Force centered position No		Positioning Normal



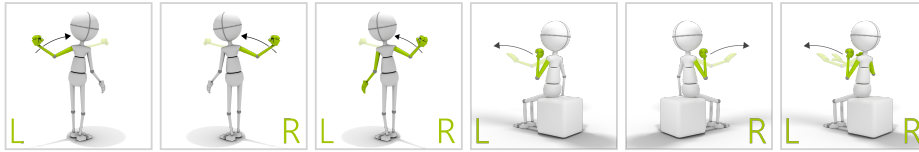


# FUNCTIONAL MOVEMENTS

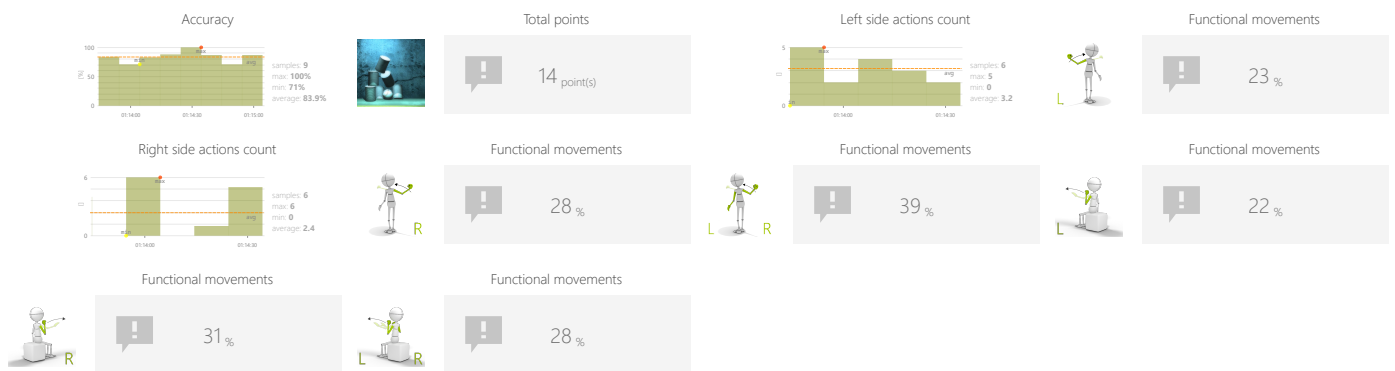
## CANS

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
- Speed of objects

## OBJECTIVES

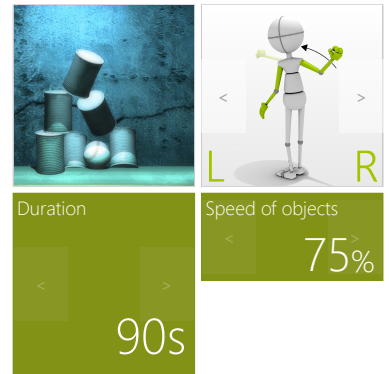
- Movement precision
- Predicting the trajectory of objects in 3D space
- Dynamics of planned movements
- Dynamic responses to emerging moving targets
- The ability of spatial visualization

## INSTRUCTION FOR PATIENT

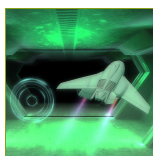
Throw the balls to strike as many cans as you can



## SAMPLE SETTINGS





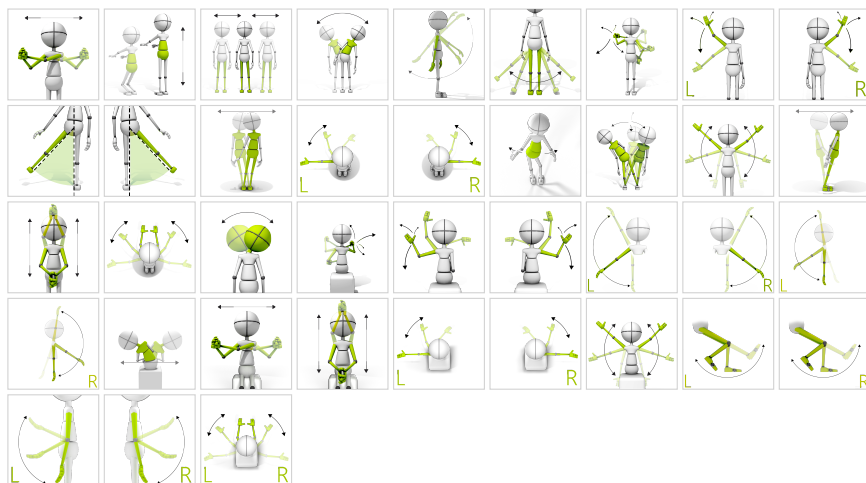


# FUNCTIONAL MOVEMENTS

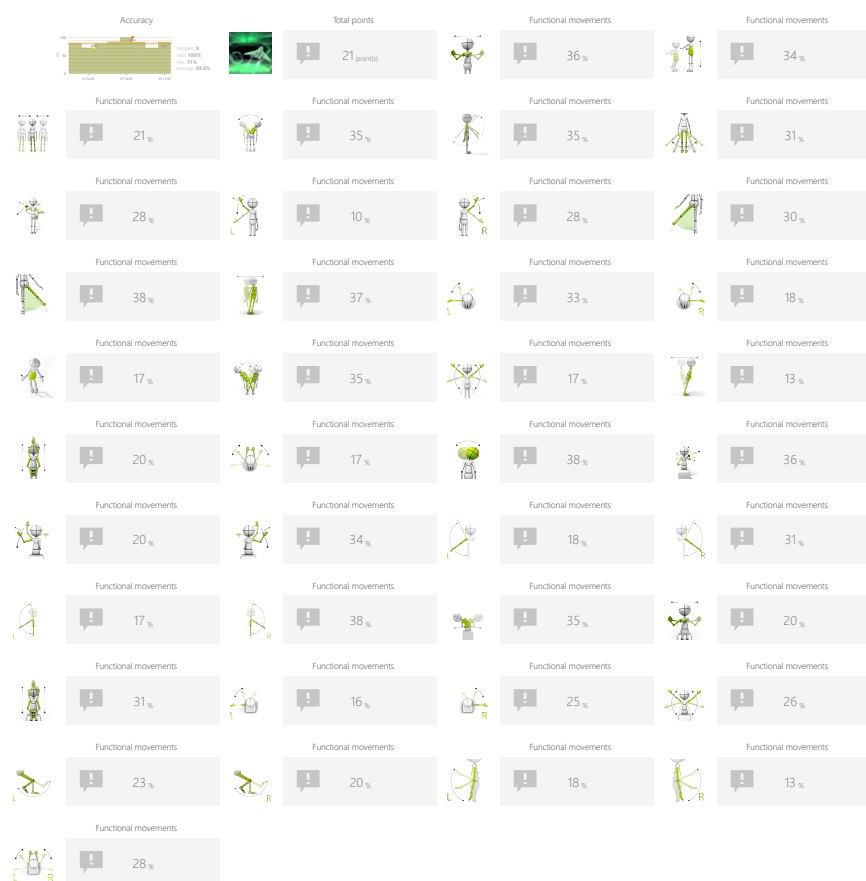
## AIRPLANE

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

- automatic
- Task duration
- Range
- Positioning

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

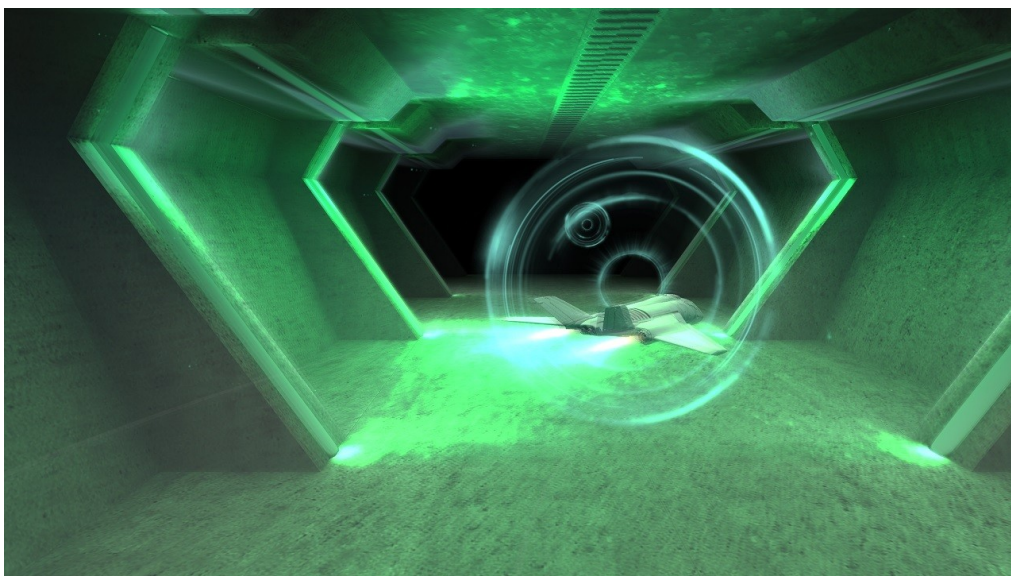
Make the airplane fly through the circles. The closer to the center it flies the more points you get


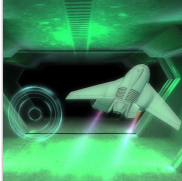


# FUNCTIONAL MOVEMENTS

AIRPLANE

## SAMPLE SETTINGS





◀

Difficulty  
**2/4**

▶

Speed

< 100% >

speed set automatically

Duration

< 90s >

Range

< 20% ↔ 80% >

Positioning

< Any >

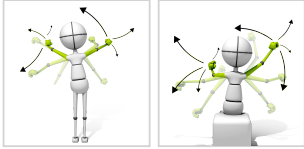


# FUNCTIONAL MOVEMENTS

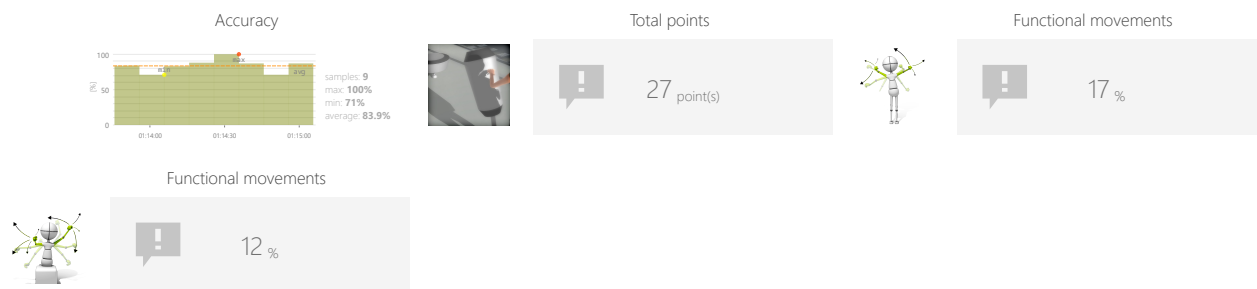
## PUNCHER

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
- Time to complete action

## OBJECTIVES

- Speed of movement
- Spontaneous movements

## INSTRUCTION FOR PATIENT

Punch or kick the bag as many times as you can



# FUNCTIONAL MOVEMENTS

## PUNCHER

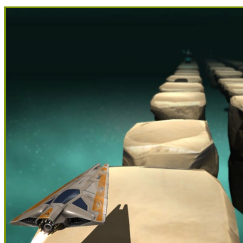
### SAMPLE SETTINGS



Difficulty <b>1/2</b>	
Duration 30s	Minitask duration 30s



Difficulty <b>1/2</b>	
Duration 30s	Minitask duration 30s

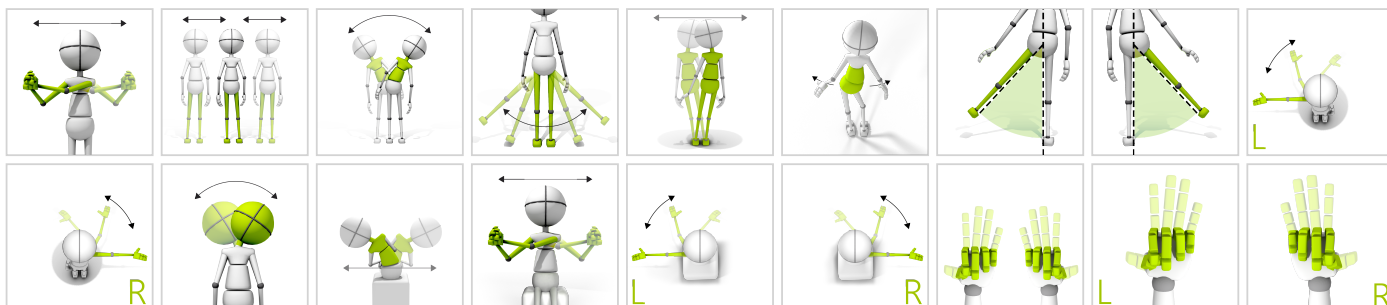


# FUNCTIONAL MOVEMENTS

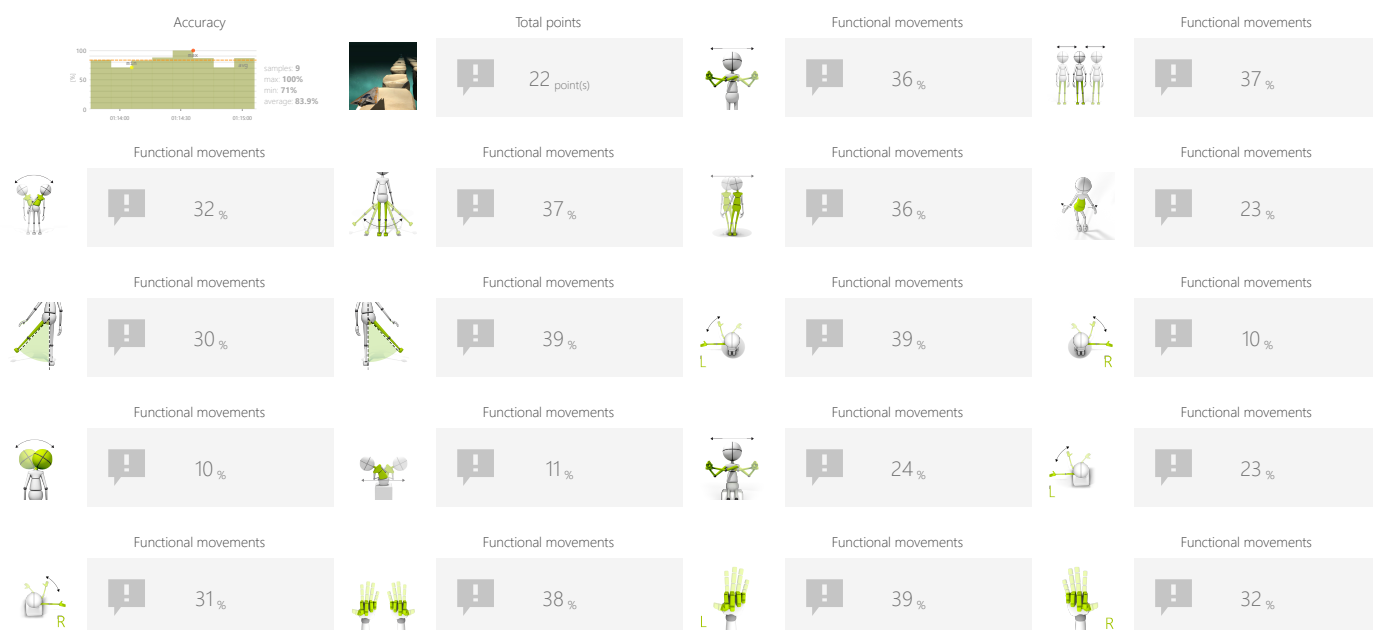
## STONES

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



## ADJUSTMENTS

- automatic
- Task duration
- Range

## OBJECTIVES

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


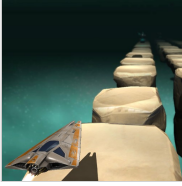
## INSTRUCTION FOR PATIENT

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



## SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

Speed

< 100% >


speed set automatically

Duration

< 90s >

Range

< 20% ↔ 80% >





# FUNCTIONAL MOVEMENTS

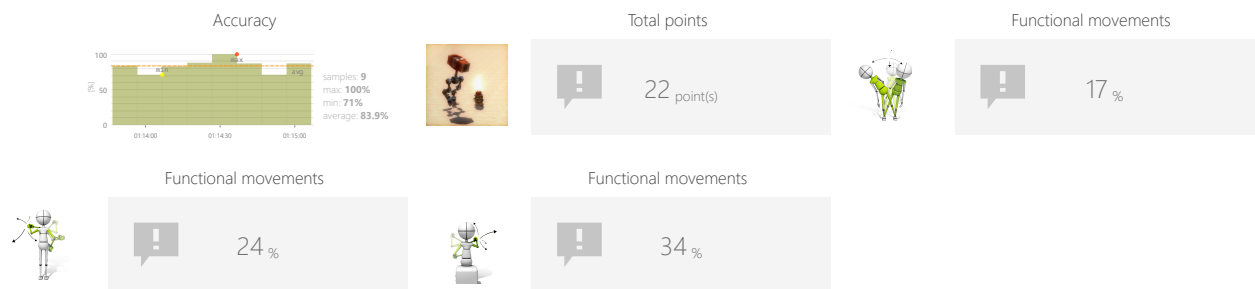
## HAMMER

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



## ADJUSTMENTS

- Positions to have targets on
- Task duration
- Range
- Time to react
- Reticle size
- Positioning

## OBJECTIVES

- Planning and Strategy
- Sideways walking
- Balance and equilibrium training
- Speed of decision making

## INSTRUCTION FOR PATIENT

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







# FUNCTIONAL MOVEMENTS

HAMMER

## SAMPLE SETTINGS







◀

Difficulty  
**1/3**

▶

Active positions  


Duration  
< 90s >

Range  
80%  
20%  
  
20% ↔ 80%

Time to react  
< 10s >

Reticle size  
< 125% >

Positioning  
< Near >



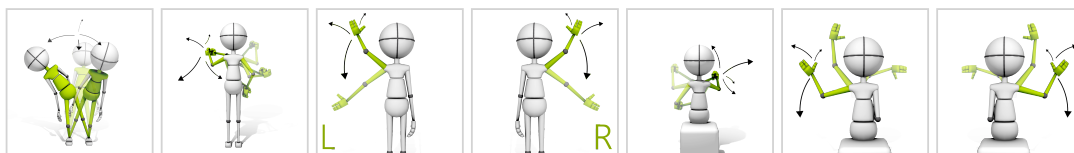


# FUNCTIONAL MOVEMENTS

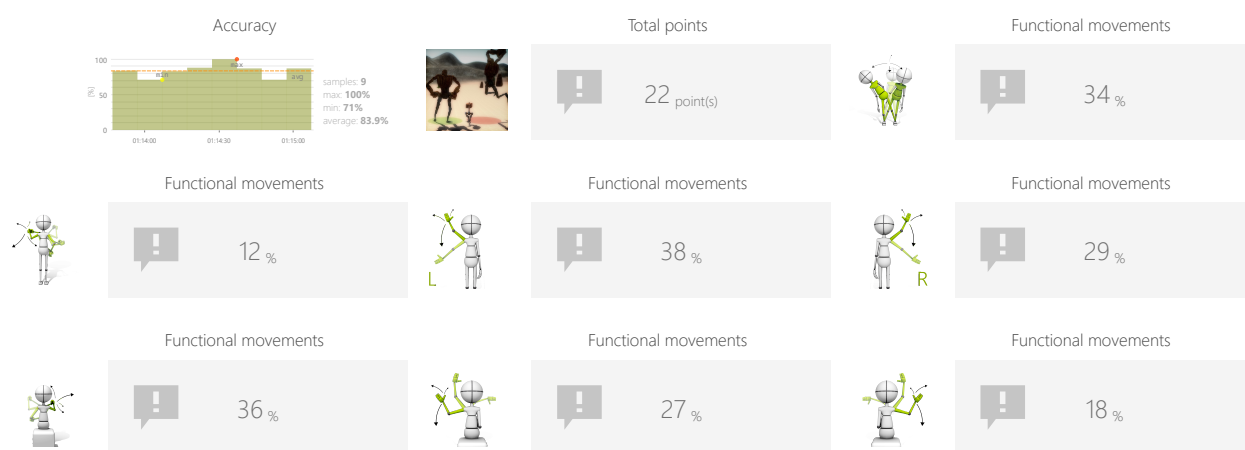
## RUNAWAY

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



## ADJUSTMENTS

- Task duration
- Range
- Number of enemies
- Enemies speed
- Positioning

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

Keep away from the big robots





# FUNCTIONAL MOVEMENTS

RUNAWAY

## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

>

90s

◀

Range

>

20% ↔ 80%

◀

Number of enemies

>

2

◀

Enemies speed

>

100%

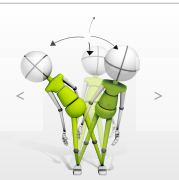

◀

Positioning

>

Near





◀

Difficulty

▶

custom

◀

Duration

>

90s

◀

Range

>

20% ↔ 80%

◀

Number of enemies

>

4

◀

Enemies speed

>

100%

◀

Positioning

>

Near



# FUNCTIONAL MOVEMENTS

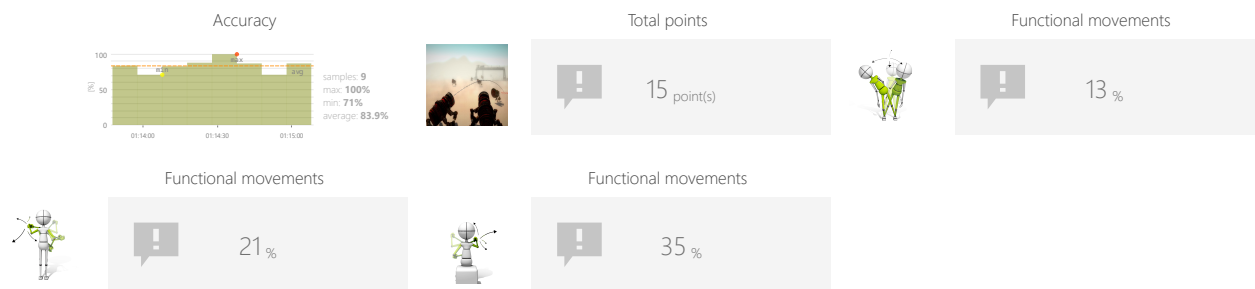
## CANNON

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
- Range
- Time between cannonballs
- Time between enemies
- Enemies speed
- Positioning

## OBJECTIVES

- Planning and Strategy
- Movement precision
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

Use the cannon(s) to shoot into the robots coming in your direction



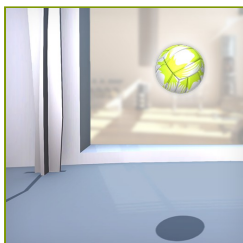
## SAMPLE SETTINGS



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Range 20% ↔ 80%
Time between cannonballs 2s		Time between enemies 4s
Enemies speed 50%		Positioning Near



◀	Difficulty <b>custom</b>	▶
Duration 90s		Range 20% ↔ 80%
Time between cannonballs 2s		Time between enemies 4s
Enemies speed 100%		Positioning Near

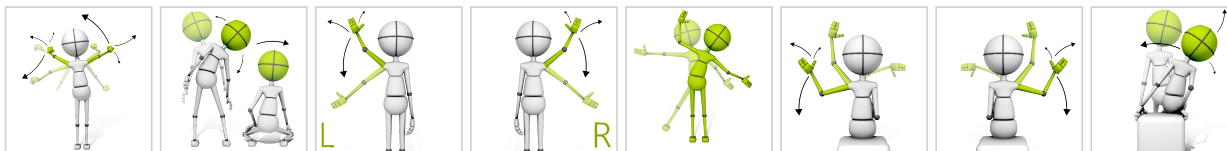


# FUNCTIONAL MOVEMENTS

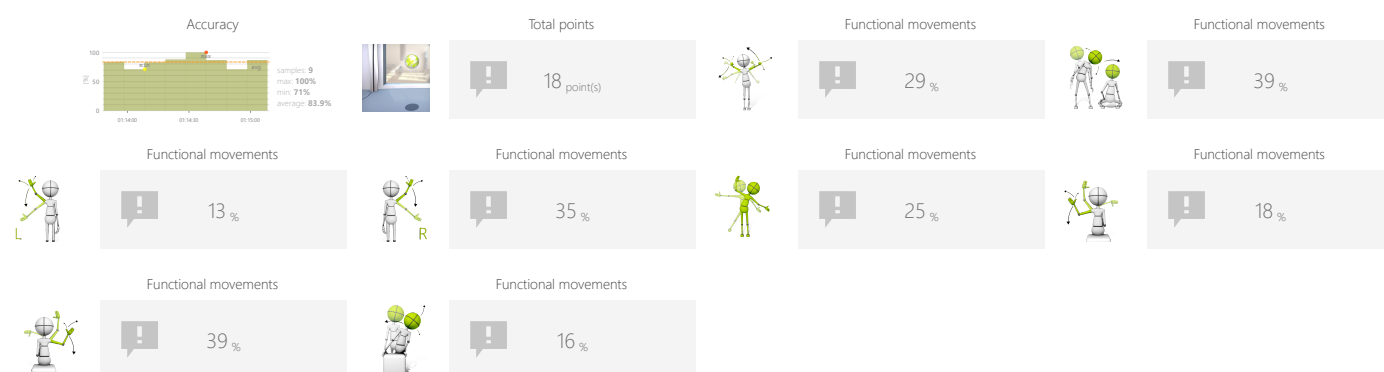
## BALL

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

- Positions to have targets on
- Task duration
- Enable marker
- Time between objects
- Speed of objects
- Positioning

## OBJECTIVES

- Improve range of motion
- Visual motor coordination
- Predicting the trajectory of objects in 3D space
- Activity in a given rhythm
- Mirrored feedback exercises

## INSTRUCTION FOR PATIENT

Use your body to hit the balls

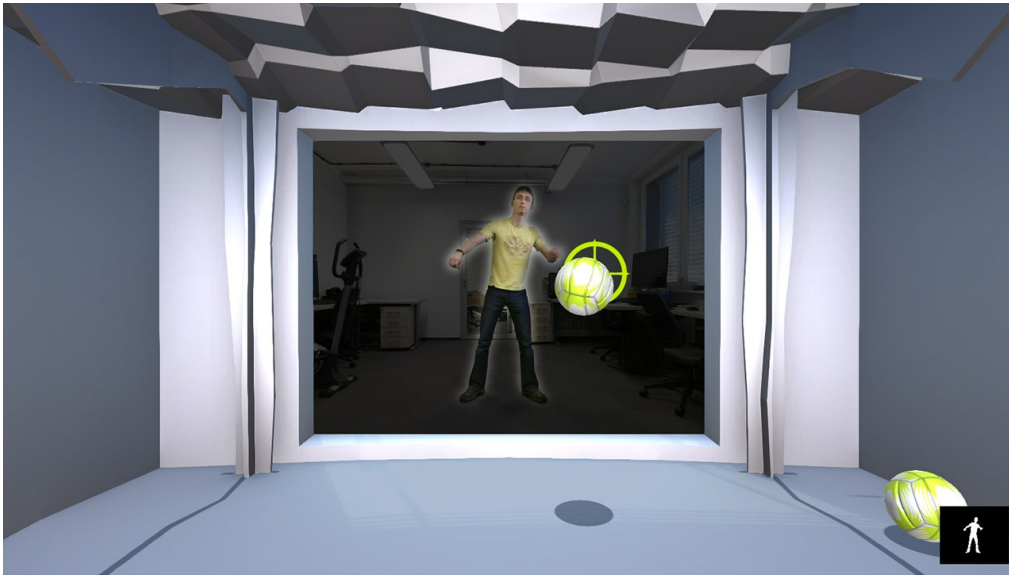




# FUNCTIONAL MOVEMENTS

BALL

## SAMPLE SETTINGS



	Difficulty <b>1/3</b>	
Active positions 		Duration 90s
Enable marker < Yes >		Time between objects < 5s >
Speed of objects < 75% >		Positioning < Normal >

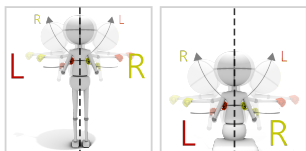


# FUNCTIONAL MOVEMENTS

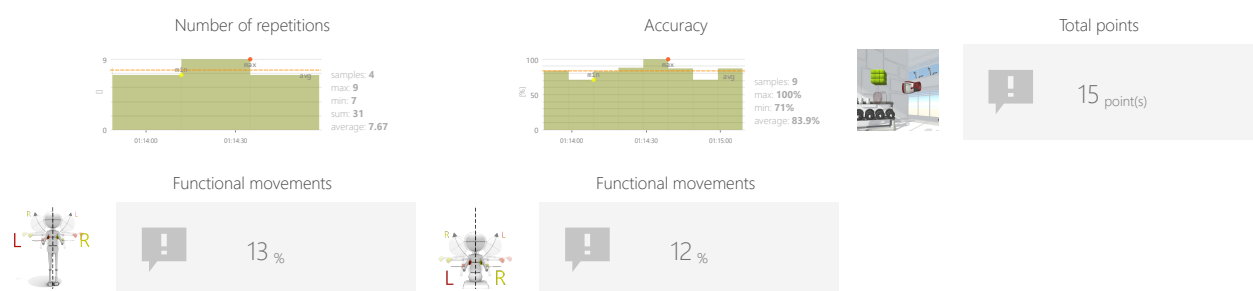
## CROSS PUNCHER

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
- Time to react
- Distance to targets

## OBJECTIVES

- Crossing the midline
- Speed of movement
- Rhythmicity
- Repetitive movements

## INSTRUCTION FOR PATIENT

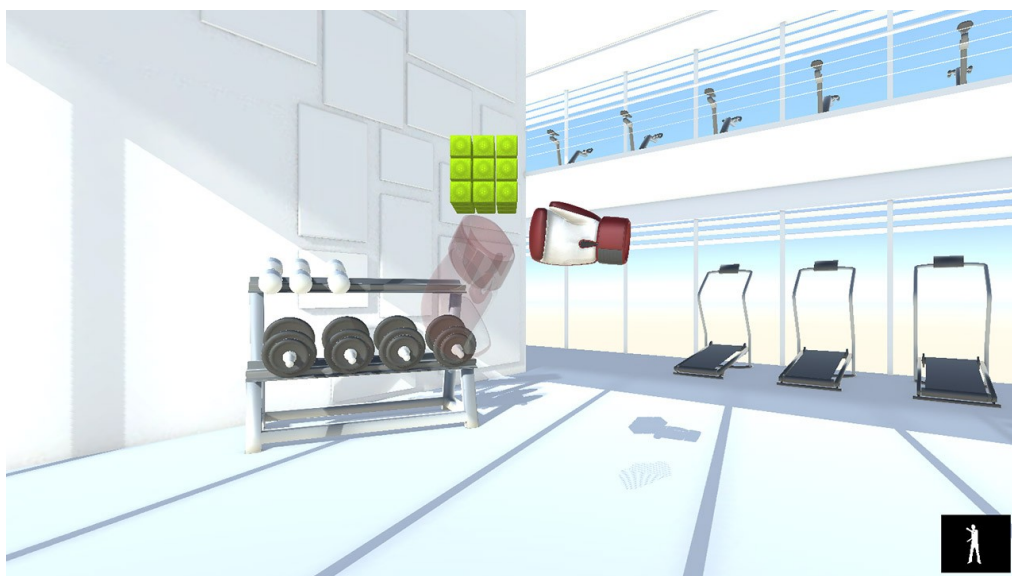
Hit green cubes as fast as you can and remember to always cross your punches and kicks



# FUNCTIONAL MOVEMENTS

CROSS PUNCHER

## SAMPLE SETTINGS



	Difficulty <b>1/3</b>	
Duration <b>30s</b>		Time to react <b>3s</b>
		Distance to targets <b>75%</b>



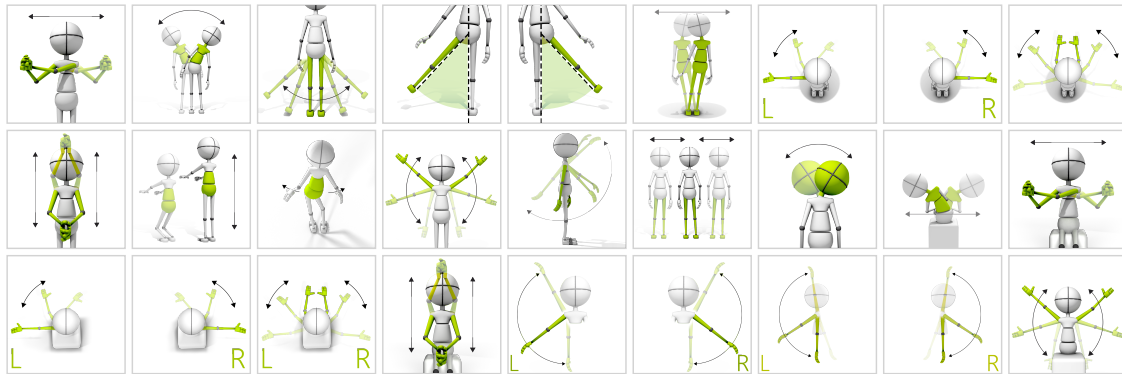


# FUNCTIONAL MOVEMENTS

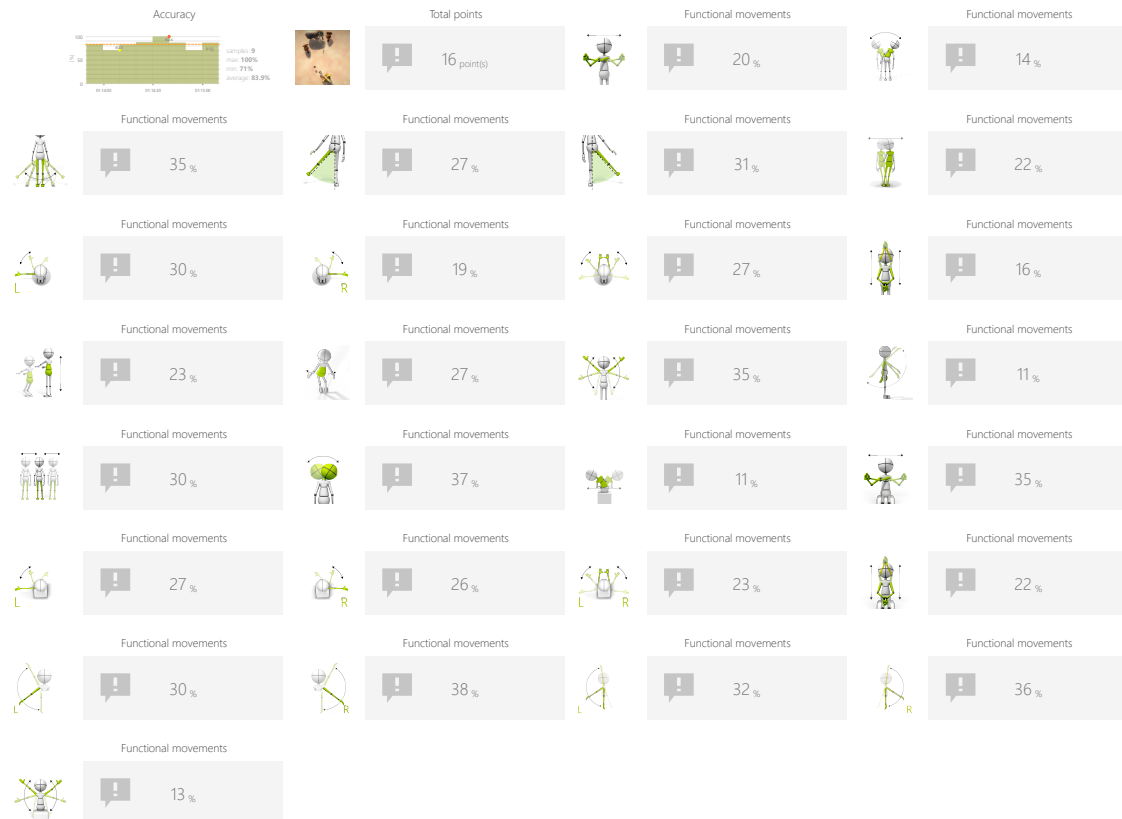
## AUTOMATIC CANNON

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
- Range
- Enable distractors
- Time between cannonballs
- Time between enemies
- Enemies speed

## OBJECTIVES

- Divided attention
- Spontaneous movements
- Arms swings
- Muscle strengthening

## INSTRUCTION FOR PATIENT

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





# FUNCTIONAL MOVEMENTS

AUTOMATIC CANNON

## SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

◀

Duration  
**90s**

▶

◀

Range  
20% ↔ 80%

▶

◀

Enable distractors  
**No**

▶

◀

Time between cannonballs  
**1s**

▶

◀

Time between enemies  
**3s**

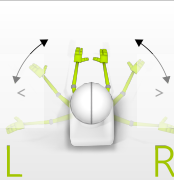

▶

◀

Enemies speed  
**50%**

▶





◀

Difficulty  
**custom**

▶

◀

Duration  
**90s**

▶

◀

Range  
20% ↔ 80%

▶

◀

Enable distractors  
**No**

▶

◀

Time between cannonballs  
**1s**

▶

◀

Time between enemies  
**3s**

▶

◀

Enemies speed  
**100%**

▶

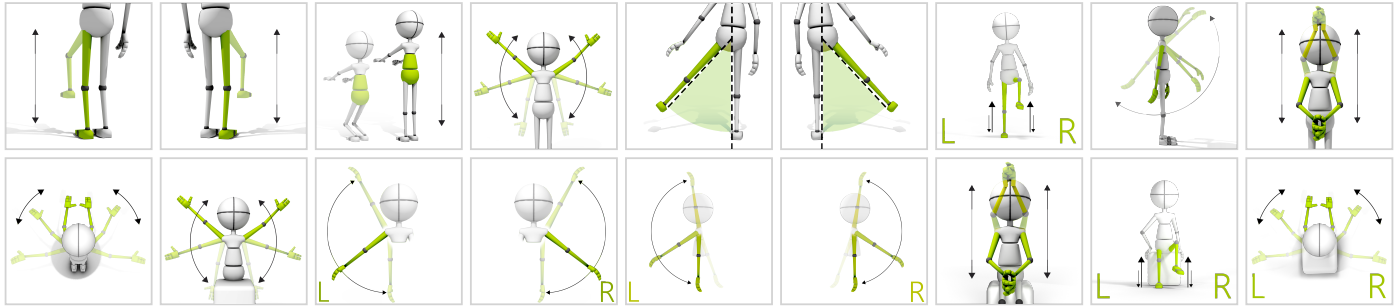


# FUNCTIONAL MOVEMENTS

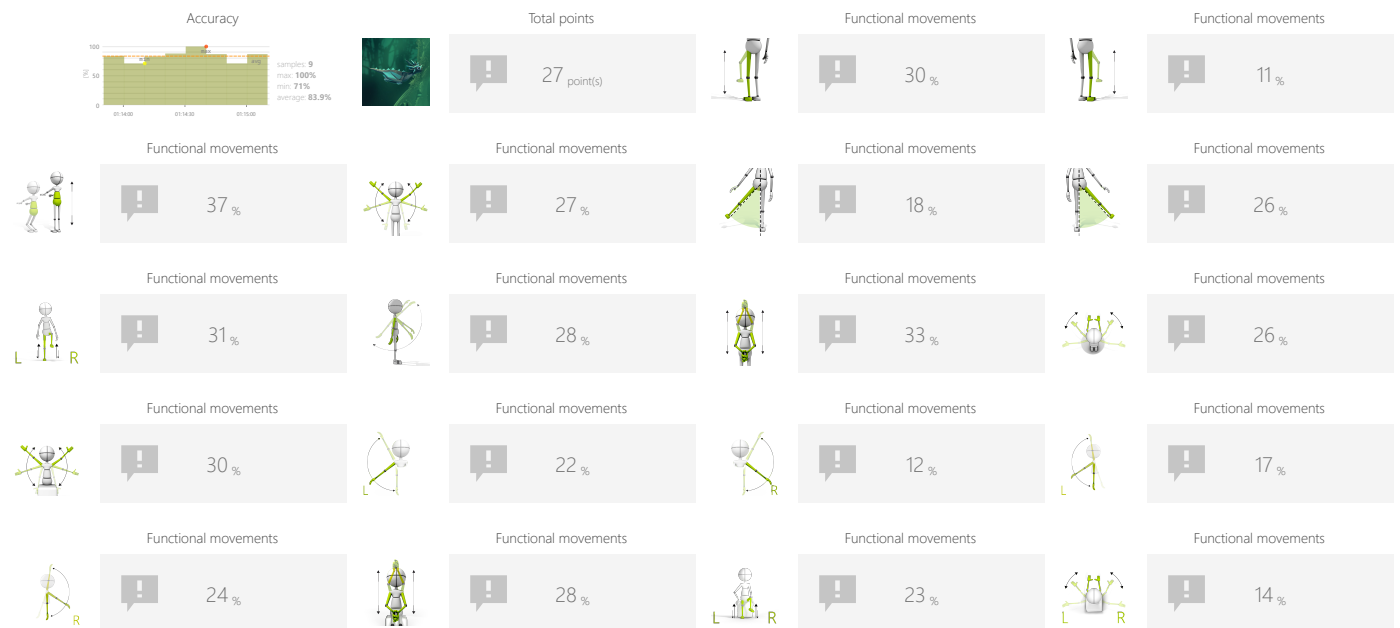
## DRAGON

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
- Range
- Coins group size
- 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 <b>custom</b>	▶
Duration 90s		Range 20% 80% 
Coins group size 3		Distance between coins 250%
Gravity force 100%		



◀	Difficulty <b>1/3</b>	▶
Duration 90s		Range 20% 80% 
Coins group size 5		Distance between coins 250%
Gravity force 100%		





# FUNCTIONAL MOVEMENTS

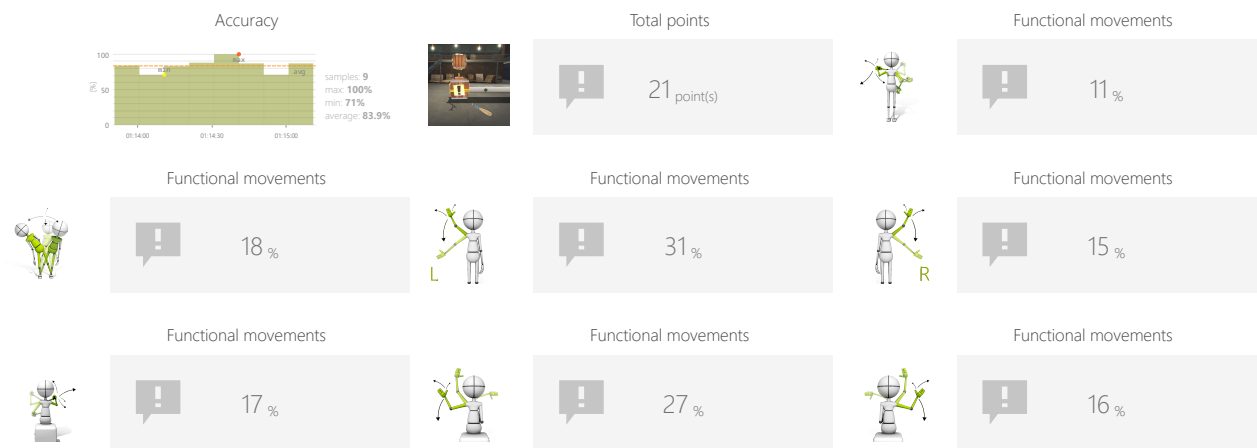
## BOX CRUSHER

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

- Positions to have targets on
- Task duration
- Required force

## OBJECTIVES

- 3D space movements reproduction
- Movement awareness
- Muscle strengthening
- Repetitive movements

## INSTRUCTION FOR PATIENT

Smash boxes with the club

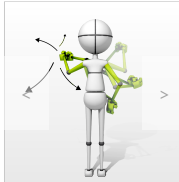






# FUNCTIONAL MOVEMENTS

## BOX CRUSHER

### SAMPLE SETTINGS





	Difficulty <b>1/3</b>	
Active positions 		Duration < 90s >
Required force < 50% >		

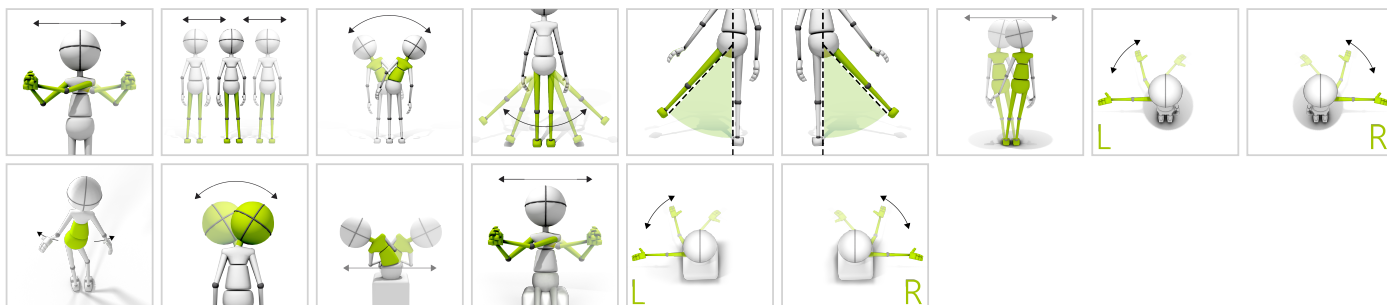


# FUNCTIONAL MOVEMENTS

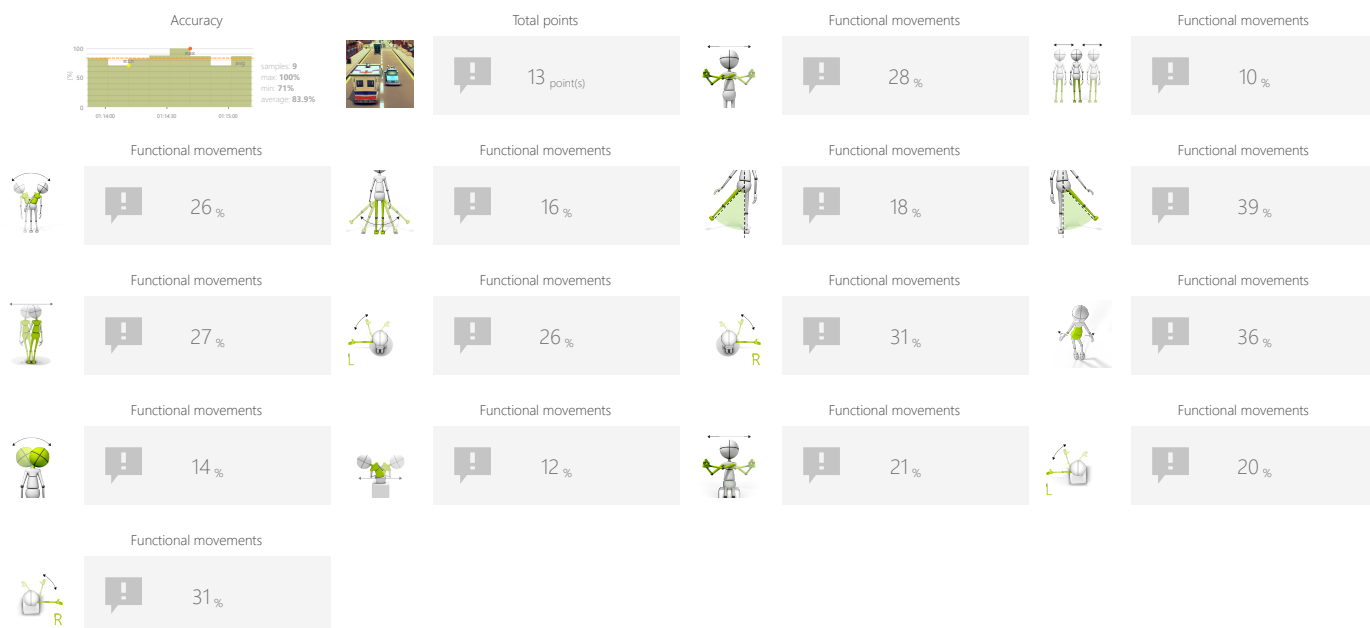
## AMBULANCE

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

- automatic
- Task duration
- Range
- Distance between cars

## 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





# FUNCTIONAL MOVEMENTS

AMBULANCE

## SAMPLE SETTINGS





◀

Difficulty  
**2/3**

▶

Speed  
< 50% >  
speed set automatically

◀

Duration  
**30s**

▶

◀

Range  
20% ↔ 80%



▶

◀

Distance between cars  
50%

▶





◀

Difficulty  
**custom**

▶

Speed  
< 50% >  
speed set automatically

◀

Duration  
**30s**

▶

◀

Range  
20% ↔ 80%

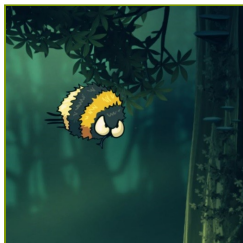
▶

◀

Distance between cars  
200%

▶



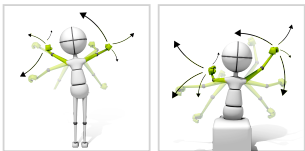


# FUNCTIONAL MOVEMENTS

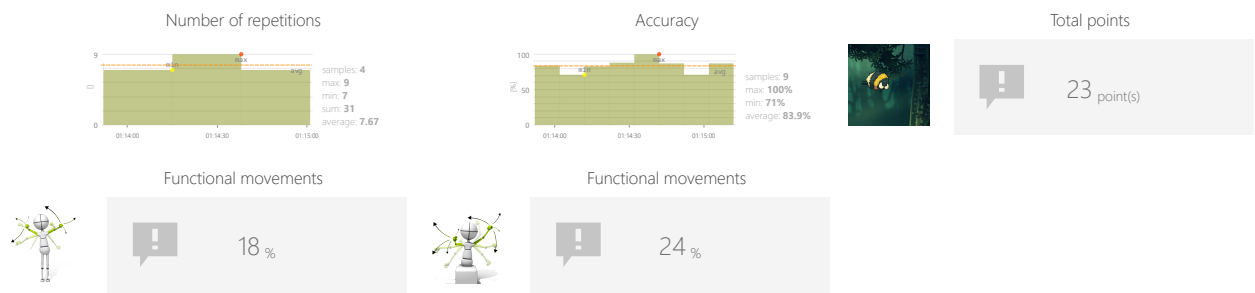
## INSECTS

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
- Time between objects
- Time to react

### OBJECTIVES

- Dynamic responses to emerging moving targets
- Focusing
- Mirrored feedback exercises
- Visual motor coordination

### INSTRUCTION FOR PATIENT

Hit all the insects that sit on your body



# FUNCTIONAL MOVEMENTS

INSECTS

## SAMPLE SETTINGS



◀	Difficulty <b>1/3</b> ▶
Duration < 90s >	Time between objects < 4s > Time to react < 4s >

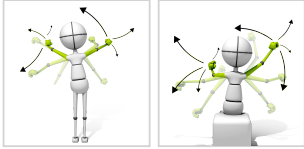


# FUNCTIONAL MOVEMENTS

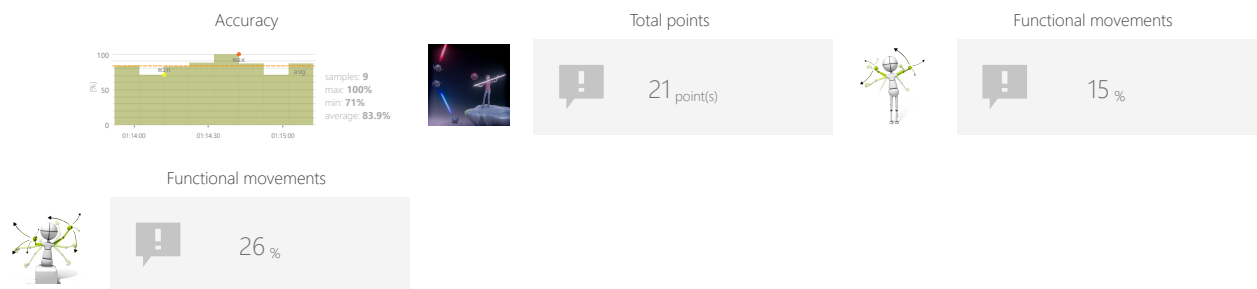
## SORTER: LEGACY

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
- Number of gates
- Gravity force

## OBJECTIVES

- 3D space movements reproduction
- Dynamic responses to emerging moving targets
- Planning and Strategy

## INSTRUCTION FOR PATIENT

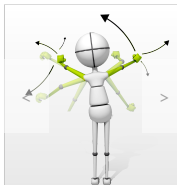
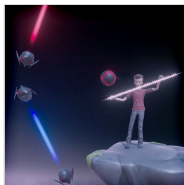
Make the ball fly through the gate in corresponding color



# FUNCTIONAL MOVEMENTS

SORTER: LEGACY

## SAMPLE SETTINGS



◀

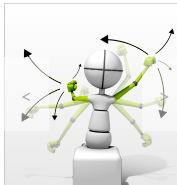
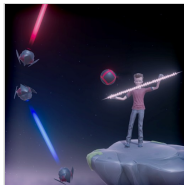
Difficulty  
**1/3**

▶

Duration  
< 90s >

Number of gates  
< 2 >

Gravity force  
< 100% >



◀

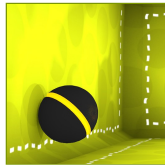
Difficulty  
**3/3**

▶

Duration  
< 90s >

Number of gates  
< 4 >

Gravity force  
< 100% >

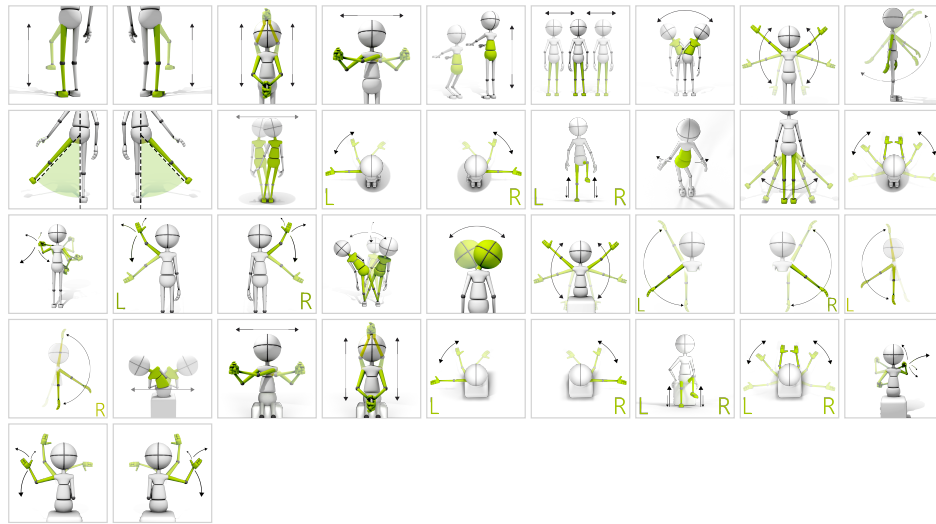


# FUNCTIONAL MOVEMENTS

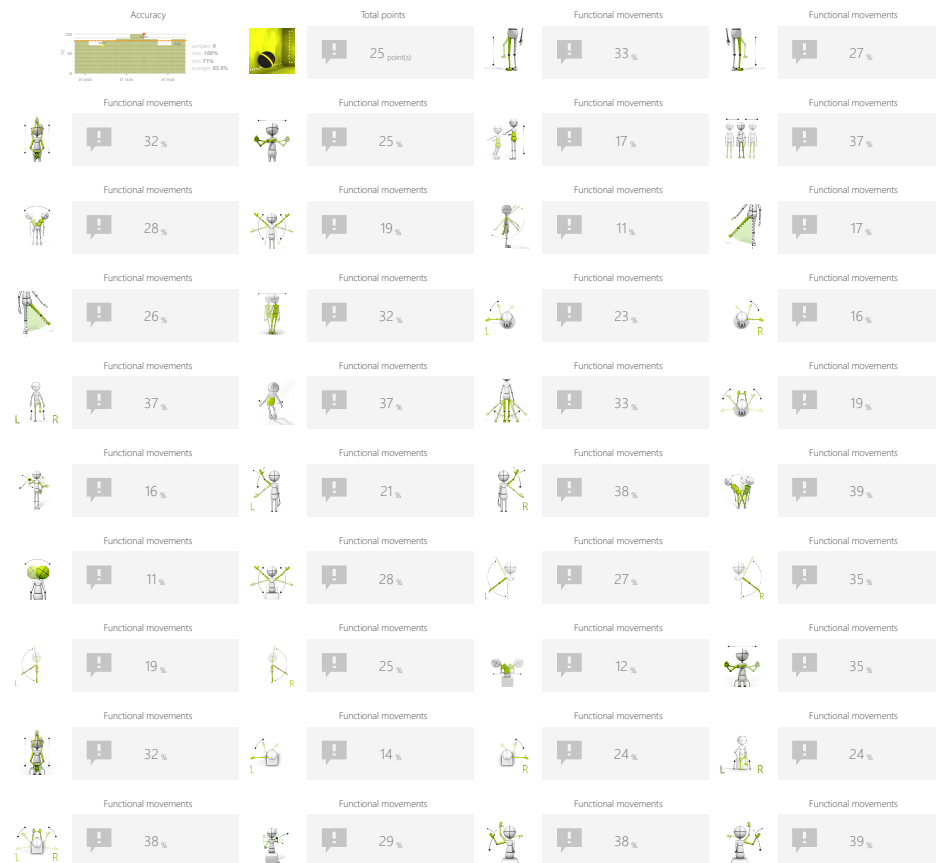
## ARCANOID

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
- Range
- Reticle size
- Speed of objects

## OBJECTIVES

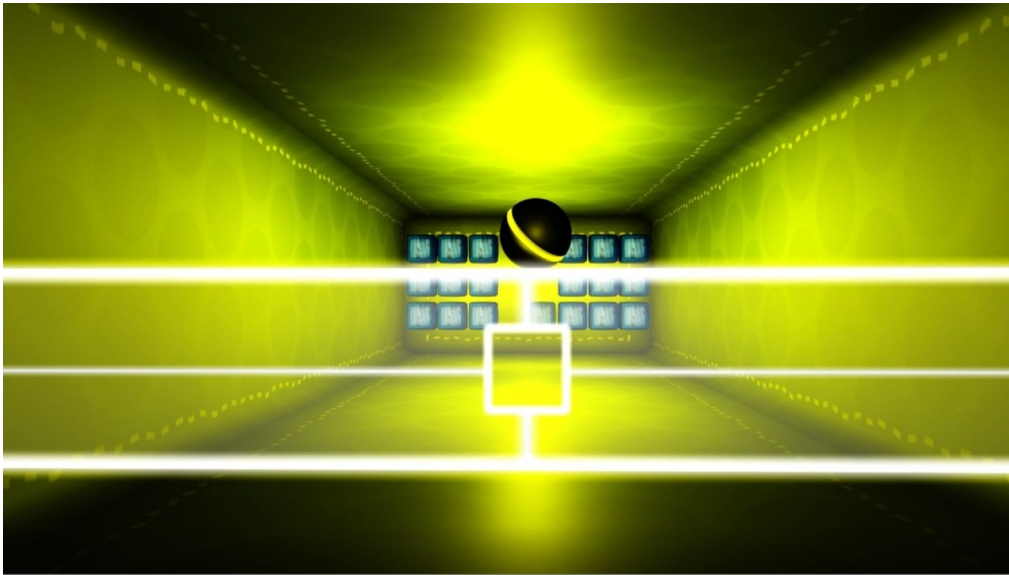
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

## INSTRUCTION FOR PATIENT

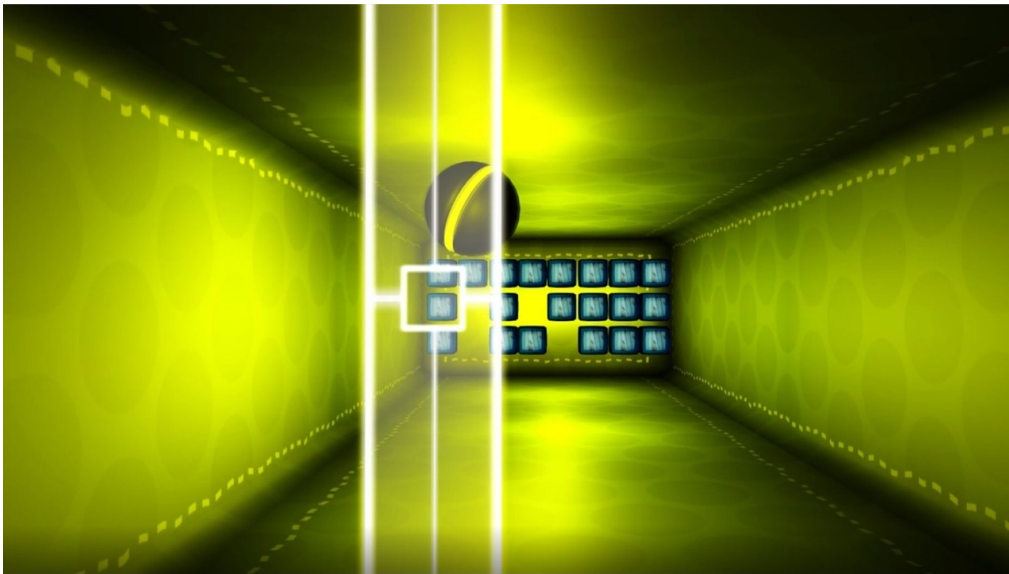
Destroy as many boxes as you can



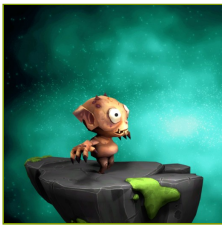
## SAMPLE SETTINGS



	Difficulty <b>custom</b>
Duration  90s	Range  20% 80% 
Reticle size  100%	Speed of objects  70%



	Difficulty <b>custom</b>
Duration  90s	Range  20% 80% 
Reticle size  75%	Speed of objects  70%

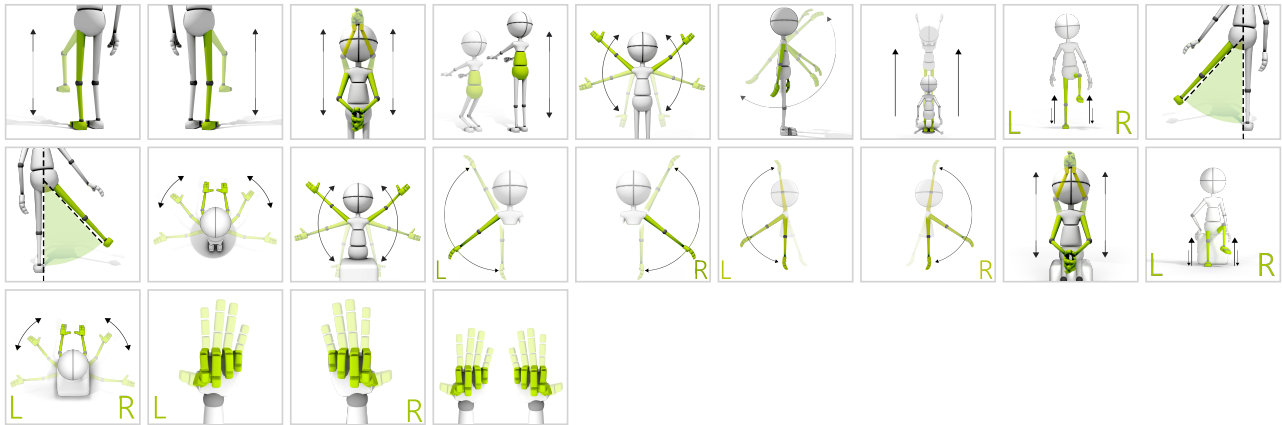


# FUNCTIONAL MOVEMENTS

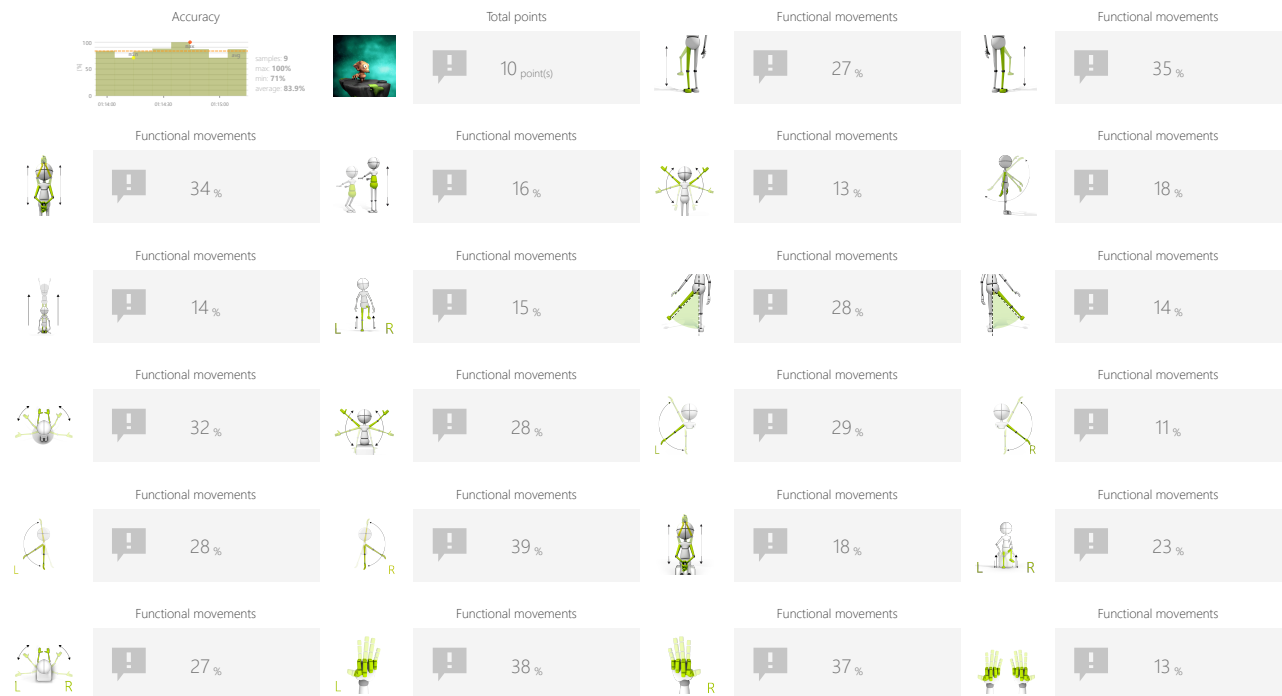
## ROCKET JUMPING

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



## ADJUSTMENTS

- Task duration
- Range
- Time between objects
- Bomb format
- Speed of objects

## 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.



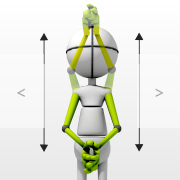
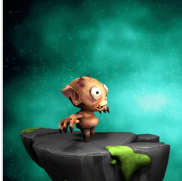


# FUNCTIONAL MOVEMENTS

## ROCKET JUMPING

### SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶


90s

◀

Range

▶

20% 80%



◀

Time between objects

▶

5s

◀

Bomb format

▶

1


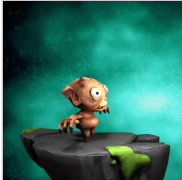
◀

Speed of objects

▶

100%





◀

Difficulty

▶

custom

◀

Duration

▶


90s

◀

Range

▶

20% 80%



◀

Time between objects

▶

5s

◀

Bomb format

▶

2

◀

Speed of objects

▶

100%

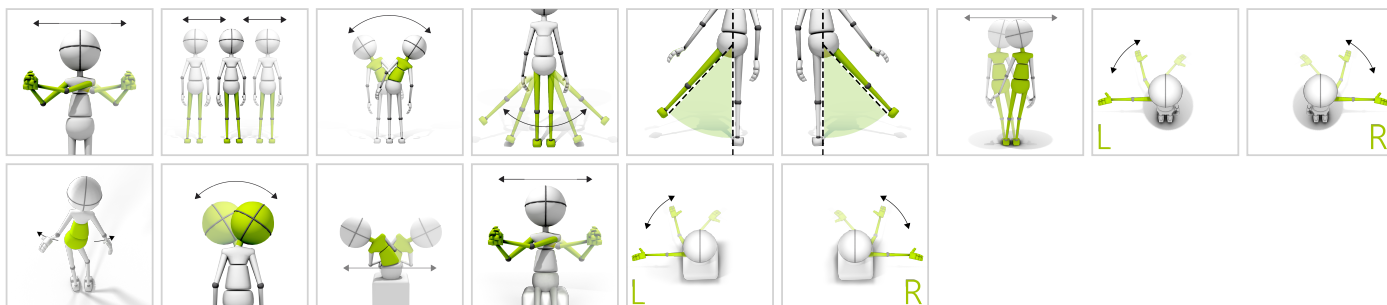


# FUNCTIONAL MOVEMENTS

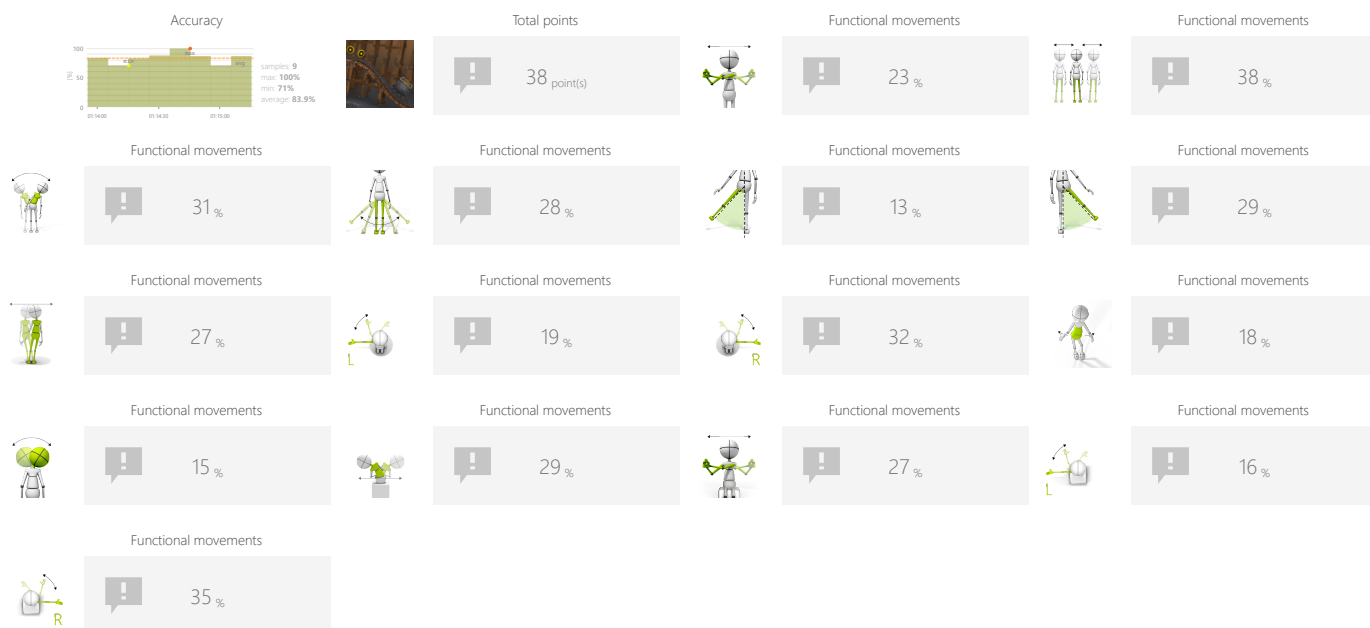
## RAILS

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

- automatic
- Task duration
- Range
- Route shape
- Enable derailling
- Enable obstacles
- Time between objects

## OBJECTIVES

- Dynamic responses to emerging moving targets
- Predicting the trajectory of objects
- Visual motor coordination

## INSTRUCTION FOR PATIENT

Tilt the world to let the trolley collect the coins





# FUNCTIONAL MOVEMENTS

## RAILS

### SAMPLE SETTINGS





◀

Difficulty  
**1/3**

▶

Speed  

< 100% >

speed set automatically

Duration  

< 90s >

Range  

< 20% ↔ 80% >

Route shape  

< — >

Enable derailling  

< No >

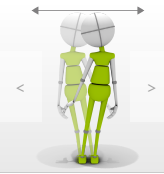

Enable obstacles  

< No >

Time between objects  

< 5s >





◀

Difficulty  
**3/3**

▶

Speed  

< 200% >

speed set automatically

Duration  

< 90s >

Range  

< 20% ↔ 80% >

Route shape  

< ~ >

Enable derailling  

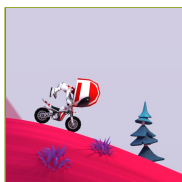
< Yes >

Enable obstacles  

< No >

Time between objects  

< 5s >

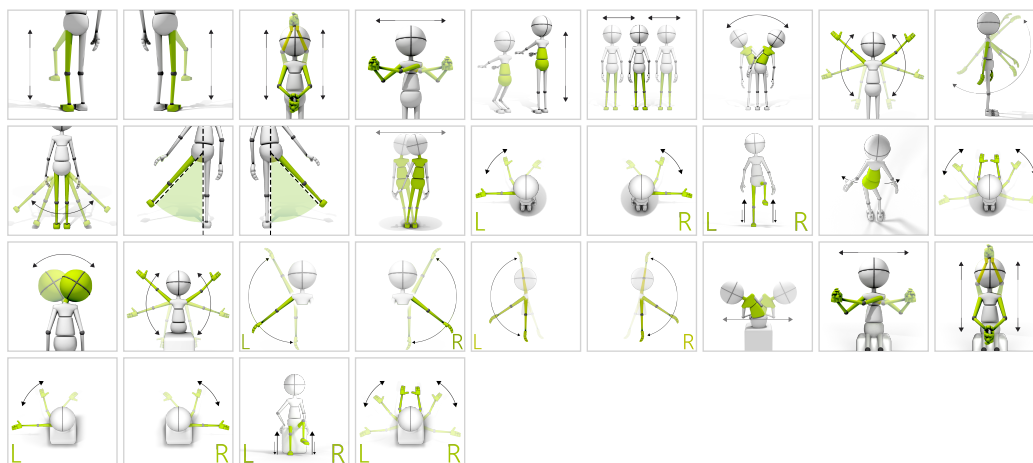


# FUNCTIONAL MOVEMENTS

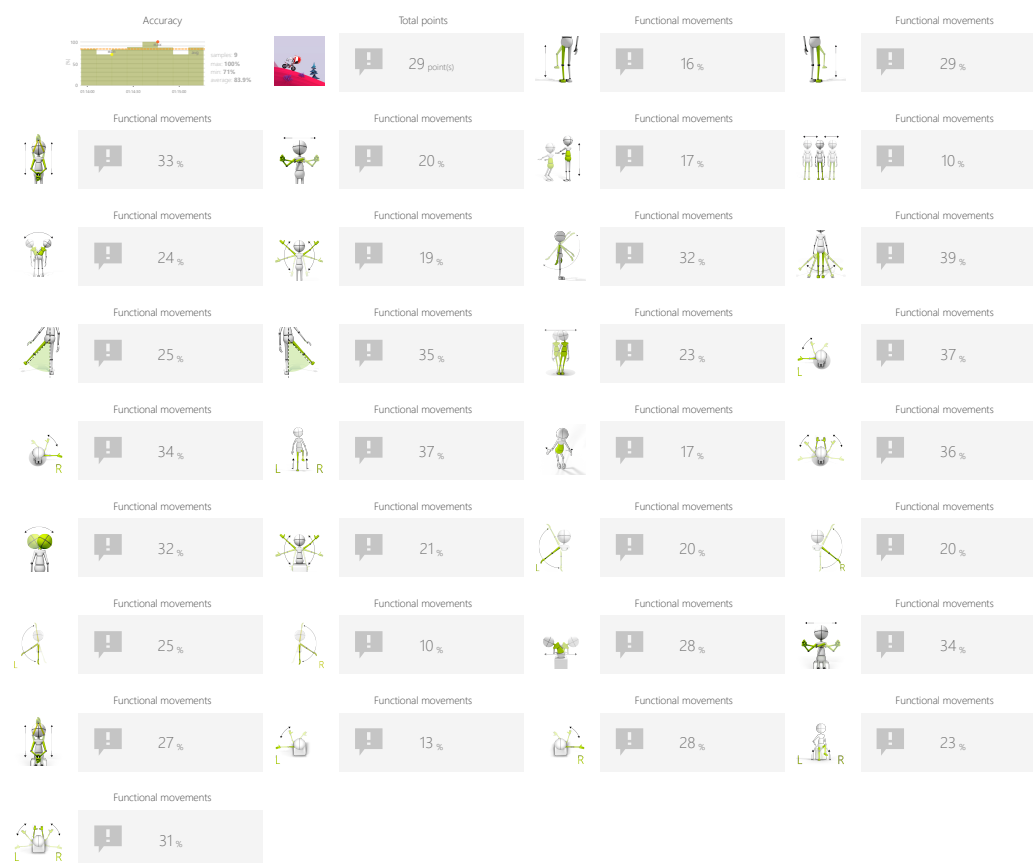
## MOTOCROSS

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
- Range
- Route shape

### OBJECTIVES

- Dynamics of planned movements
- Planning and Strategy

### INSTRUCTION FOR PATIENT

accelerate and brake to cover the entire route as quickly as possible without tipping.





## SAMPLE SETTINGS



	Difficulty <b>2/3</b>	
Duration <b>90s</b>		Range 20%  80% 
Route shape <b>Medium</b>		



# FUNCTIONAL MOVEMENTS

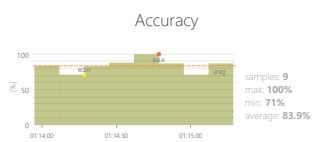
## WALKER

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

36 point(s)



### Functional movements

12 %

## ADJUSTMENTS

- Task duration
- Range

## OBJECTIVES

- Planned movements
- Knees lifting
- Balance and equilibrium training
- Repetitive movements

## INSTRUCTION FOR PATIENT

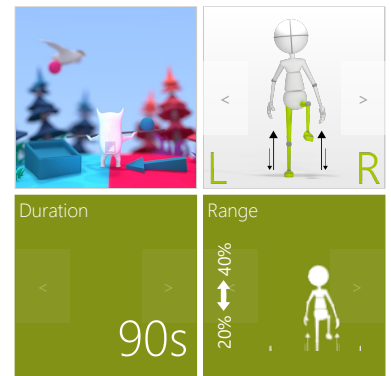
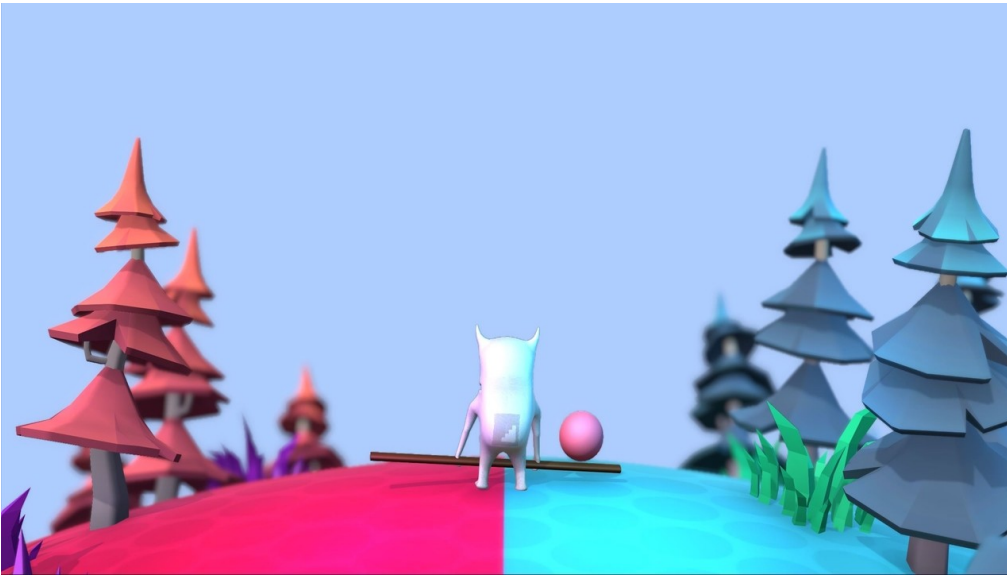
Keep walking. Put blue balls into blue boxes and pink balls into pink boxes



# FUNCTIONAL MOVEMENTS

## WALKER

### SAMPLE SETTINGS





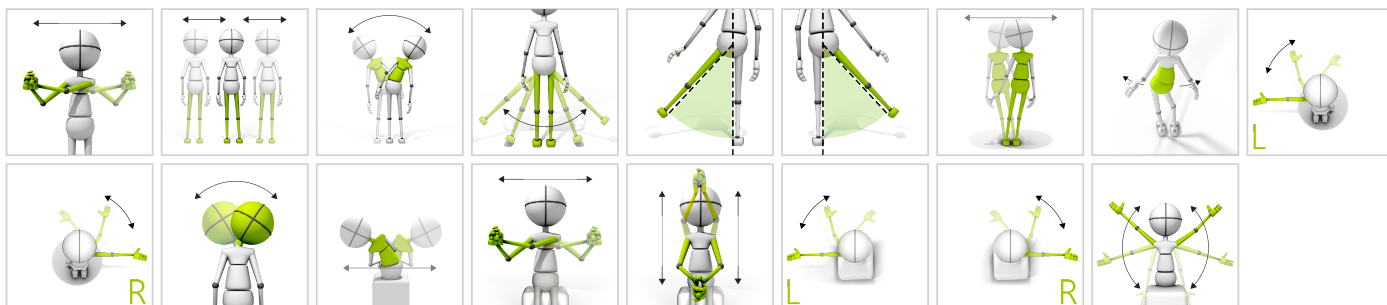


# FUNCTIONAL MOVEMENTS

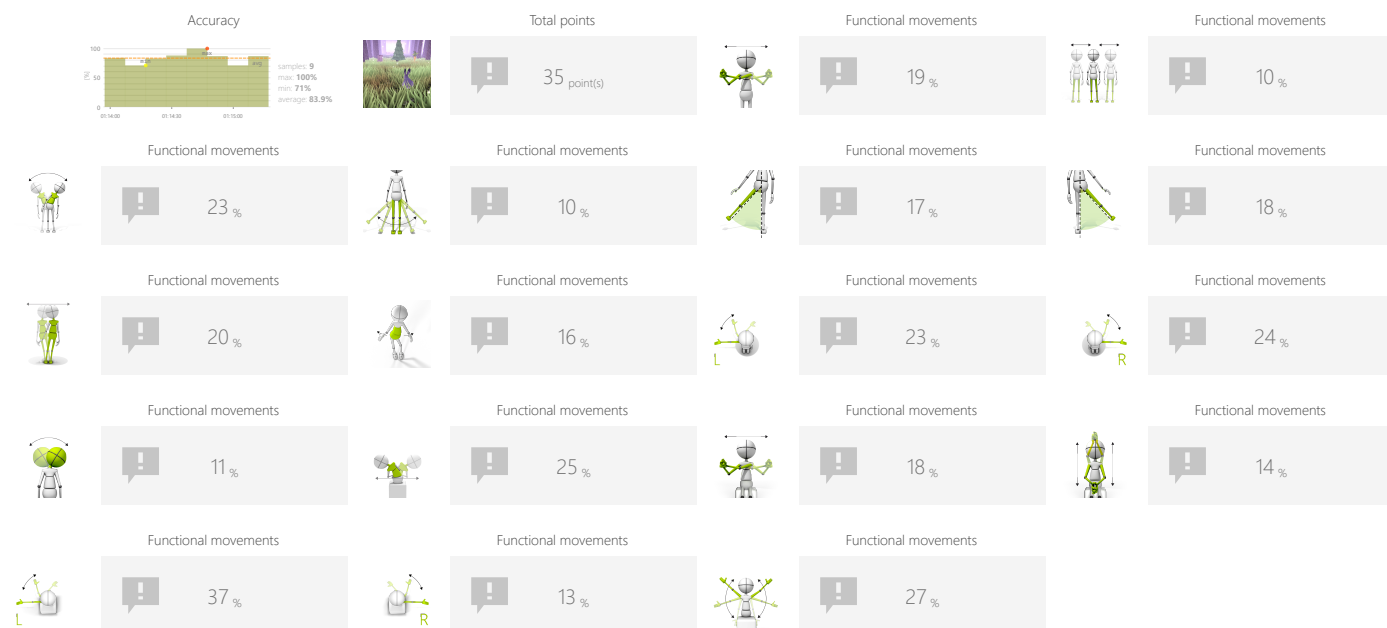
## FOREST RUNNER

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

- automatic
- Task duration
- Range

## OBJECTIVES

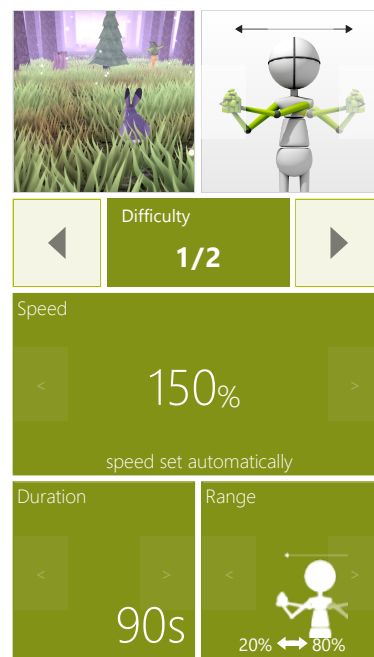
- Dynamics of planned movements
- Focusing
- Planned movements
- Speed of movement

## INSTRUCTION FOR PATIENT

Keep the hare on the run, avoid obstacles and collect as many carrots as you can.



## SAMPLE SETTINGS



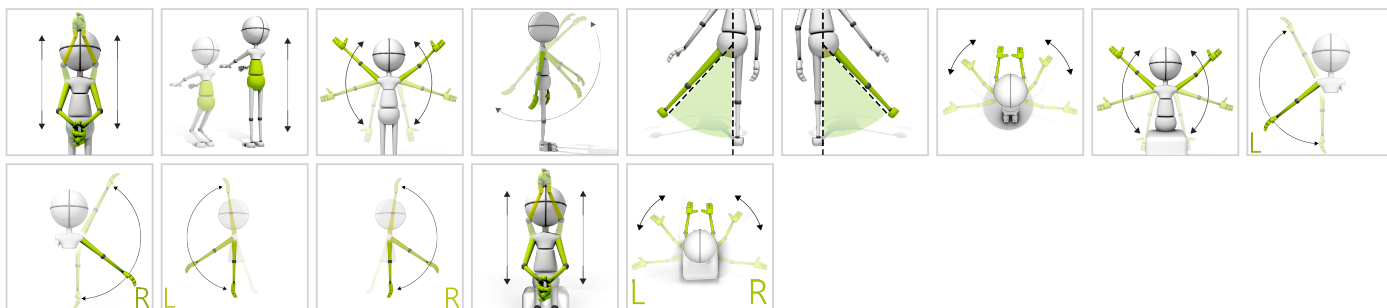


# FUNCTIONAL MOVEMENTS

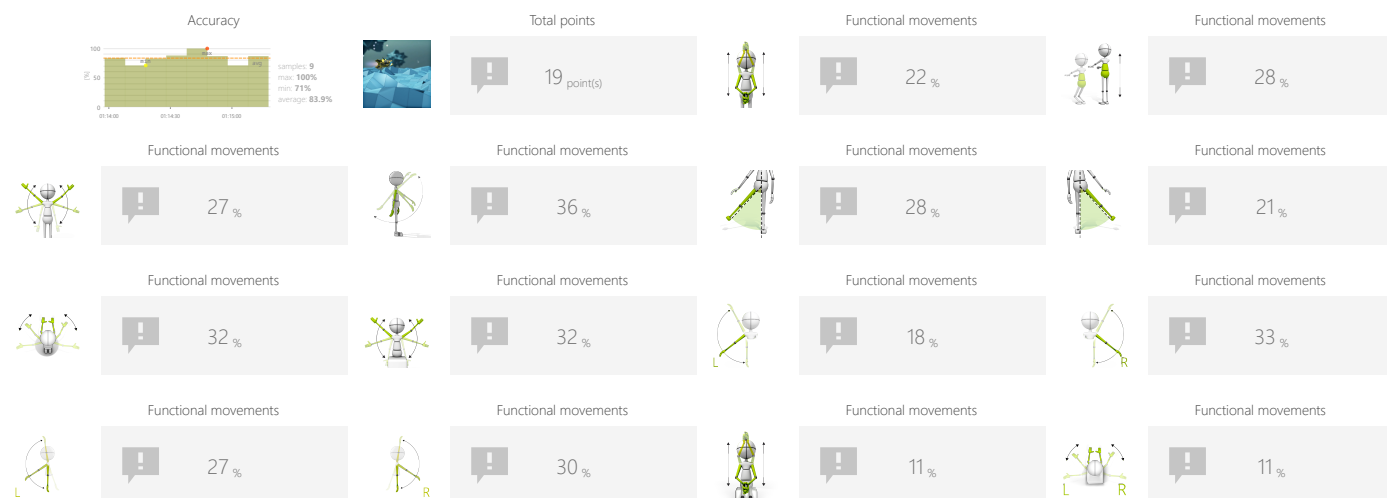
## GEOMETRY FLIER

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

- automatic
- Task duration
- Range

## OBJECTIVES

- Dynamics of planned movements
- Activity in a given rhythm
- Visual motor coordination

## INSTRUCTION FOR PATIENT

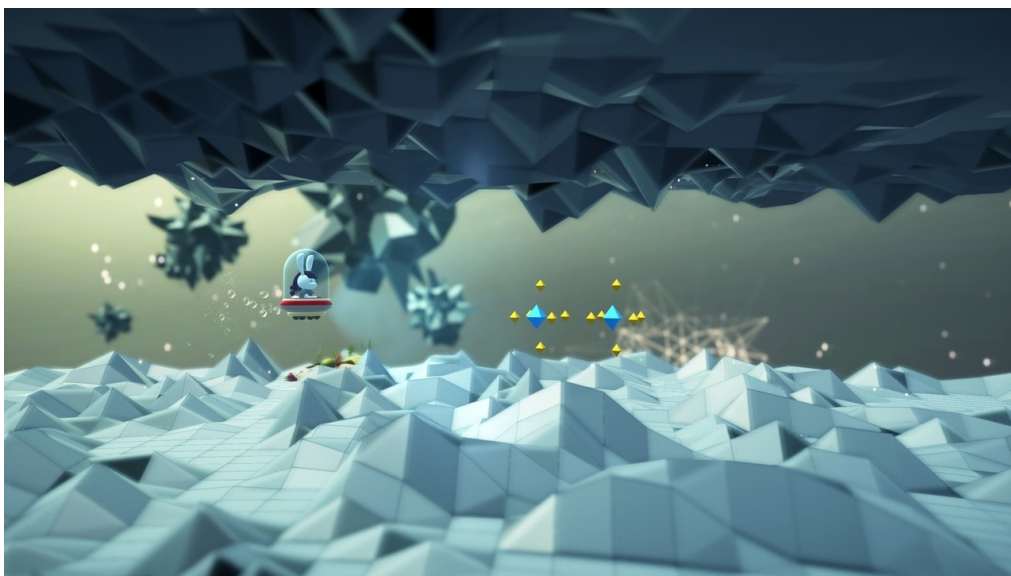
Control the vehicle to avoid the obstacles



# FUNCTIONAL MOVEMENTS

GEOMETRY FLIER

## SAMPLE SETTINGS



Difficulty

1/3

Speed

< 100% >

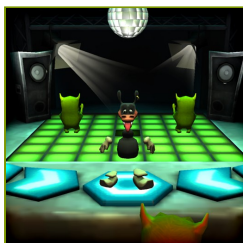
speed set automatically

Duration

< 30s >

Range

20% 80%

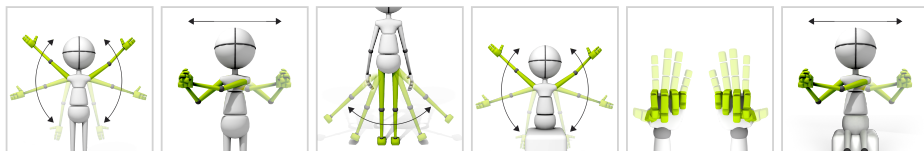


# FUNCTIONAL MOVEMENTS

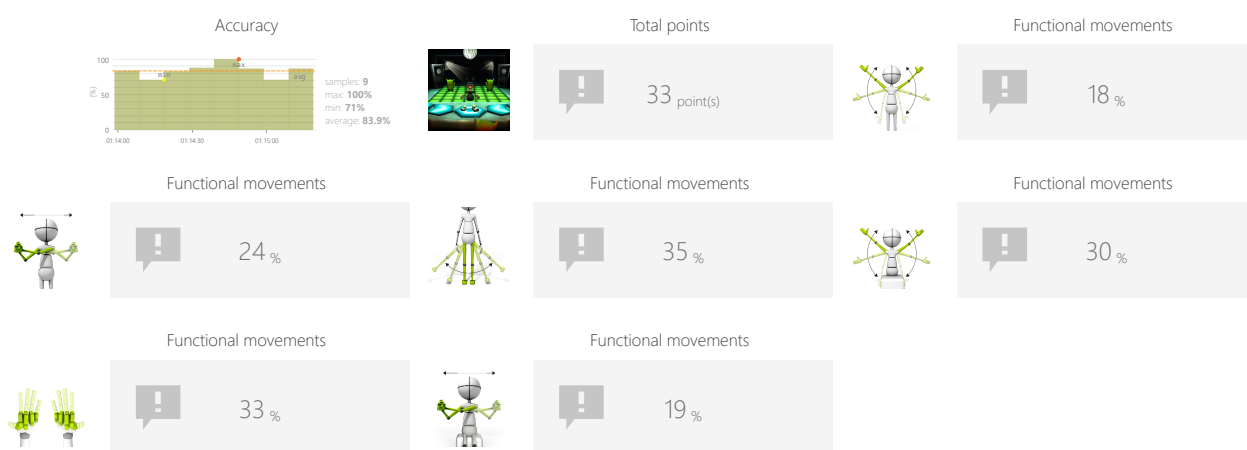
## DANCEMAN

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
- Range
- Advanced scoring
- Song index
- Spawn rate level

## OBJECTIVES

- Activity in a given rhythm
- Spontaneous movements
- Visual motor coordination

## INSTRUCTION FOR PATIENT

Hit the green characters when they come close

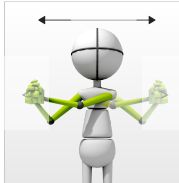




# FUNCTIONAL MOVEMENTS

DANCEMAN


## SAMPLE SETTINGS







Difficulty  
**1/6**



Duration  
**90s**

Range  
20% ↔ 80%

Advanced scoring  
**No**

Song index  
**0**

Spawn rate level  
**Easy**



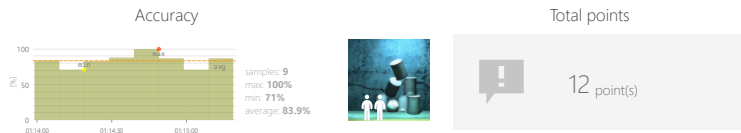
# FUNCTIONAL MOVEMENTS

## CANS MULTIPLAYER

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



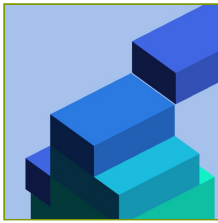
## OBJECTIVES

- Movement precision
- Predicting the trajectory of objects in 3D space
- Dynamics of planned movements
- Dynamic responses to emerging moving targets
- The ability of spatial visualization

## INSTRUCTION FOR PATIENT

Throw the balls to strike as many cans as you can. Each player throws balls in unique color.



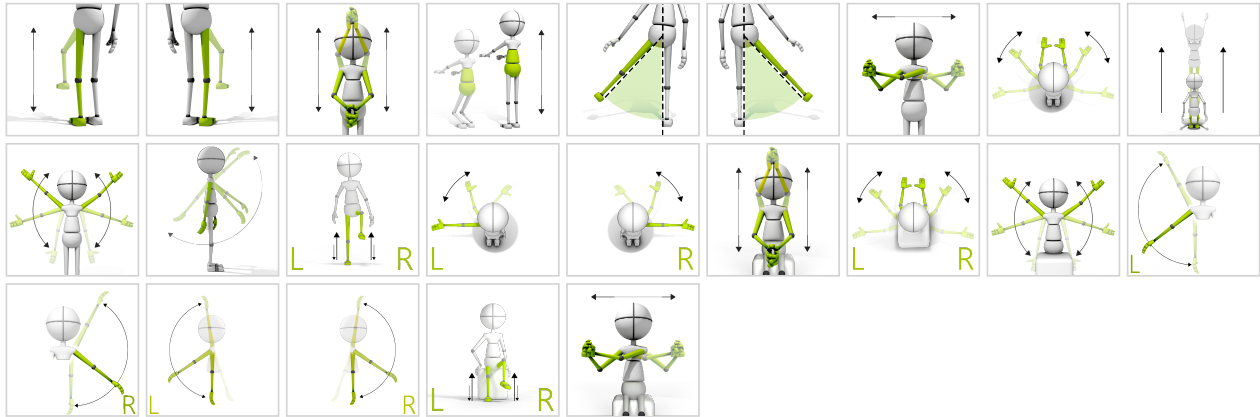


# FUNCTIONAL MOVEMENTS

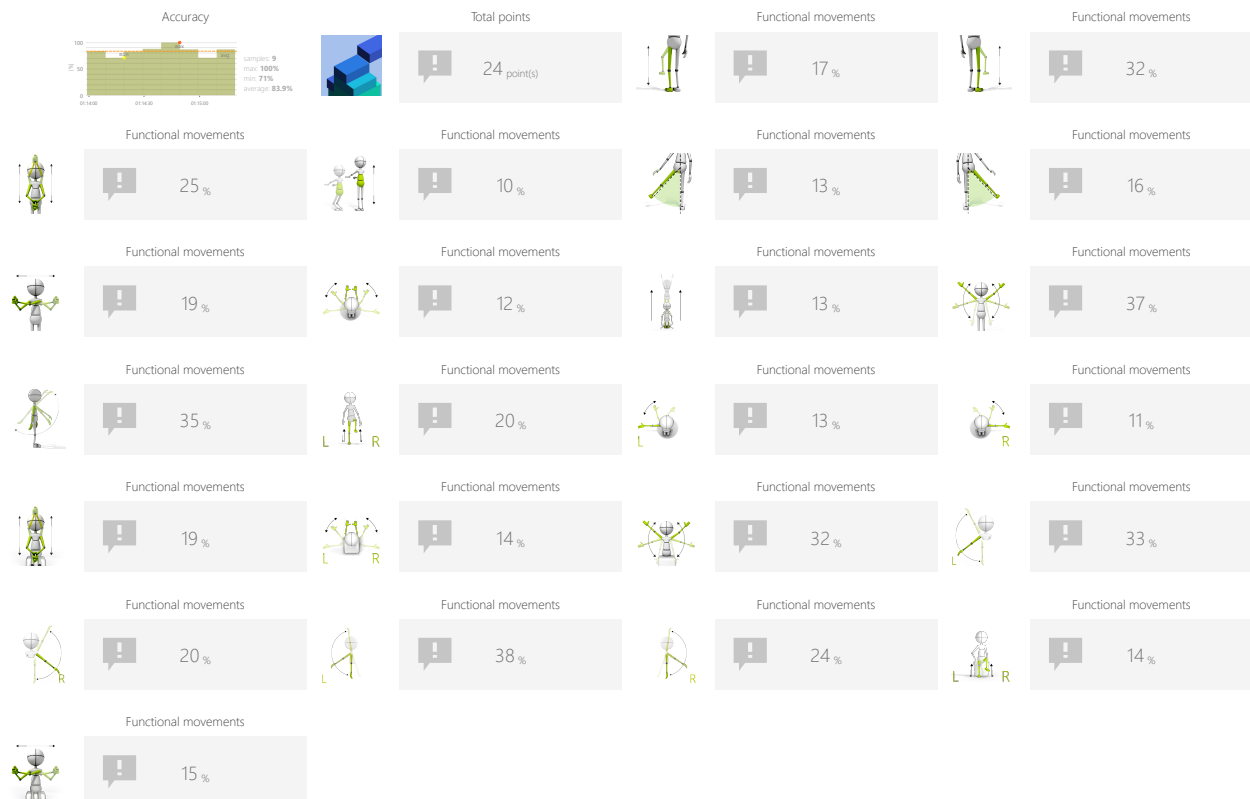
## STACK BUILDER

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
- Range
- Speed of objects

## OBJECTIVES

### INSTRUCTION FOR PATIENT

Build the highest stack possible by perfectly aligning blocks.  
Time your actions to perform the specified movement pattern when blocks are accurately positioned.

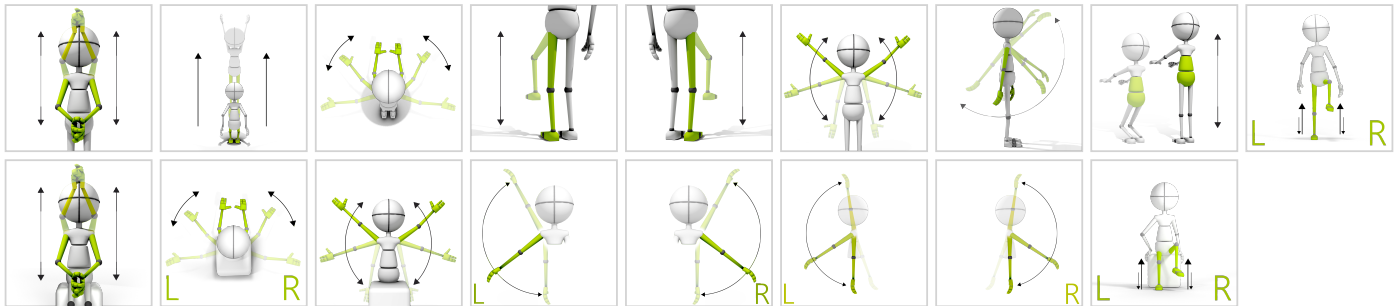


# FUNCTIONAL MOVEMENTS

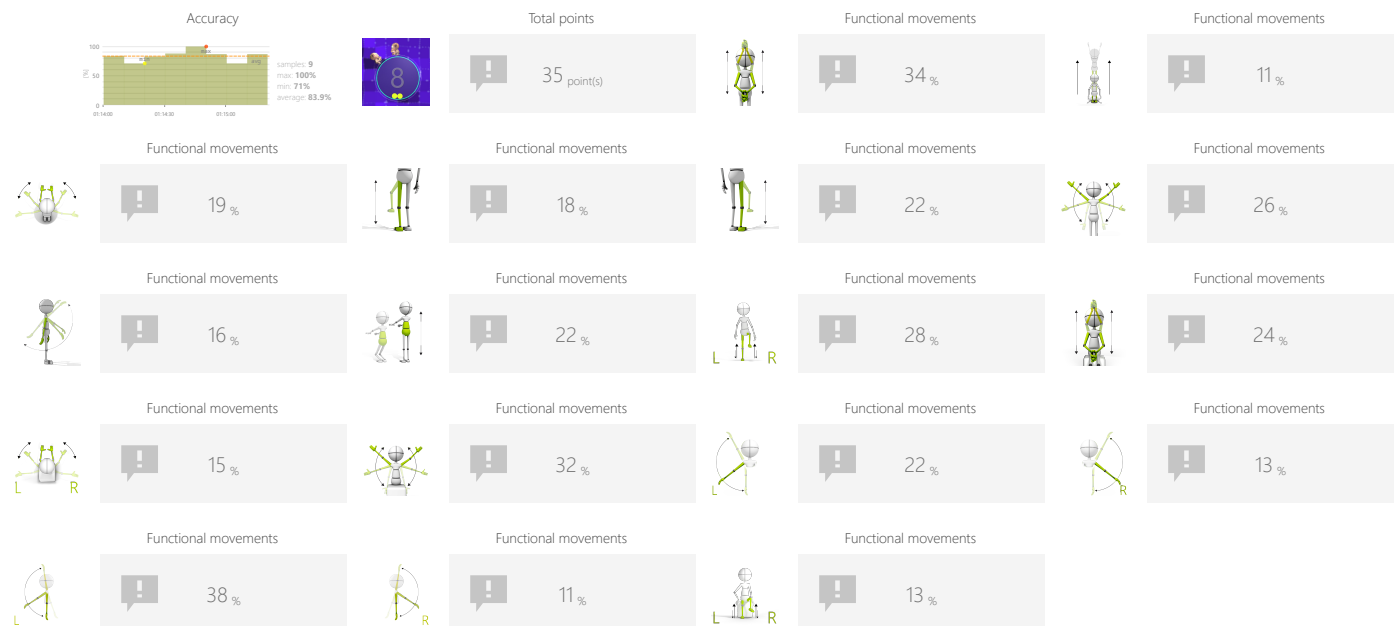
## IMP DODGE

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



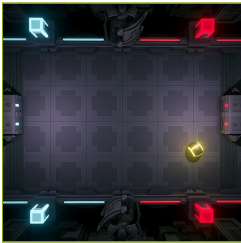
## ADJUSTMENTS

- Task duration
- Range
- Number of imps
- Number of targets
- Speed of objects

## OBJECTIVES

## INSTRUCTION FOR PATIENT

Shoot green balls into the circle while avoiding hitting imps.

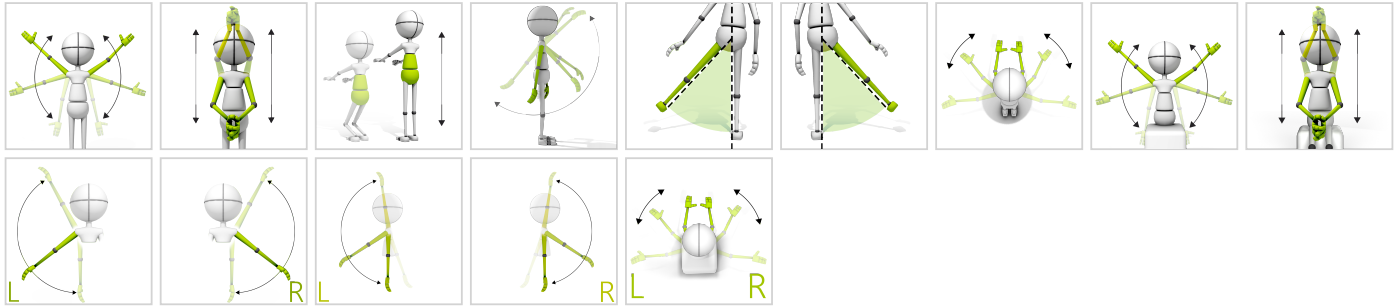


# FUNCTIONAL MOVEMENTS

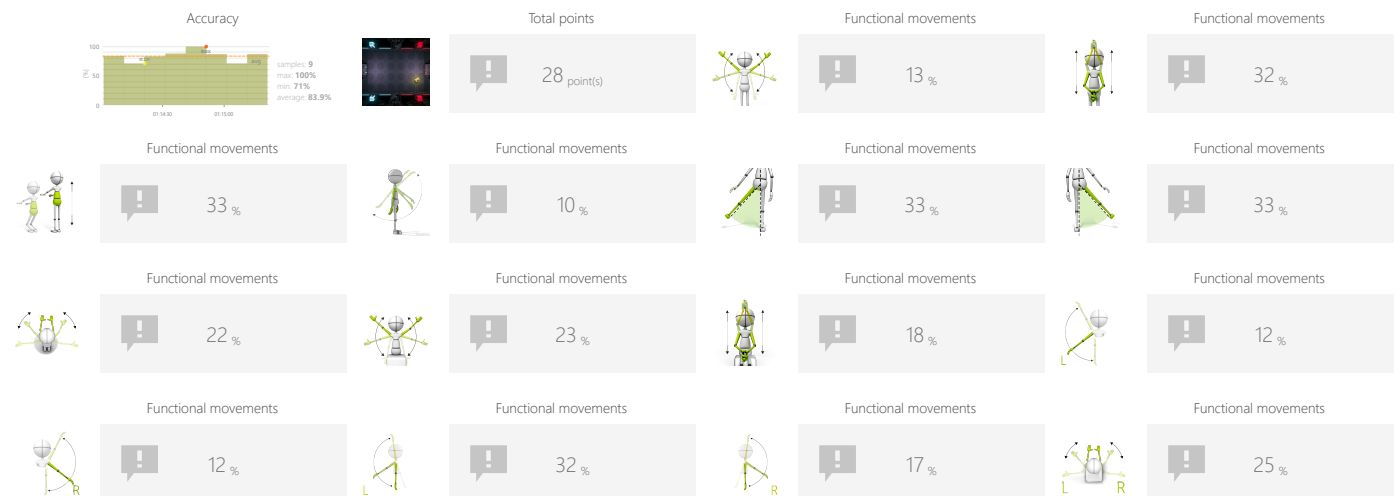
## PONG

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
- Range
- Speed of objects

## OBJECTIVES

- Planned movements
- Focusing
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

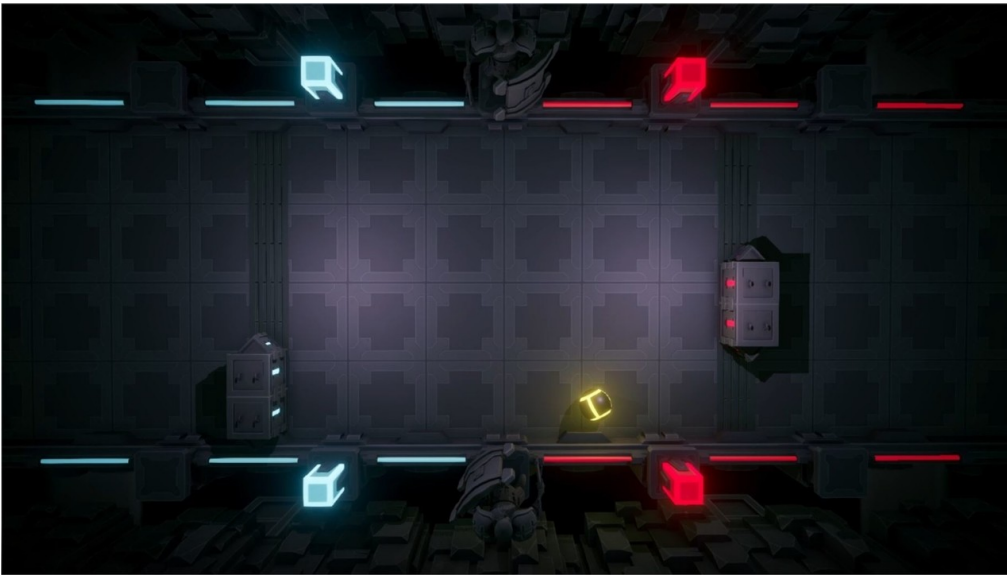
Use the paddles to hit a ball back and forth

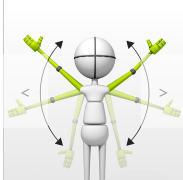
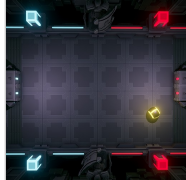


# FUNCTIONAL MOVEMENTS

## PONG

### SAMPLE SETTINGS






◀

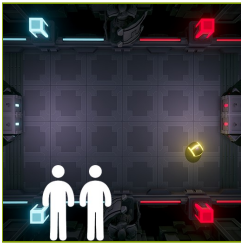
Difficulty  
**1/3**

▶

Duration  
**90s**

Range  
20% ↔ 80%  


Speed of objects  
**100%**



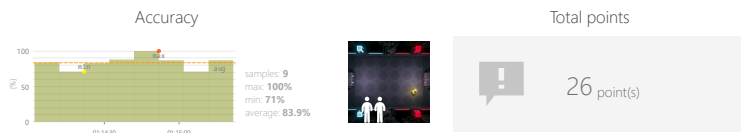
# FUNCTIONAL MOVEMENTS

## PONG

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

- Planned movements
- Focusing
- Predicting the trajectory of objects

## INSTRUCTION FOR PATIENT

Use the paddles to hit a ball back and forth



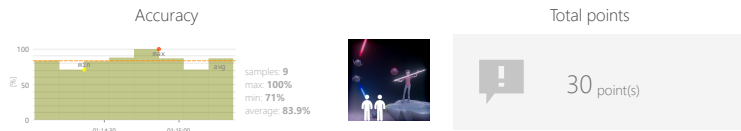
# FUNCTIONAL MOVEMENTS

## SORTER: LEGACY MULTIPLAYER

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

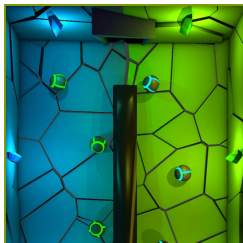


## OBJECTIVES

- 3D space movements reproduction
- Dynamic responses to emerging moving targets
- Planning and Strategy

## INSTRUCTION FOR PATIENT

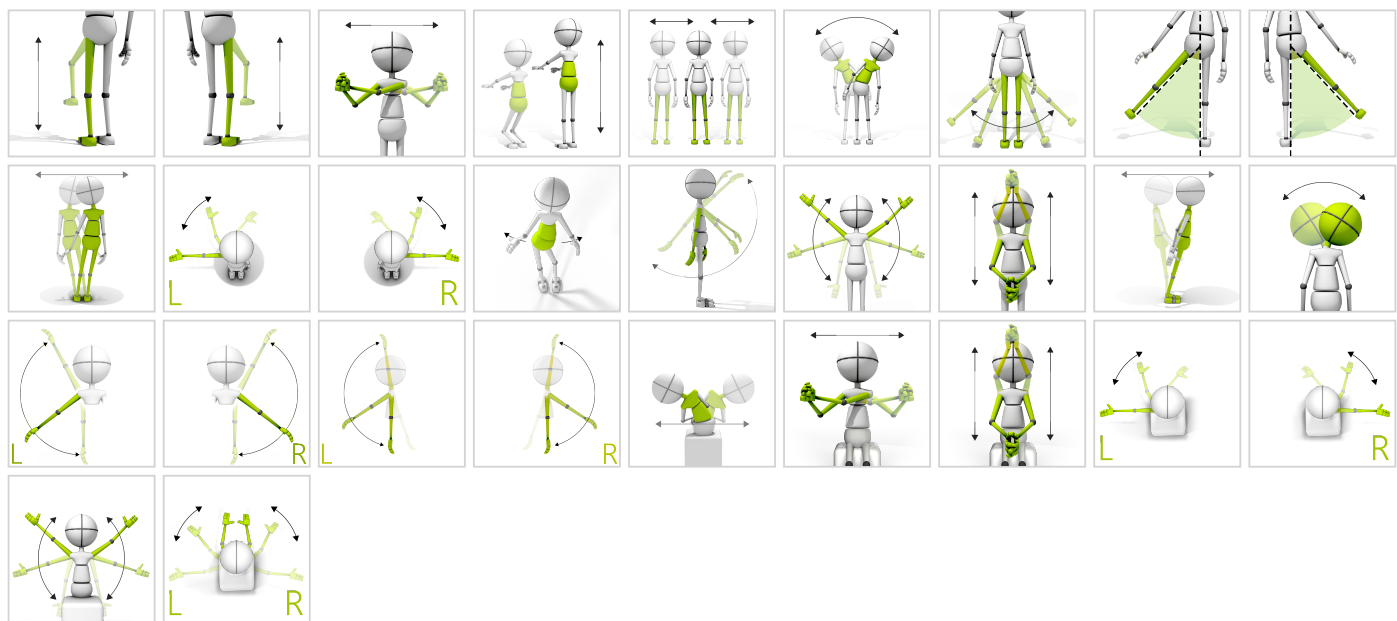
Make the ball fly through the gate in corresponding color



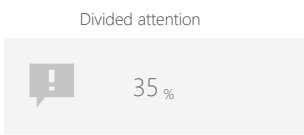
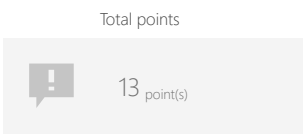
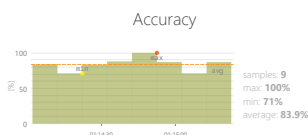
# DIVIDED ATTENTION SORTER

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
- Range
- 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

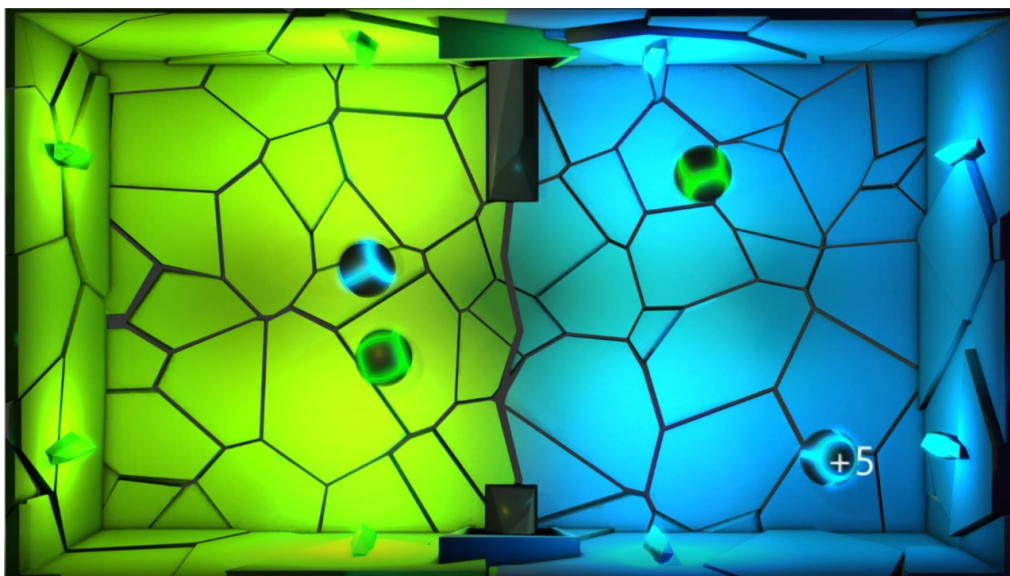
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.



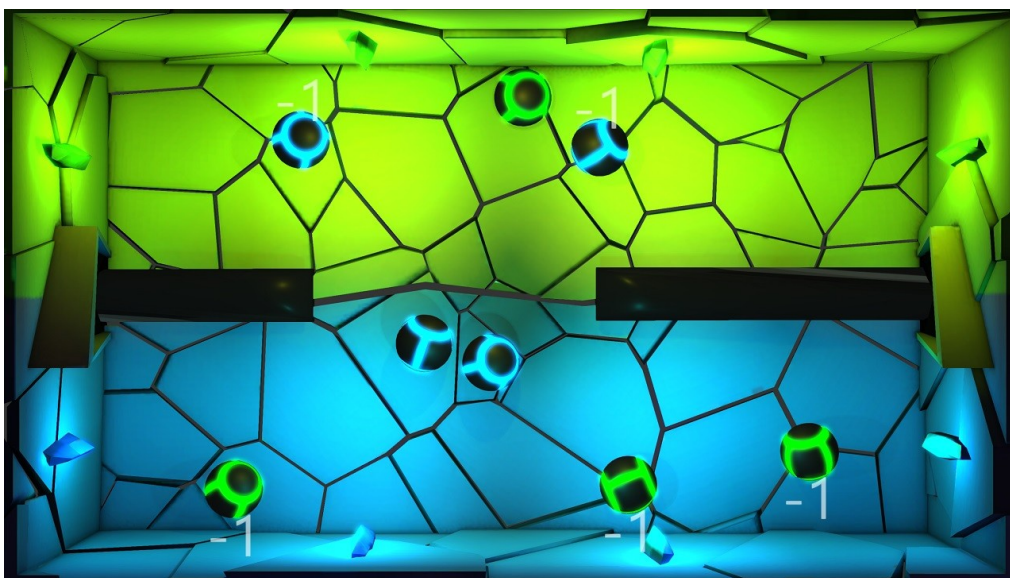


# DIVIDED ATTENTION SORTER

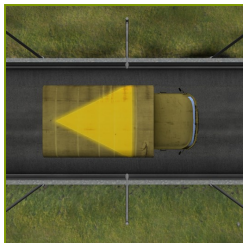
## SAMPLE SETTINGS



Difficulty <b>1/3</b>	
Duration 30s	Range 20% 80%
Number of objects 4	Gap size 150%
Speed of objects 100%	



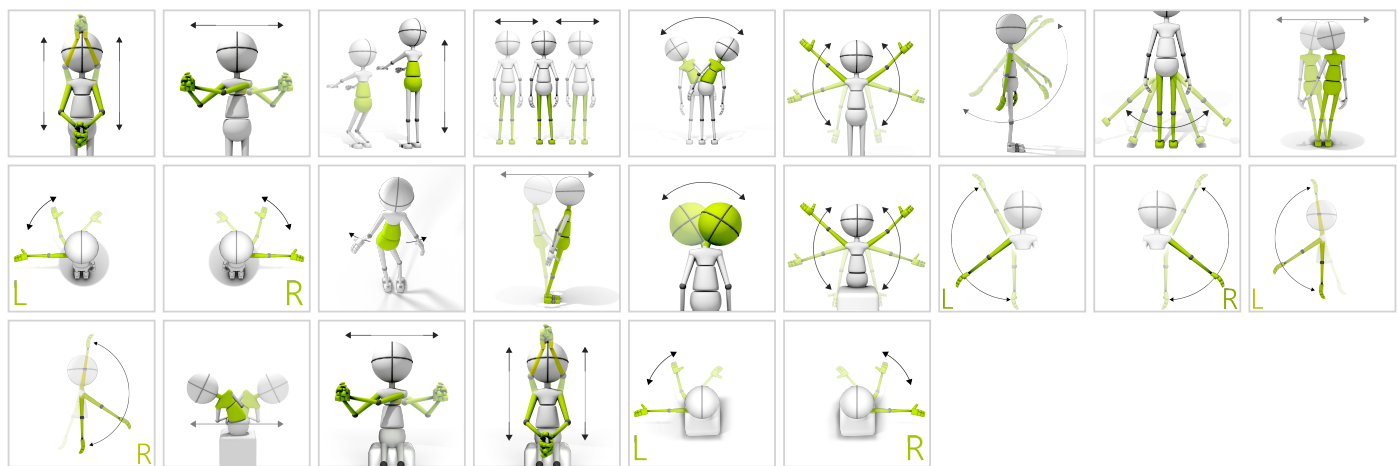
Difficulty <b>1/3</b>	
Duration 30s	Range 20% 80%
Number of objects 4	Gap size 150%
Speed of objects 100%	



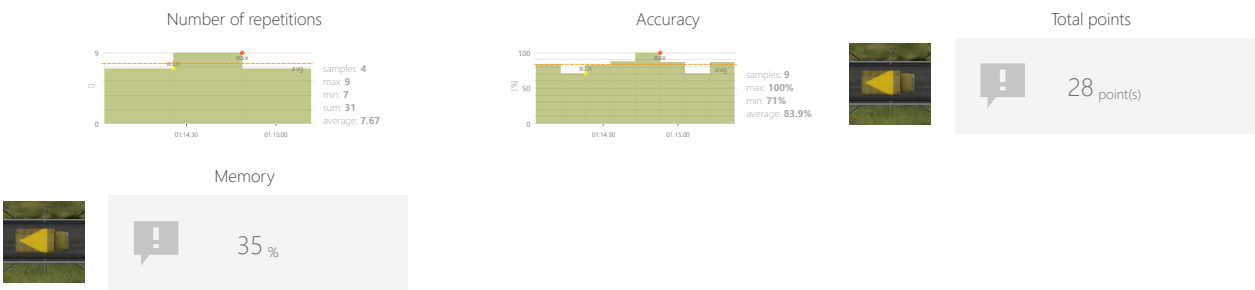
# MEMORY TRUCKS

Measure and train individual's skills to memorize information.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Variations

## OBJECTIVES

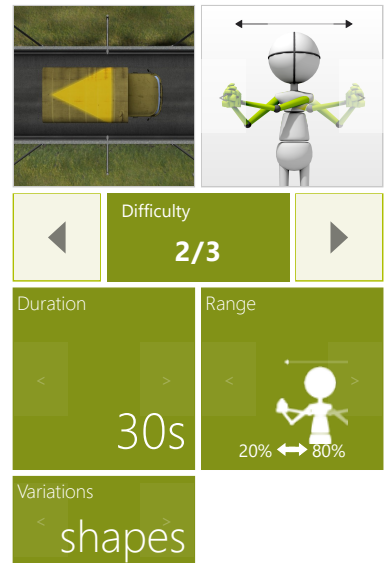
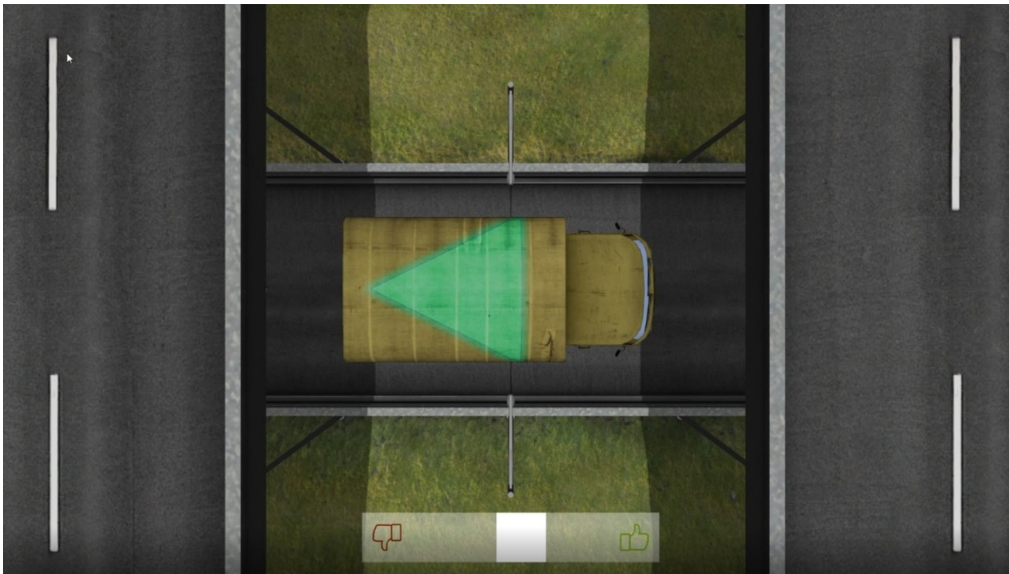
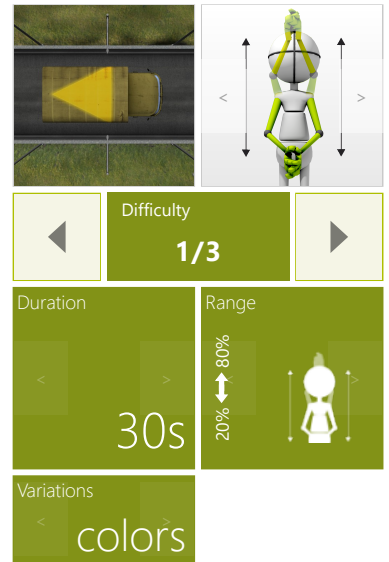
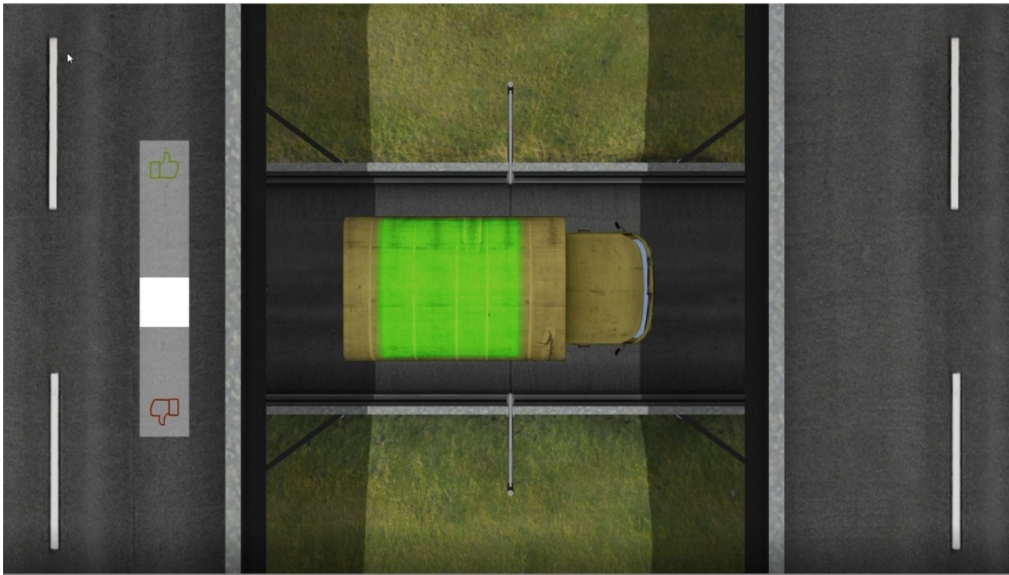
- Logical tasks
- Focusing
- Perceptivity

## 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



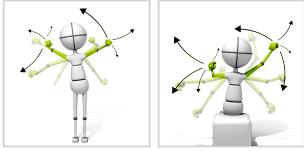


# MEMORY

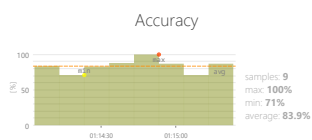
## POSE REPEATER

Measure and train individual's skills to memorize information.

## CONTROL MODES



## RESULTS



Total points

26 point(s)



Memory

29 %

## ADJUSTMENTS

- Task duration
- Time to remember poses
- Time to repeat pose
- Number of poses to remember

## OBJECTIVES

- Memory training
- 3D space movements reproduction
- Focusing
- Speed of decision making

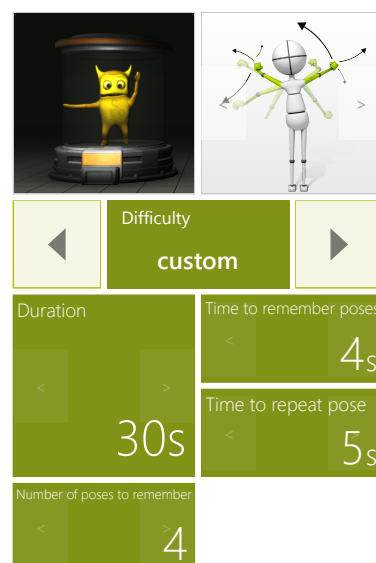
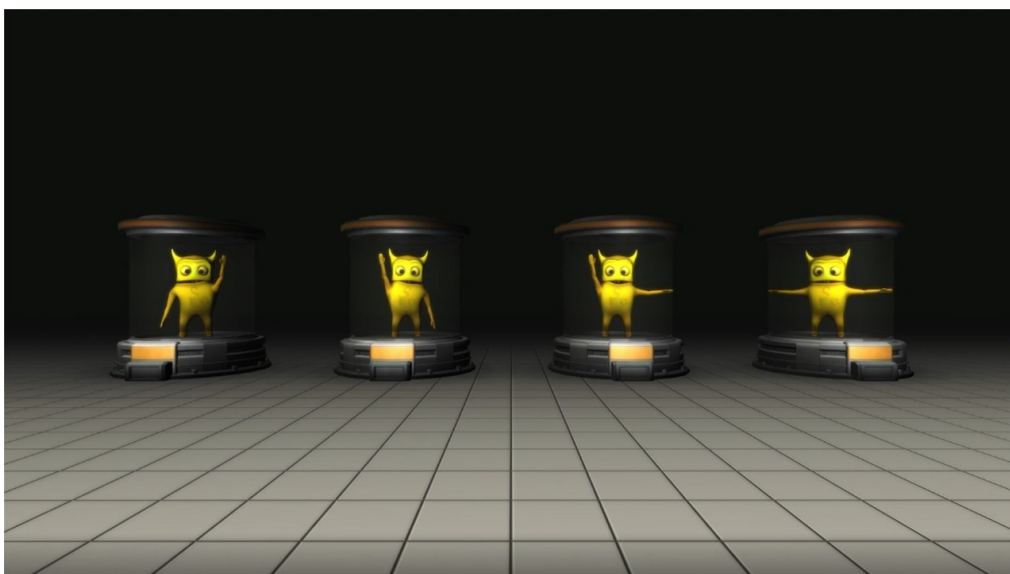
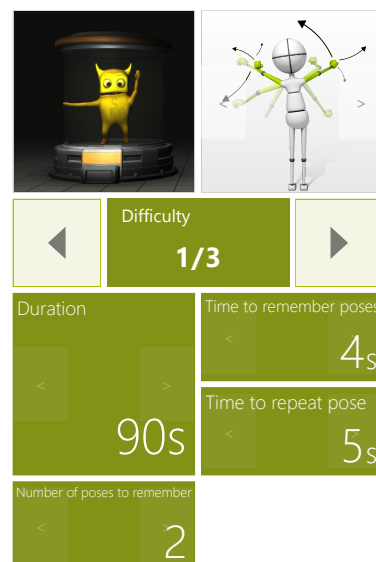
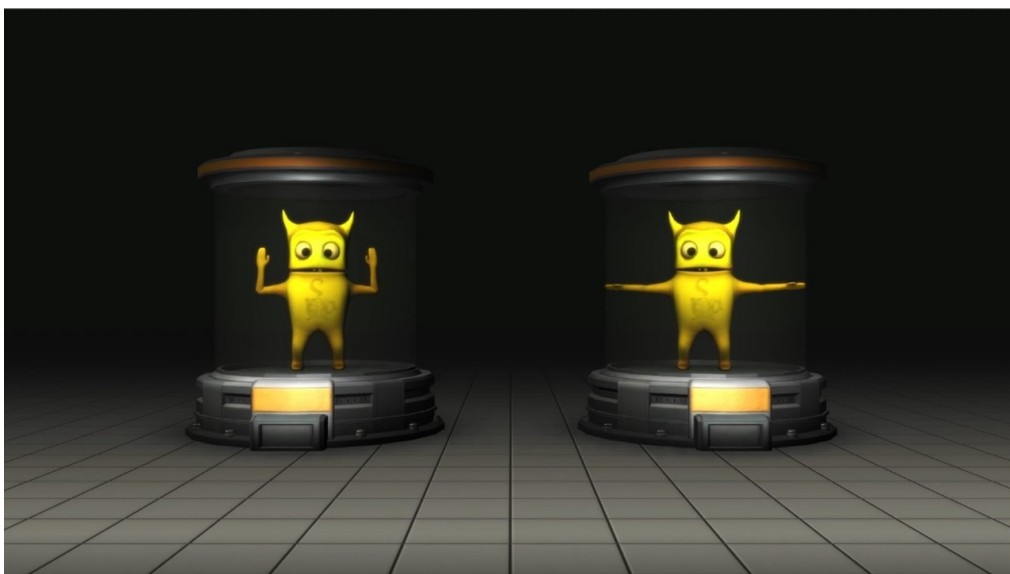
## INSTRUCTION FOR PATIENT

Remember poses presented by yellow creatures and then try to repeat selected pose based on what you managed to remember





## SAMPLE SETTINGS



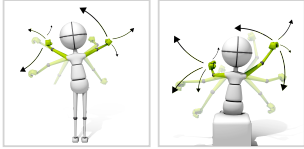


# PROBLEM SOLVING

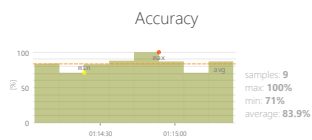
## MATH

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

10 point(s)



Problem solving

16 %

## ADJUSTMENTS

- Task duration
- Target number range
- Allow negative numbers

## OBJECTIVES

- Logical tasks
- Arms swings

## INSTRUCTION FOR PATIENT

Hit the punching bag to change its state (orange ring means it is active). Make the sum of the numbers above active punching bags to be equal to the number in top left corner





## SAMPLE SETTINGS



◀	Difficulty <b>1/5</b>	▶
Duration 30s		Target number range min 5 max 10
Allow negative numbers No		



◀	Difficulty <b>5/5</b>	▶
Duration 30s		Target number range min 10 max 20
Allow negative numbers Yes		

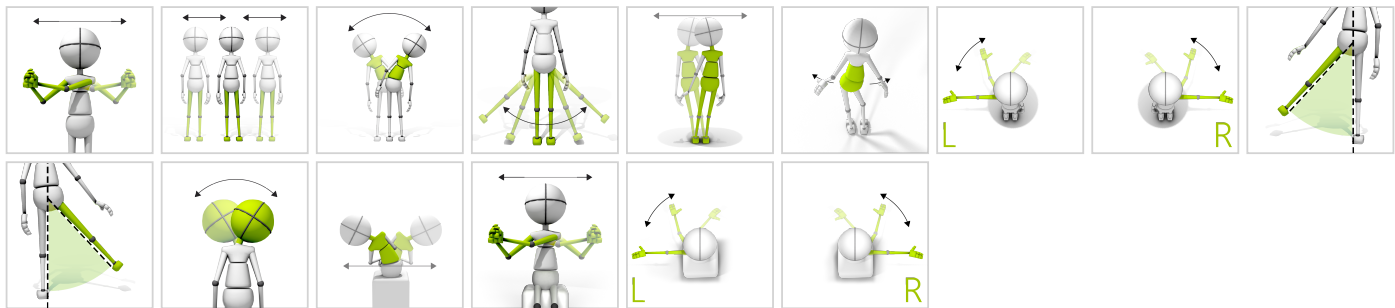


# PROBLEM SOLVING

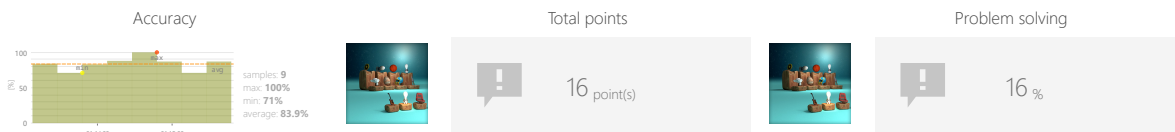
## CLONES

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



## ADJUSTMENTS

- Task duration
- Time to complete action
- Range
- Number of pairs

## OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

## INSTRUCTION FOR PATIENT

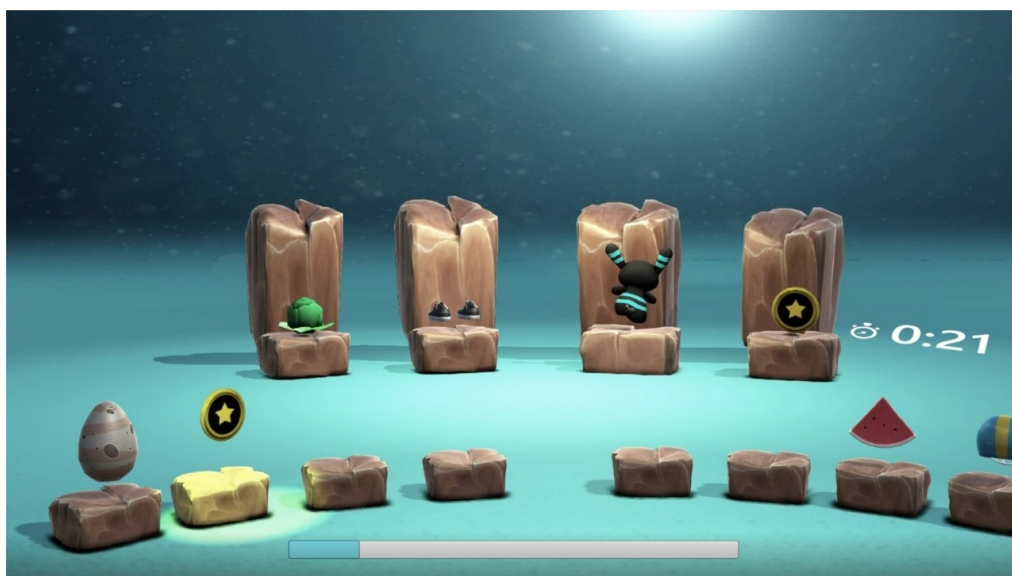
Select the item which has a pair on the screen





# PROBLEM SOLVING

CLONES

## SAMPLE SETTINGS





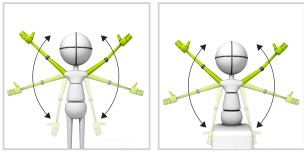
◀	Difficulty <b>1/3</b>	▶
Duration 90s		Minitask duration 30s
Range 20% ↔ 80%		Number of pairs 4



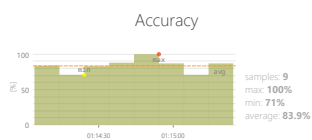
# PROBLEM SOLVING CLOCK

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



25 point(s)



Problem solving



27 %

## ADJUSTMENTS

- Task duration
- Time to complete action
- 

## OBJECTIVES

- Speed of decision making
- Visual motor coordination
- Logical tasks

## INSTRUCTION FOR PATIENT

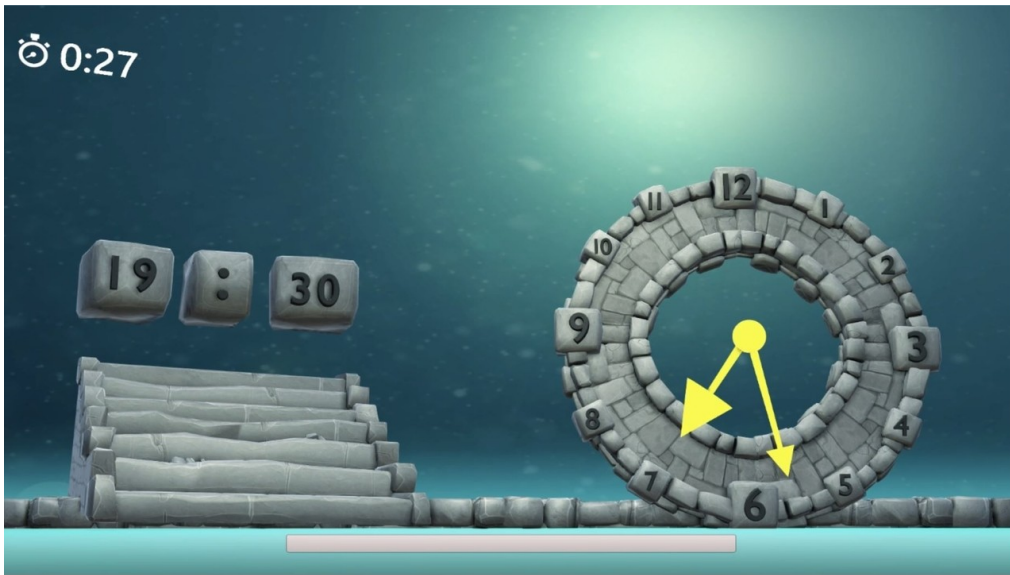
Control the arrows to set the time visible on the left clock



# PROBLEM SOLVING

CLOCK

## SAMPLE SETTINGS



Duration	Minitask duration
< 90s >	< 30s >
Angle 	Angle 
180°	180°



# PROBLEM SOLVING

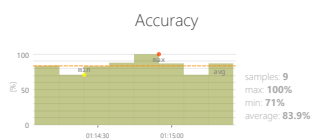
## MAZE

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



Total points



28 point(s)



Problem solving



11 %

## ADJUSTMENTS

- Task duration
- Range
- Show path
- Maze size
- Positioning

## OBJECTIVES

- Logical tasks
- Planned movements
- Planning and Strategy

## INSTRUCTION FOR PATIENT

Lead the hippo through the maze to the glowing target.

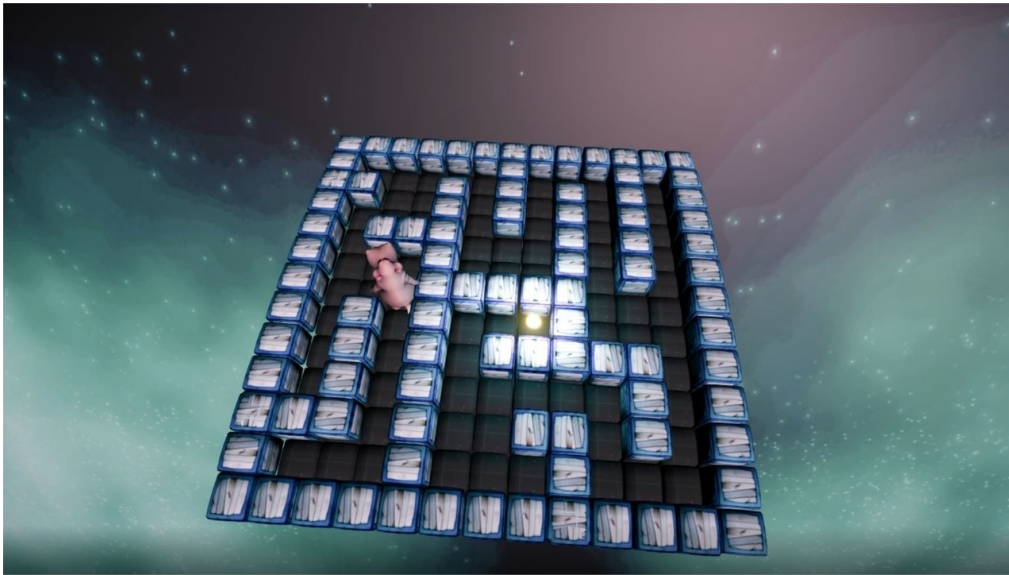






# PROBLEM SOLVING

## MAZE

### SAMPLE SETTINGS





◀

Difficulty

▶

2/4

◀

Duration

▶

90s

◀

Range

▶

80%  
20% ↔ 80%

◀

Show path

▶

No

◀

Maze size

▶

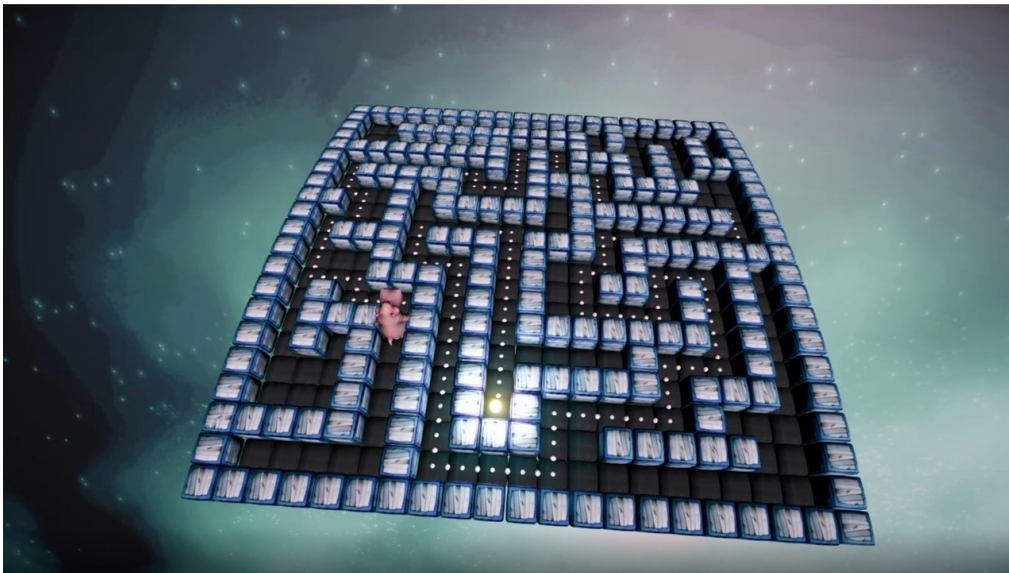
6

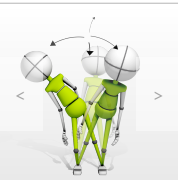
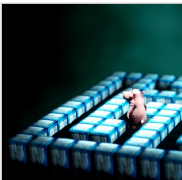
◀

Positioning

▶

Near





◀

Difficulty

▶

custom

◀

Duration

▶

90s

◀

Range

▶

80%  
20% ↔ 80%

◀

Show path

▶

Yes

◀

Maze size

▶

10

◀

Positioning

▶

Near



# 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



# SPECIALIZED ROMBERG TEST

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Time to complete action
- Show feedback
- Positioning

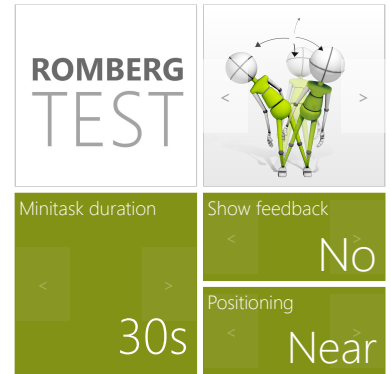
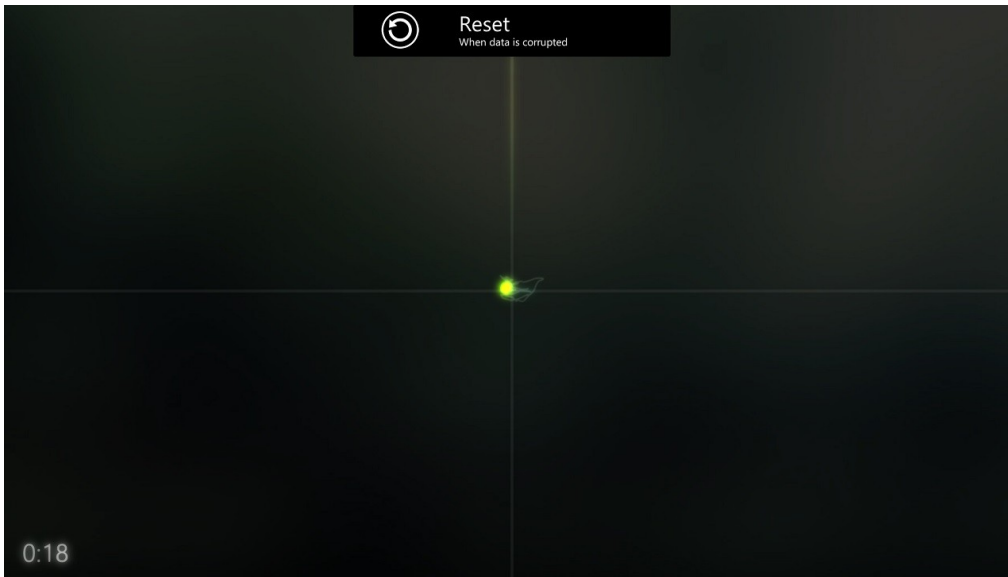
## OBJECTIVES

- Assesses static standing balance

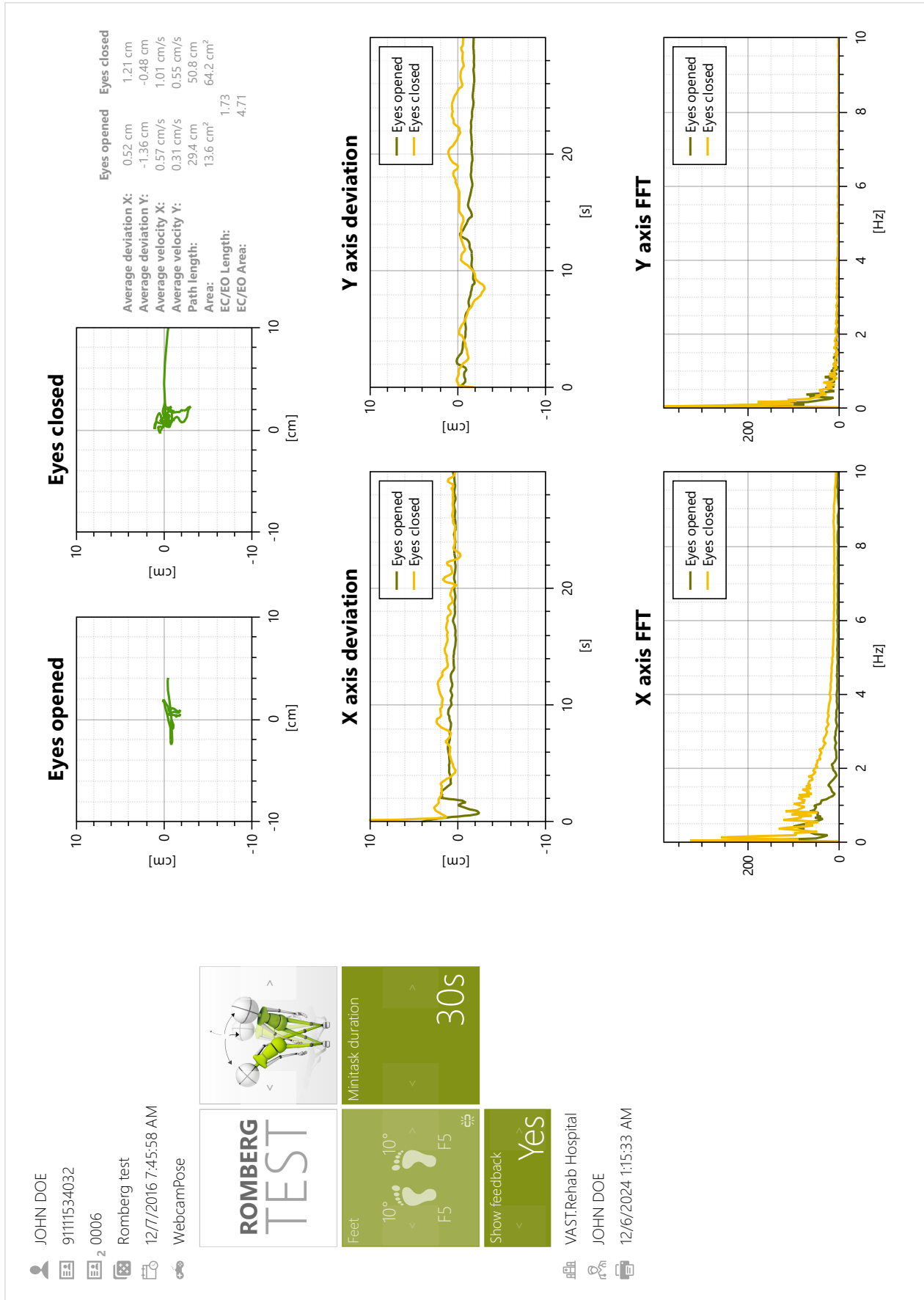
## INSTRUCTION FOR PATIENT

Romberg test. Try to stand as steadily as you can. First with eyes open, then with eyes closed

## SAMPLE SETTINGS



## SAMPLE REPORTS





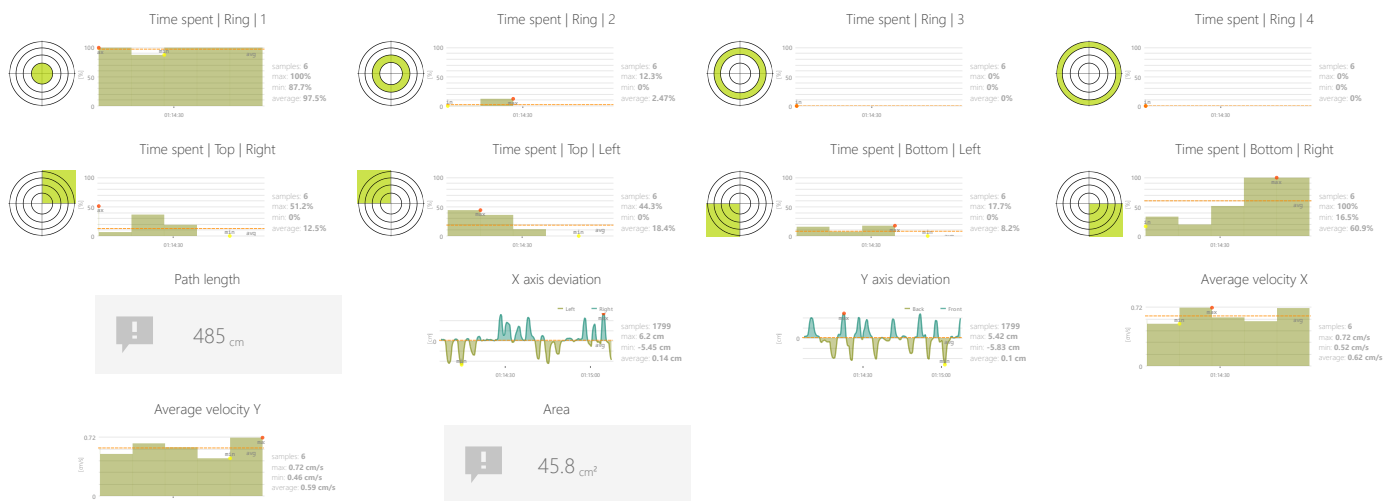
# SPECIALIZED STABILITY TEST

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Time to complete action
- Show feedback
- Radius
- Positioning

## OBJECTIVES

- Relaxation
- Postural stability

## INSTRUCTION FOR PATIENT

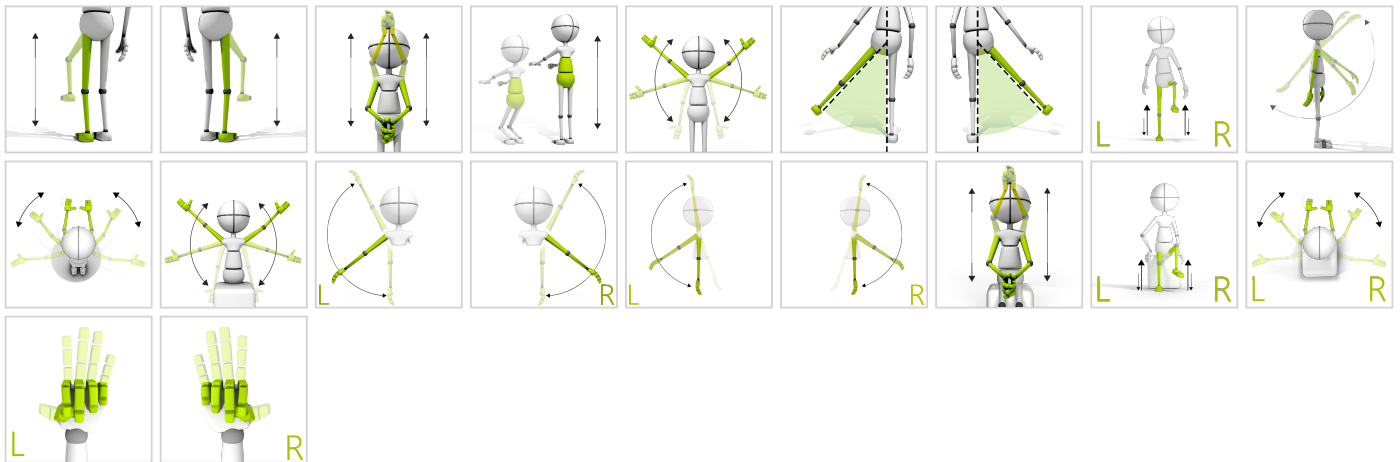
Keep your body balanced



# SPECIALIZED GONOGO TEST

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Range
- Required proper repetitions
- Hit if

## OBJECTIVES

- Spontaneous movements
- Speed of movement
- Response to negative visual stimuli
- Reaction to the positive visual stimuli

## INSTRUCTION FOR PATIENT

Hit the button when positive trigger appears



## FUKUDA TEST

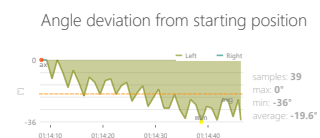
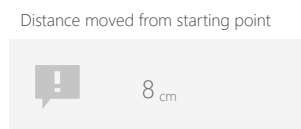
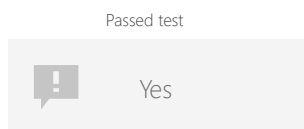
# SPECIALIZED

## FUKUDA TEST

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

## CONTROL MODES

## RESULTS



## OBJECTIVES

- Vestibular disorders diagnosis

## INSTRUCTION FOR PATIENT

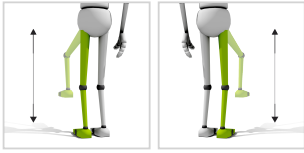
Take 50 steps in place with the eyes closed with arms outstretched at 90°



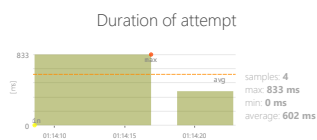
# SPECIALIZED SINGLE LEG STANCE TEST

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

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Time to complete action
- Range

## OBJECTIVES

- Test the limits of balance and equilibrium
- Knees lifting
- Postural stability

## INSTRUCTION FOR PATIENT

Try to keep your body balanced while performing single leg stance



# SPECIALIZED

## PRONUNCIATION ASSESSMENT

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

### CONTROL MODES



### OBJECTIVES

### INSTRUCTION FOR PATIENT

When the test is started there will be 5 words visible on the screen. Please read them loud and clear.