

# SOCK BASE PACK

2020.1

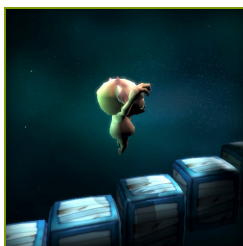
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# WHAT IS NEEDED?

## HARDWARE REQUIREMENTS

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

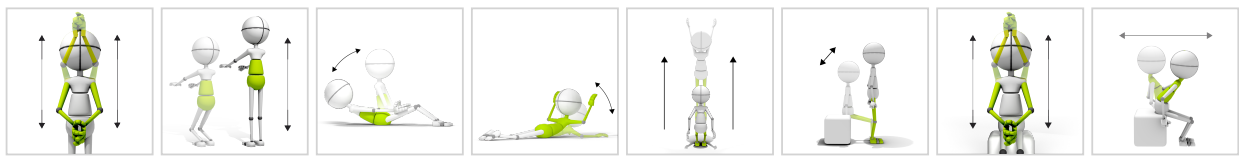


# SPEED

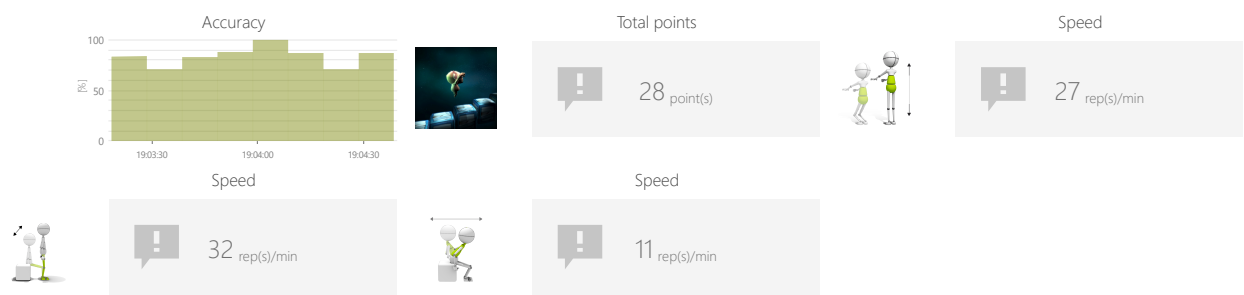
## STAIRS

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

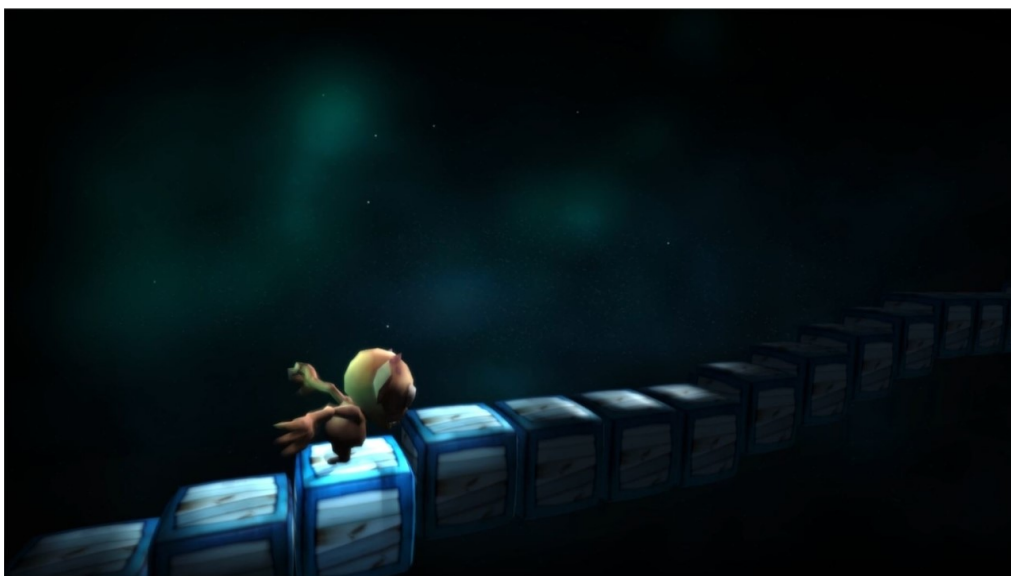
Climb the stairs before they disappear





# 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 ▶		

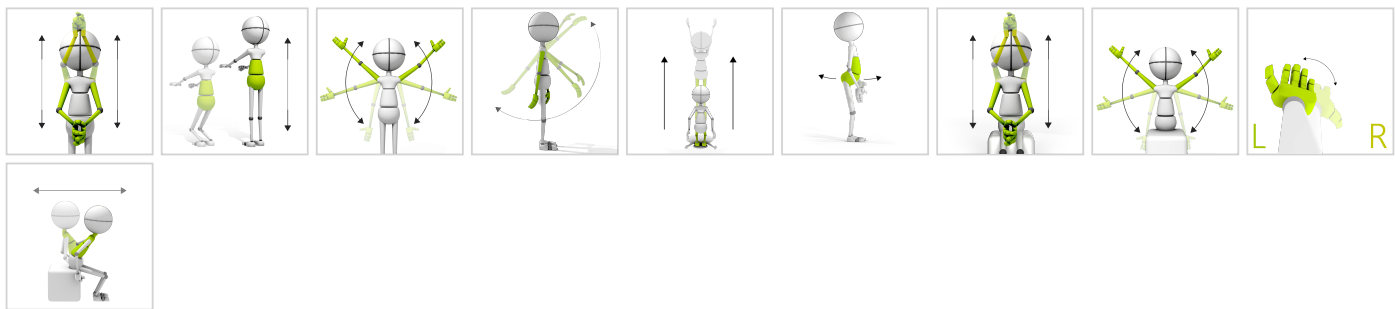


# SPEED

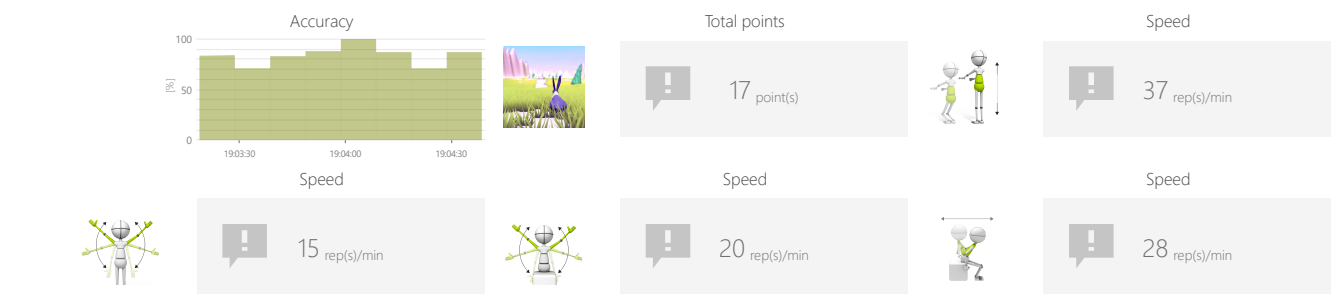
## RABBIT

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

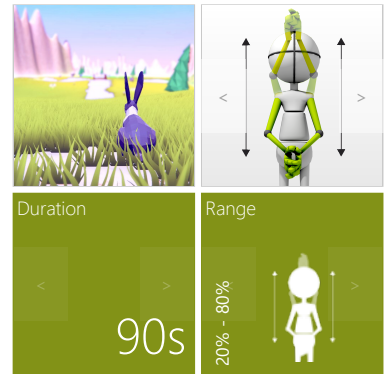
### INSTRUCTION FOR PATIENT

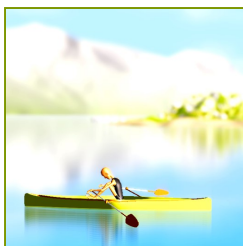
Go through the entire route as fast as you can



## SPEED RABBIT

### SAMPLE SETTINGS



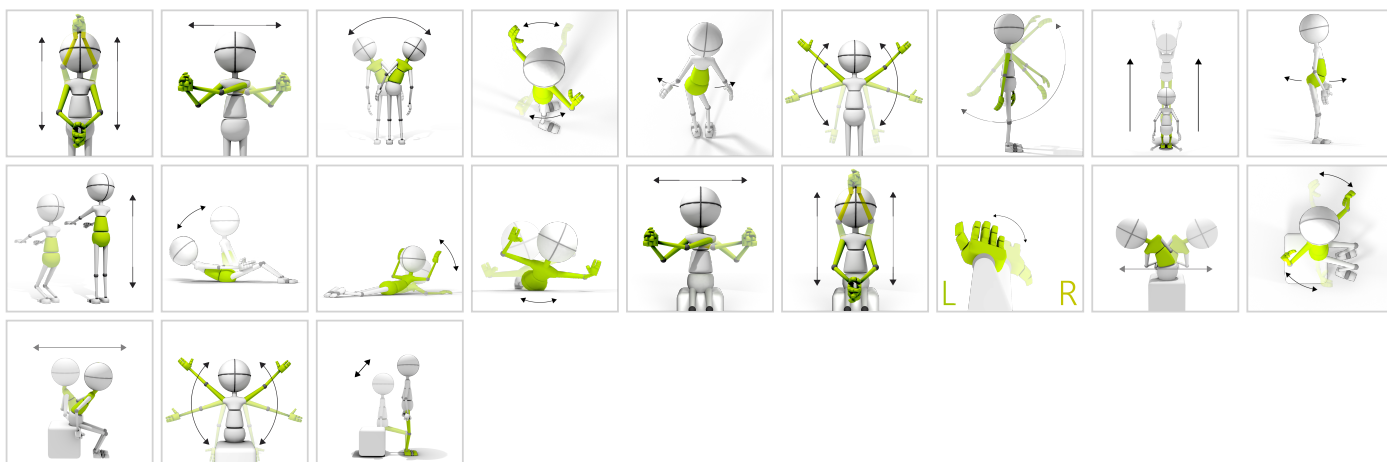


# SPEED

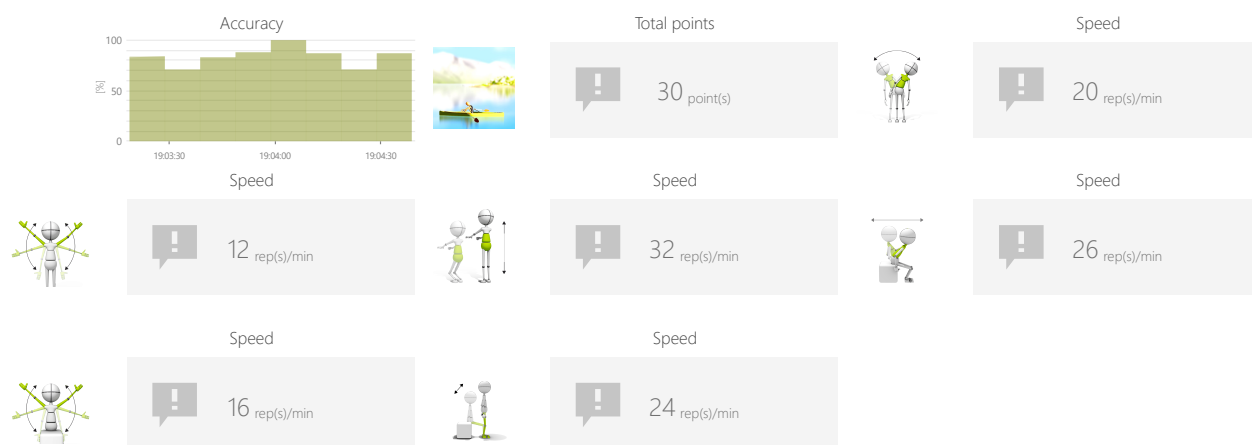
## KAYAK

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



## SAMPLE SETTINGS



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

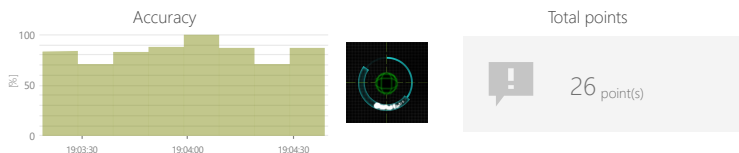


# BALANCE GRID

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

## CONTROL MODES

## RESULTS

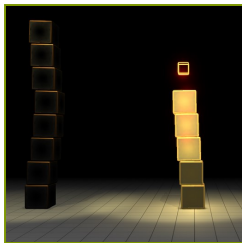


## OBJECTIVES

- 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



# BALANCE

## BLOCK BUILDER

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

### CONTROL MODES

### RESULTS



### OBJECTIVES

- Movement precision
- Muscle strengthening
- Balance and equilibrium training

### INSTRUCTION FOR PATIENT

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

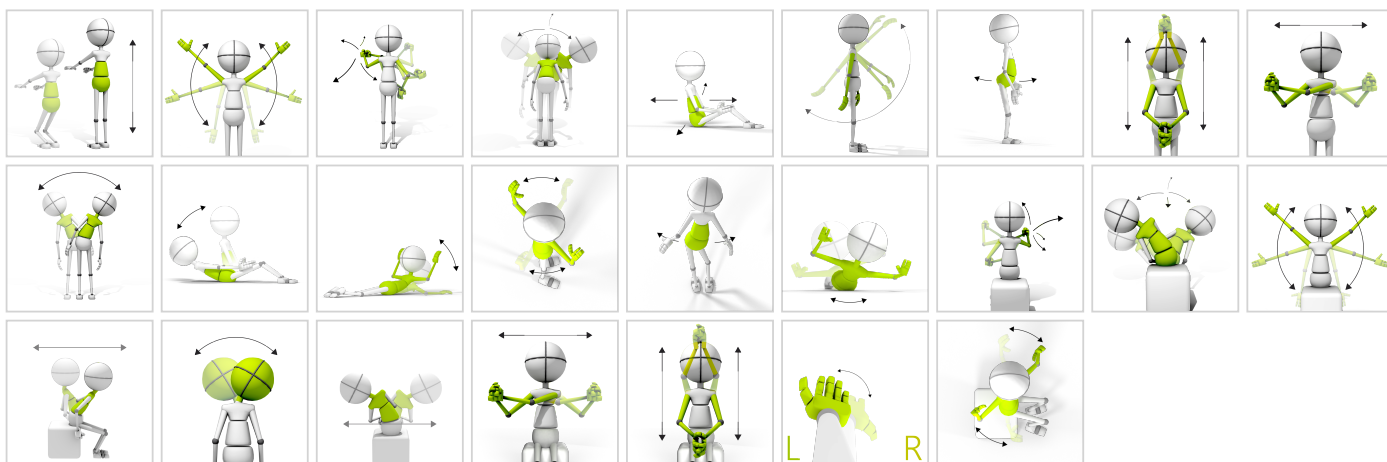


# MOVEMENT PRECISION

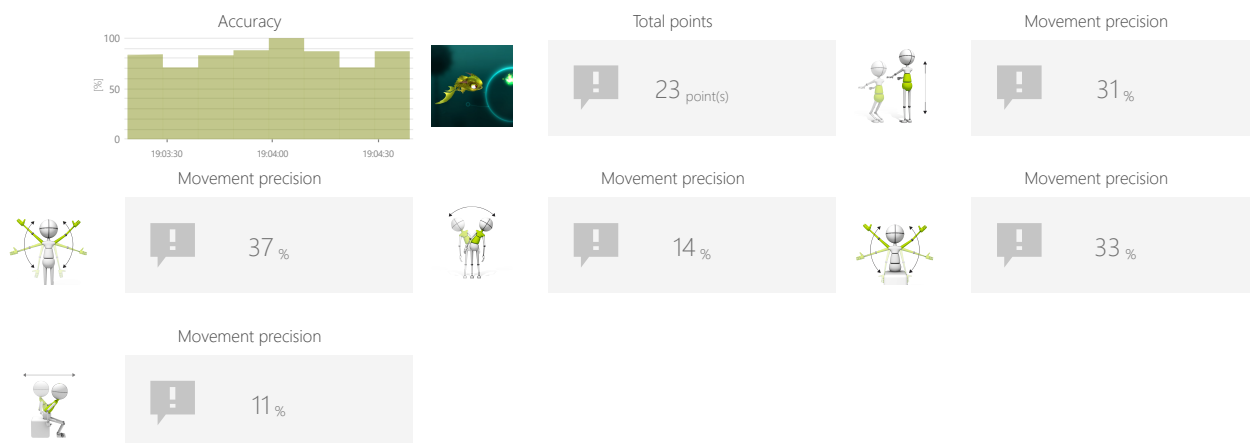
## FISH

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

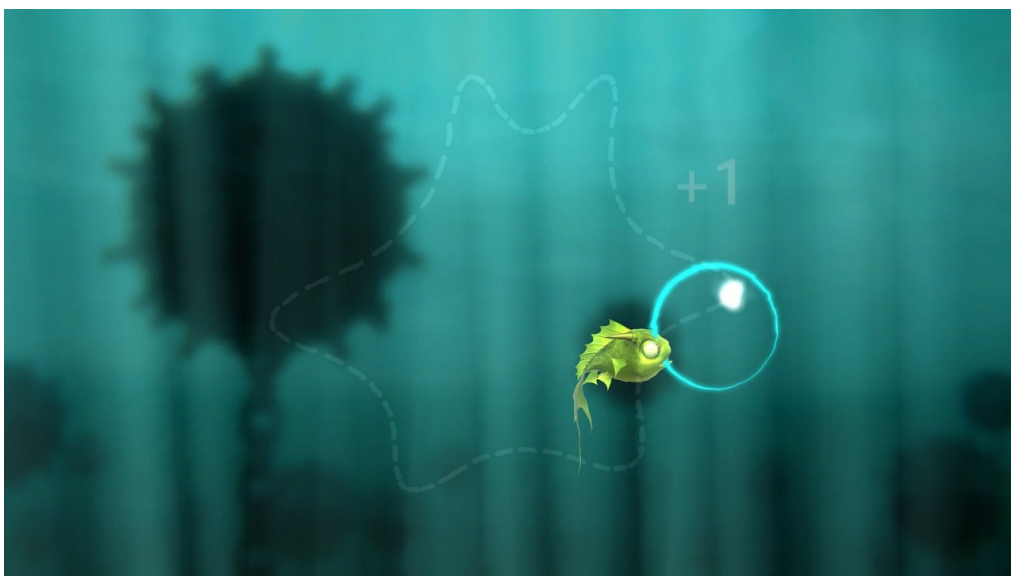




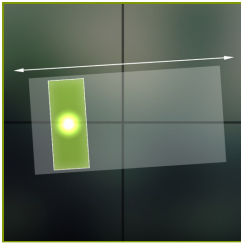
## SAMPLE SETTINGS



Difficulty <b>Custom</b>	
Duration 90s	Movement mode Left
Range 20% - 80% 20% - 80%	Route shape 
Speed of objects 100%	



Difficulty <b>1/3</b>	
Duration 90s	Movement mode Left
Range 20% - 80% 20% - 80%	Route shape 
Speed of objects 100%	

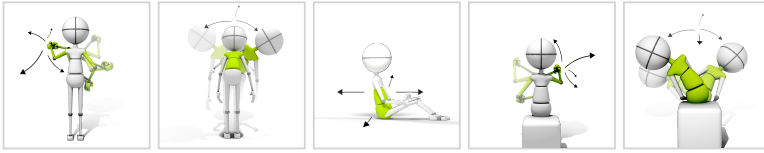


# MOVEMENT PRECISION

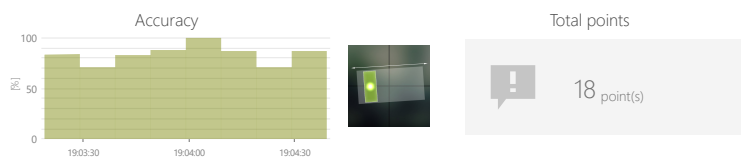
## PENDULUM

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


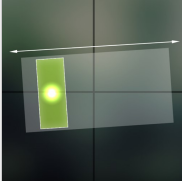



# MOVEMENT PRECISION

## PENDULUM


### SAMPLE SETTINGS








Difficulty  
**1/2**



Duration  
< 90s >

Range  
20% - 80%  
20% - 80%  


Show path  
< No >

Period  
< 5s >

Rotation  
< 0 >

Pendulum height  
< 50% >

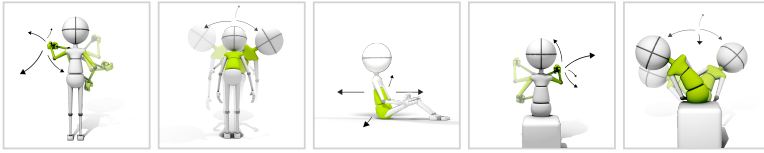
Pendulum width  
< 100% >



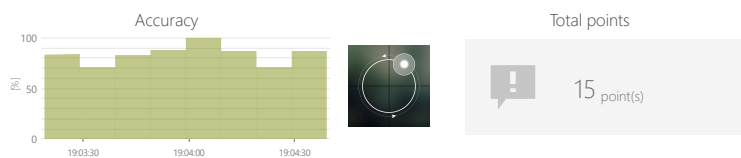
# MOVEMENT PRECISION TRACKING

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

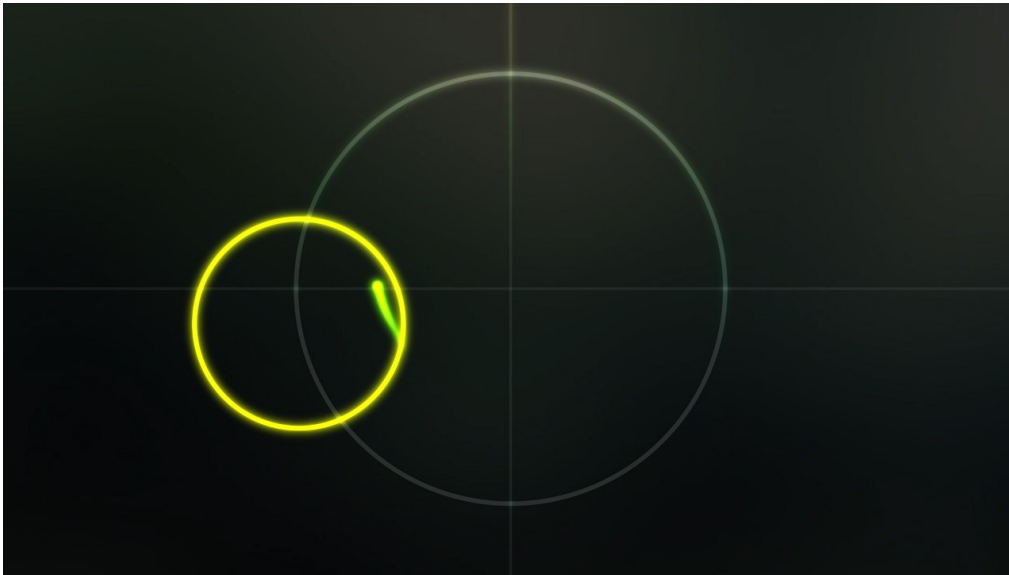
- 3D space movements reproduction
- Balance and equilibrium training
- Test the limits of balance and equilibrium

## INSTRUCTION FOR PATIENT

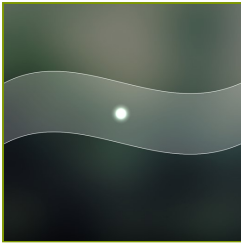
Try to synchronize yourself with the circle movements. Do your best to stay within the circle



## SAMPLE SETTINGS



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

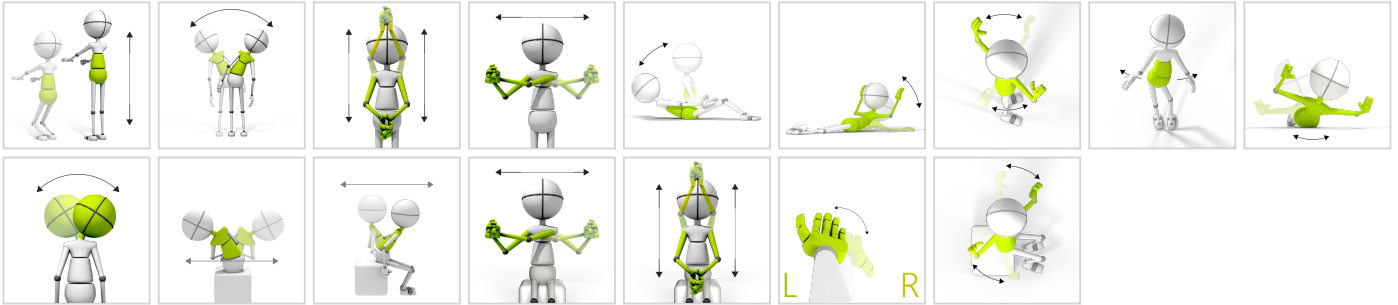


# MOVEMENT PRECISION

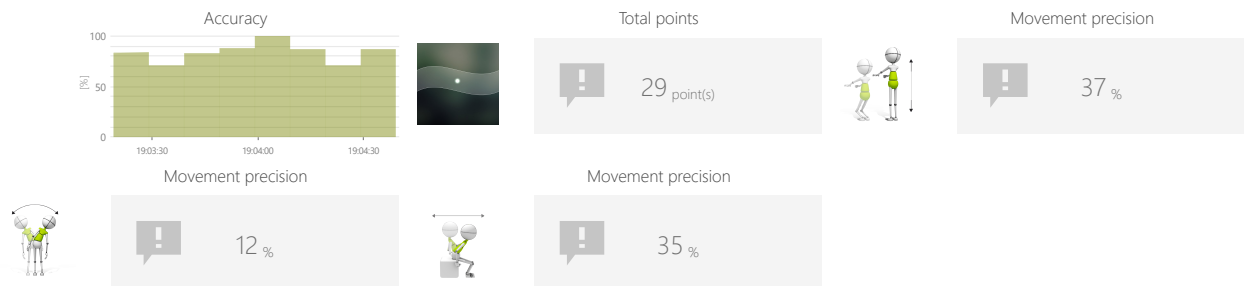
## GRAPH

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

## OBJECTIVES

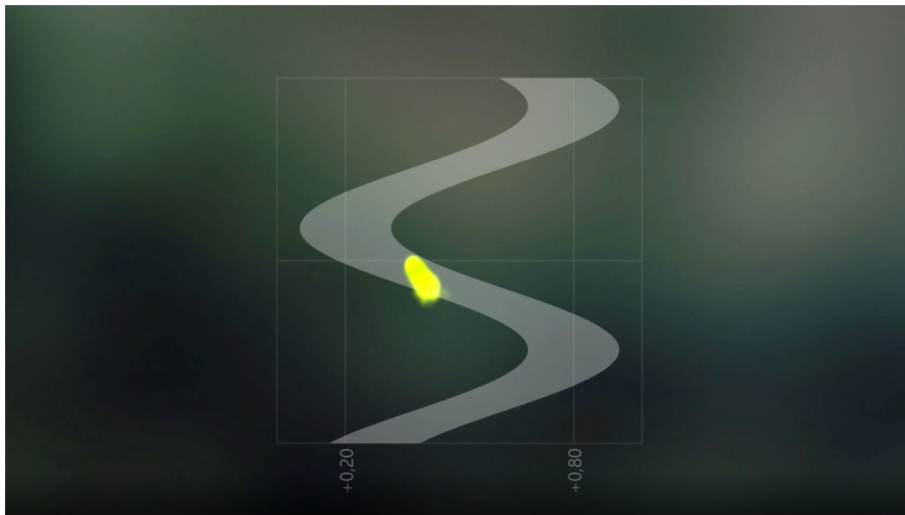
- Movement precision
- Activity in a given rhythm
- Repetitive movements
- Hands raising

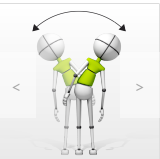
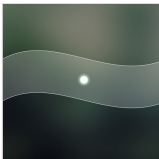
## INSTRUCTION FOR PATIENT

Try to stay within the borders



## SAMPLE SETTINGS







◀

Difficulty

▶

3/3

Graph configuration



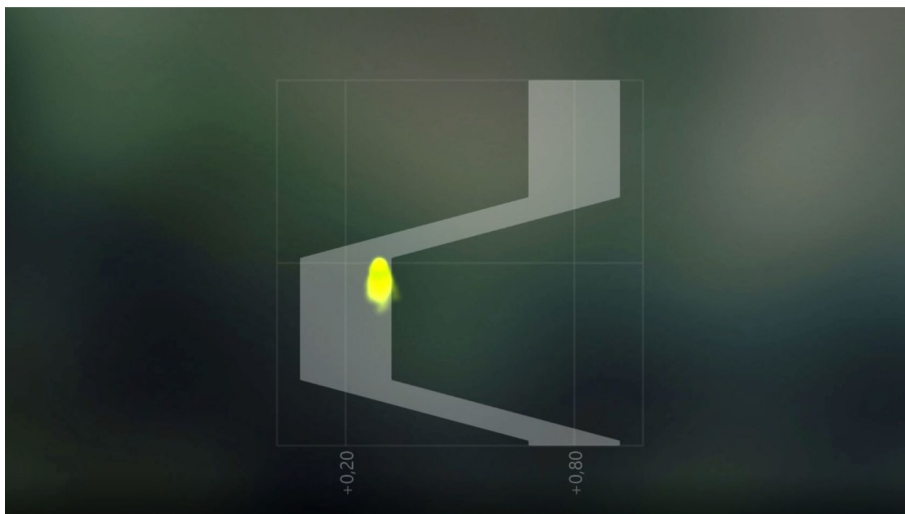
⌚ : 4.0s   ± : 20%


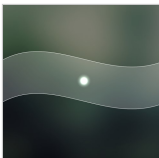
Duration

Range

< 30s >

< 20% - 80% >







◀

Difficulty

▶

1/3

Graph configuration



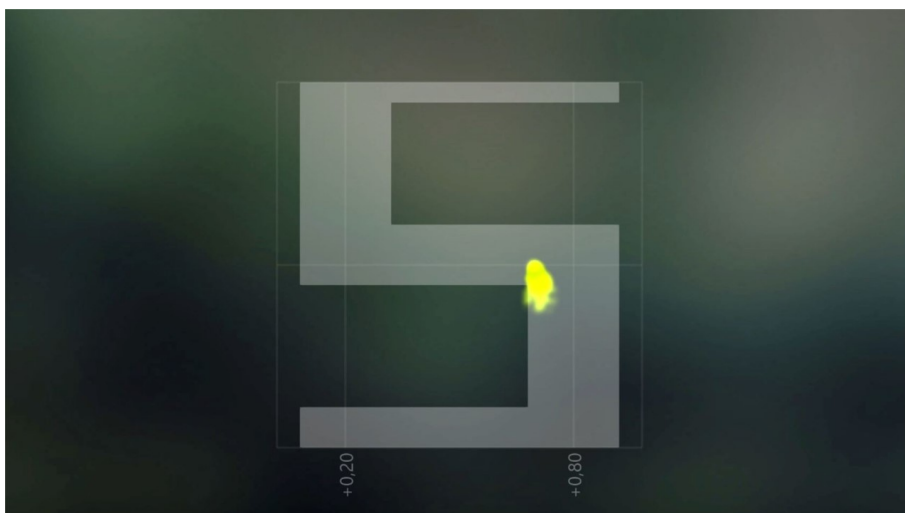
⌚ : 4.0s   ± : 40%


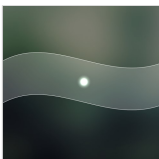
Duration

Range

< 90s >

< 5% - 50% >







◀

Difficulty

▶

Custom

Graph configuration



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

Duration

Range

< 30s >

< 20% - 80% >

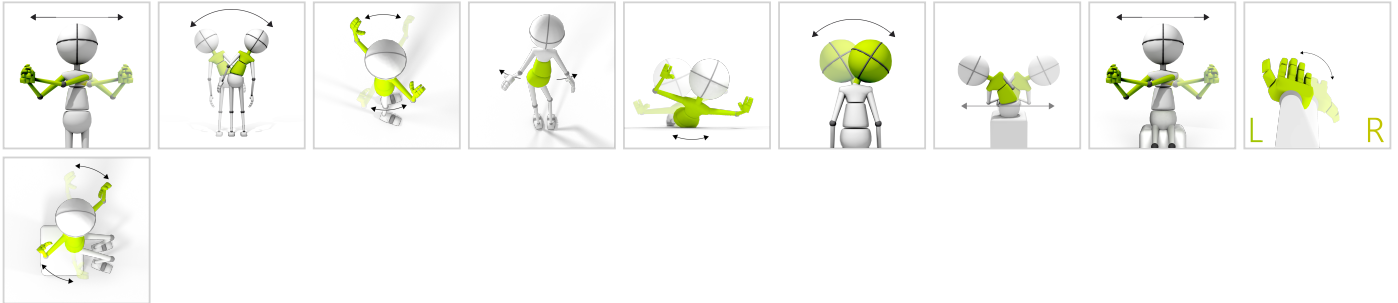


# MOVEMENT PRECISION

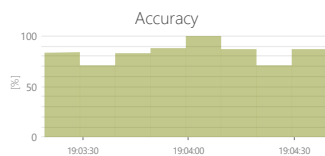
## UMBRELLA

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

### CONTROL MODES



### RESULTS



Total points

10 point(s)

Movement precision

34 %

### 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 <b>60s</b>	Path ⌚: 8.0s
Range  20% - 80%	Umbrella size ◀ <b>150%</b> ▶



# 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
- Range
- 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!







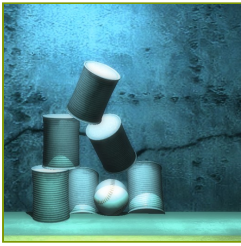
## SAMPLE SETTINGS



	
Difficulty <b>1/3</b>	
Active positions 	Duration 90s
Range 20% - 80% 	Time between objects 2s
	Time to react 2s



	
Difficulty <b>1/3</b>	
Active positions 	Duration 90s
Range 20% - 80% 	Time between objects 2s
	Time to react 2s

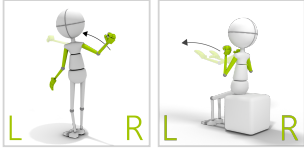


# FUNCTIONAL MOVEMENTS

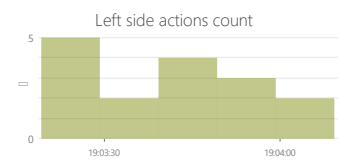
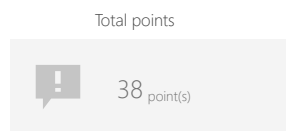
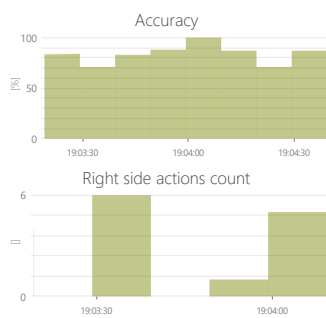
## CANS

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
- Weight of targets

## 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



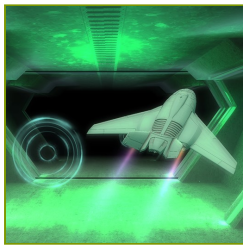
## SAMPLE SETTINGS





	Difficulty <b>1/4</b>	
Duration <b>90s</b>		Speed of objects < <b>75%</b>
		Weight of targets < <b>100%</b>



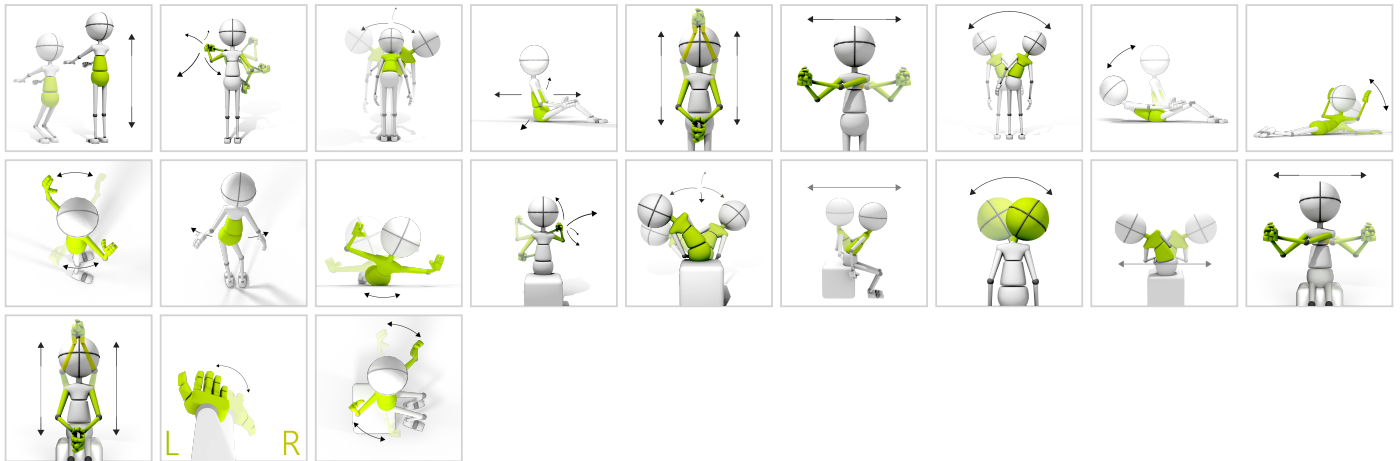


# FUNCTIONAL MOVEMENTS

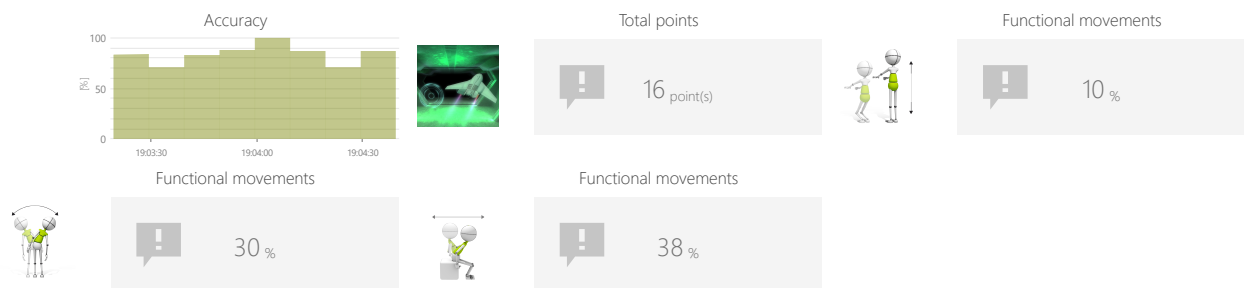
## AIRPLANE

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

- Task duration
- Range
- Player speed

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

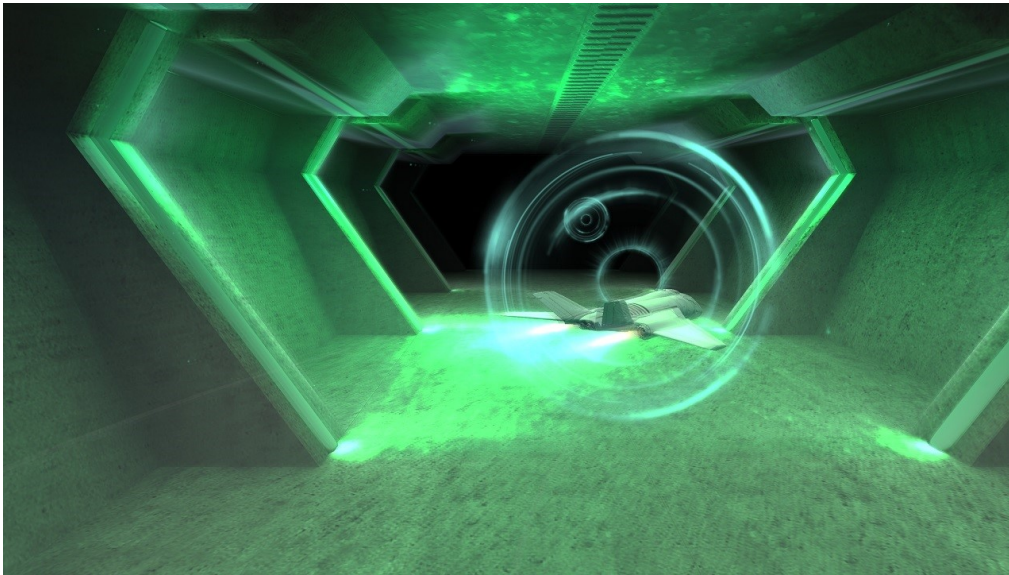
Make the airplane fly through the circles. The closer to the center it flies the more points you get

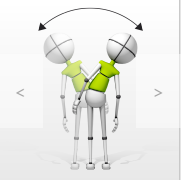
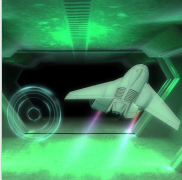


# FUNCTIONAL MOVEMENTS

AIRPLANE

## SAMPLE SETTINGS





◀

Difficulty

2/4

▶

Duration

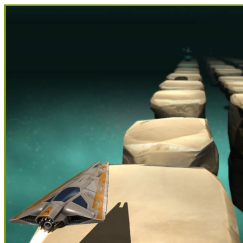
< 90s >

Range

< 20% - 80% >

Player speed

< 100% >

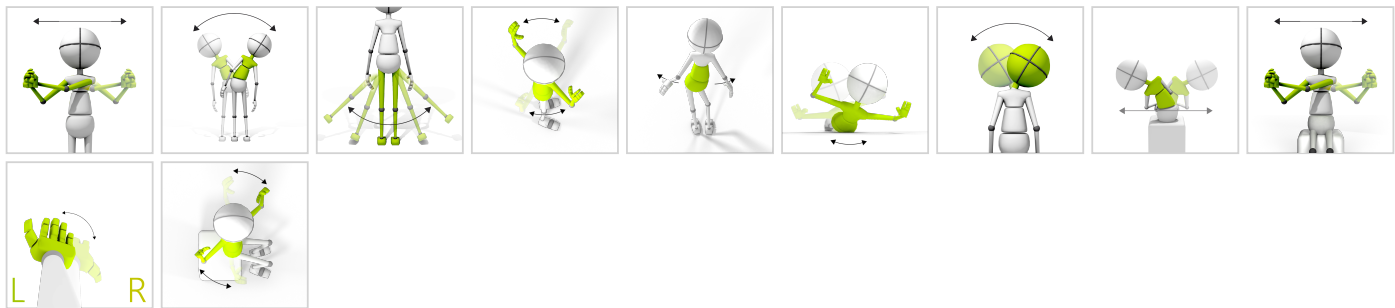


# FUNCTIONAL MOVEMENTS

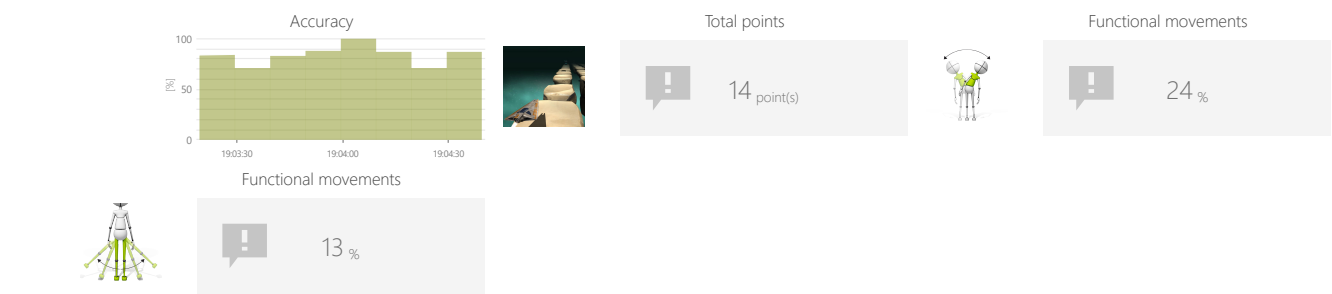
## STONES

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

- Task duration
- Range
- Player speed

### 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





# FUNCTIONAL MOVEMENTS

STONES

## SAMPLE SETTINGS



	Difficulty <b>1/3</b>	
Duration <b>90s</b>		Range  20% - 80%
Player speed <b>100%</b>		



# FUNCTIONAL MOVEMENTS

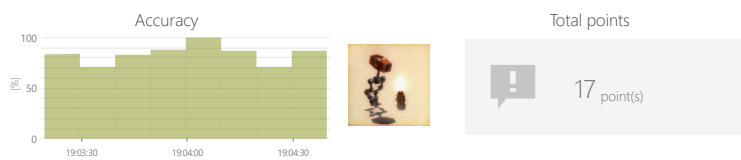
## HAMMER

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

## 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

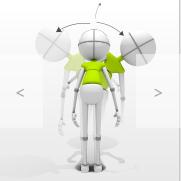




# FUNCTIONAL MOVEMENTS

## HAMMER


### SAMPLE SETTINGS








Difficulty  
**1/3**



Active positions




Duration

< >

90s

Range

30% - 70%



30% - 70%

Time to react

< >

10s

Reticle size

< >

125%



# FUNCTIONAL MOVEMENTS

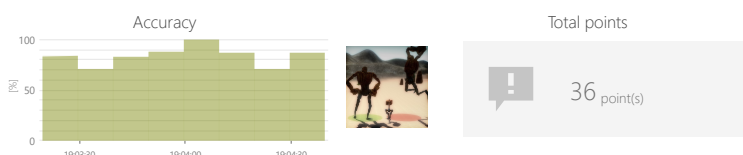
## RUNAWAY

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

## 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

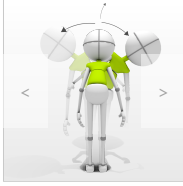



# FUNCTIONAL MOVEMENTS

RUNAWAY

## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶

90s

◀

Range

▶

30% - 70%

30% - 70%

◀

Number of enemies

▶

2



◀

Enemies speed

▶

100%





◀

Difficulty

▶

Custom

◀

Duration

▶

90s

◀

Range

▶

30% - 70%

30% - 70%

◀

Number of enemies

▶

4

◀

Enemies speed

▶

100%



# FUNCTIONAL MOVEMENTS

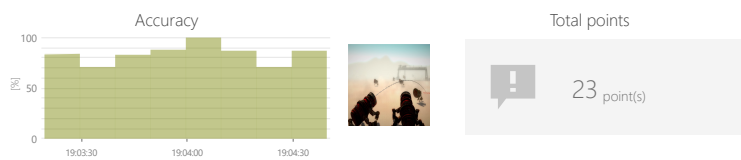
## CANNON

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

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

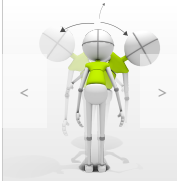

Use the cannon(s) to shoot into the robots coming in your direction





## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶

90s

◀

Range

▶

30% - 70%

30% - 70%

◀

Time between cannonballs

▶

2s

◀

Time between enemies

▶

4s

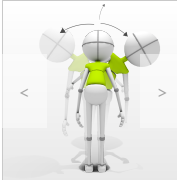

◀

Enemies speed

▶

50%





◀

Difficulty

▶

Custom

◀

Duration

▶

90s

◀

Range

▶

30% - 70%

30% - 70%

◀

Time between cannonballs

▶

2s

◀

Time between enemies

▶

4s

◀

Enemies speed

▶

100%

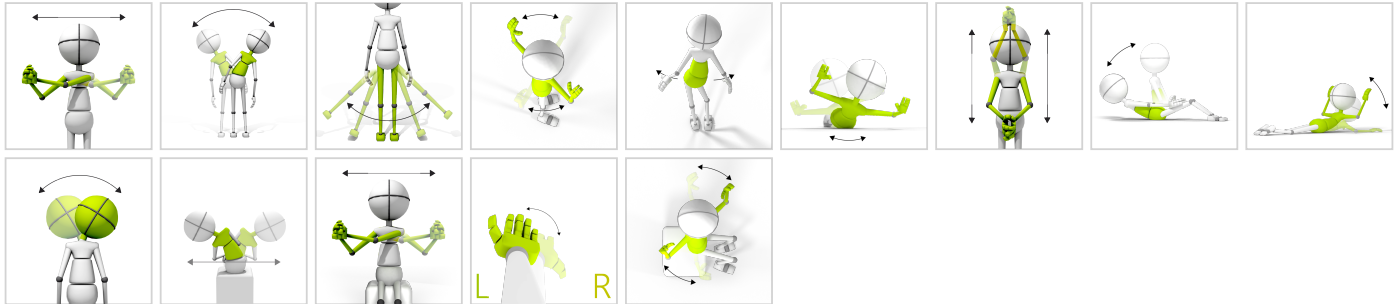


# FUNCTIONAL MOVEMENTS

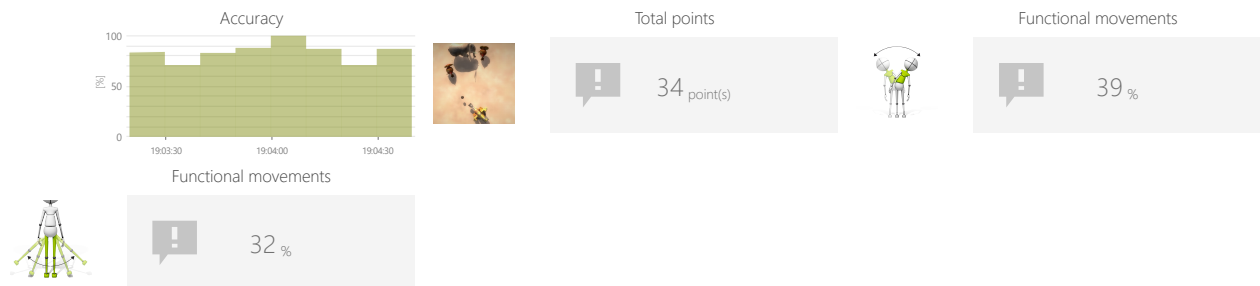
## AUTOMATIC CANNON

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 <b>1/3</b>
Duration 90s	Range 20% - 80%
Enable distractors Yes	Time between cannonballs 1s
Time between enemies 3s	Enemies speed 50%



◀	Difficulty <b>Custom</b>
Duration 90s	Range 20% - 80%
Enable distractors Yes	Time between cannonballs 1s
Time between enemies 3s	Enemies speed 100%

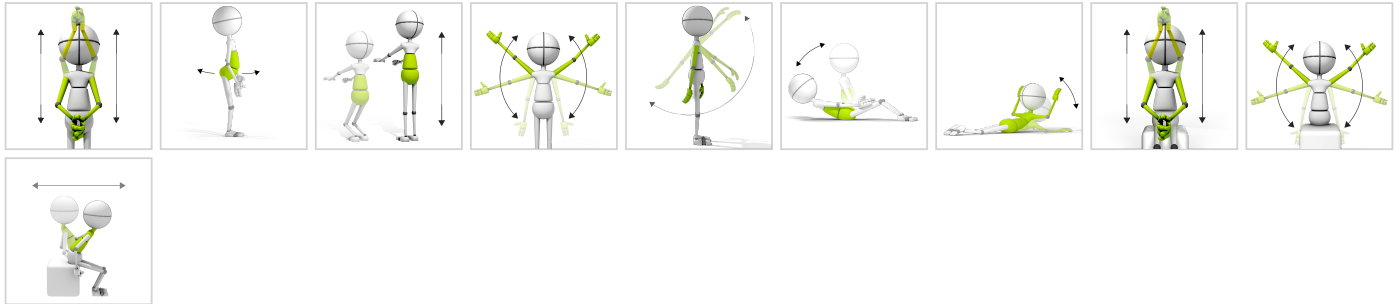


# FUNCTIONAL MOVEMENTS

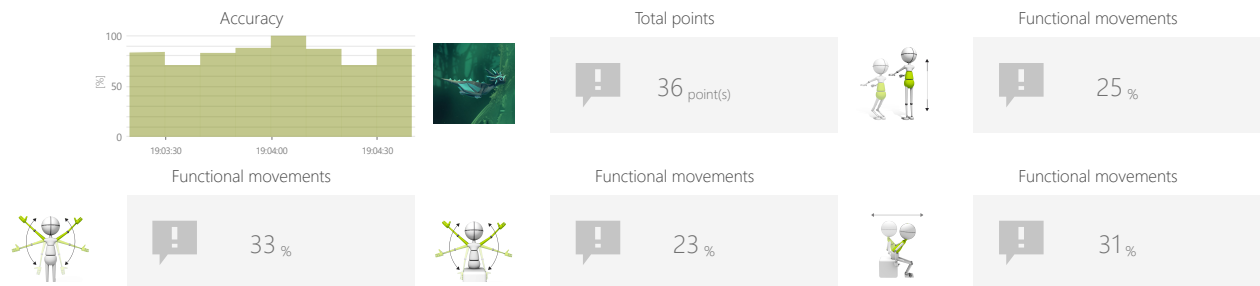
## DRAGON

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%		

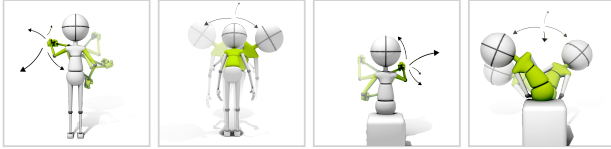


# FUNCTIONAL MOVEMENTS

## 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
- Range
- Required force

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

Smash boxes with the club

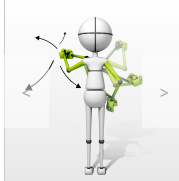





# FUNCTIONAL MOVEMENTS

## BOX CRUSHER

### SAMPLE SETTINGS





◀	Difficulty <b>1/3</b>	▶
Active positions 		Duration < 90s >
Range 20% - 80%  20% - 80%		Required force < 50% >



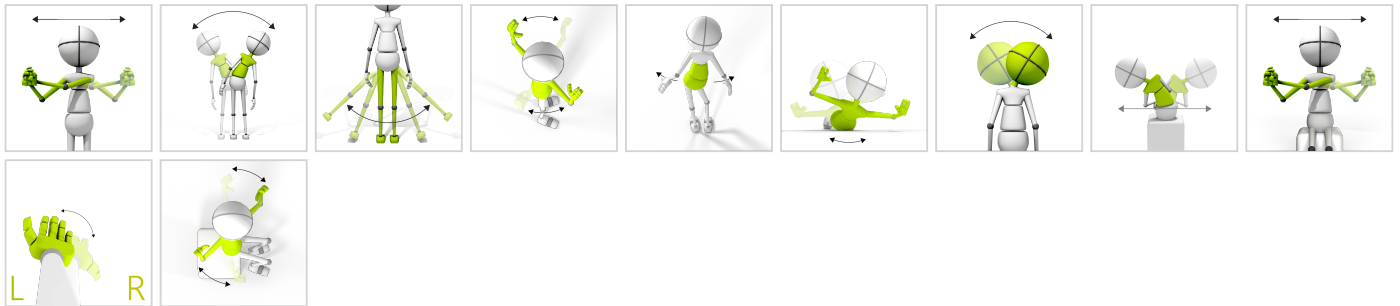


# FUNCTIONAL MOVEMENTS

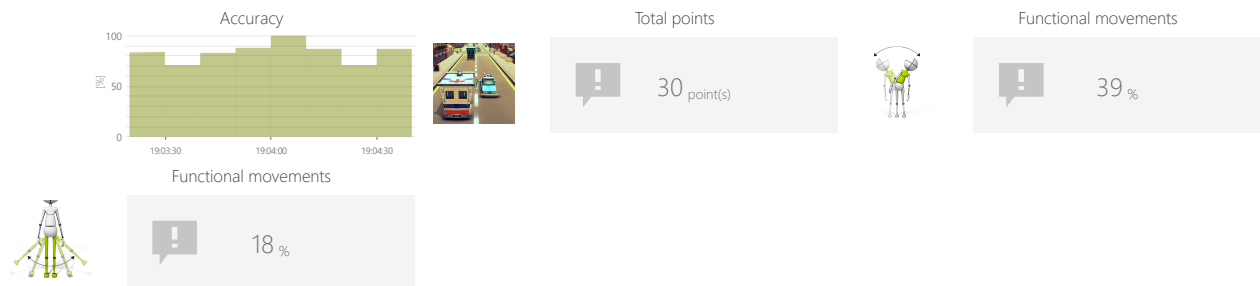
## AMBULANCE

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

- Task duration
- Range
- Distance between cars
- Player speed

## 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

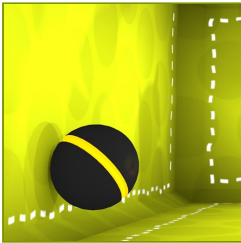


Difficulty	2/3
Duration	30s
Range	20% - 80%
Distance between cars	50%
Player speed	50%



Difficulty	Custom
Duration	30s
Range	20% - 80%
Distance between cars	200%
Player speed	50%



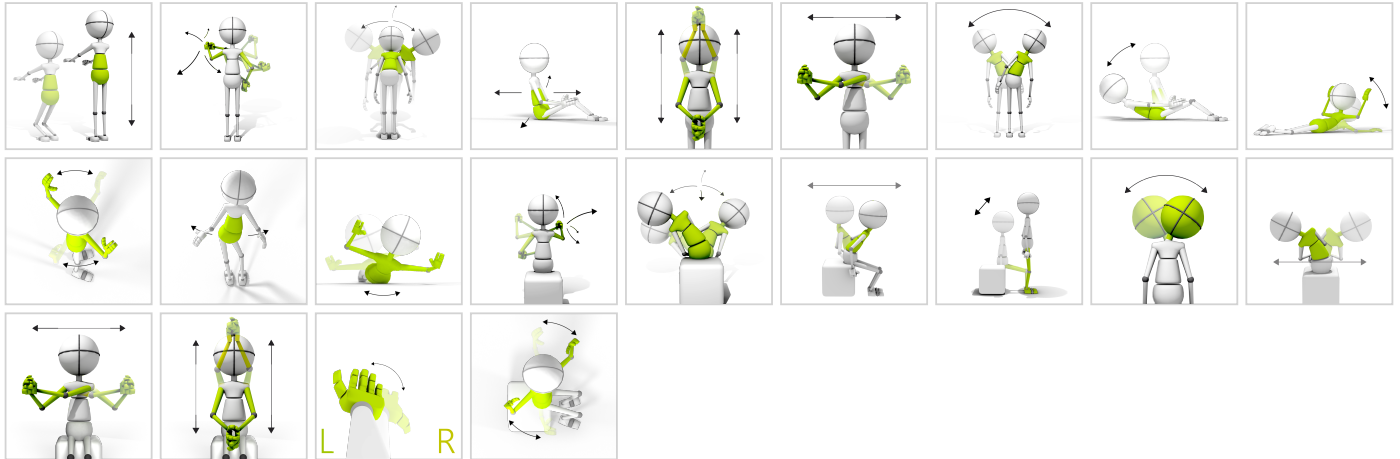


# FUNCTIONAL MOVEMENTS

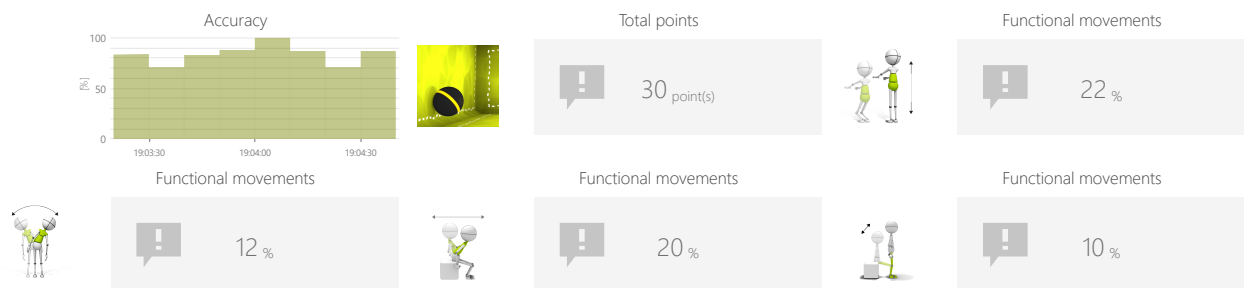
## ARCANOID

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

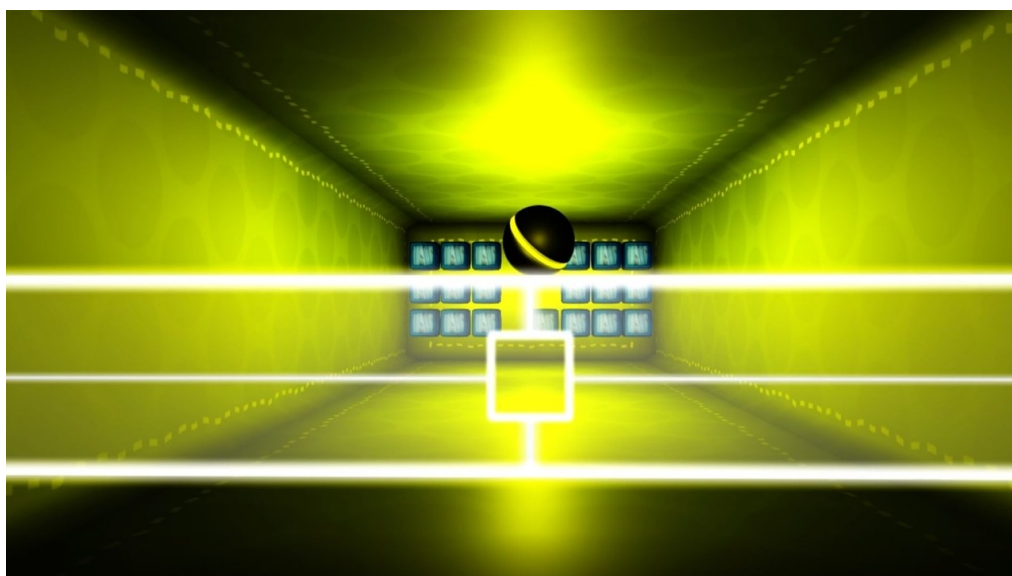
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

## INSTRUCTION FOR PATIENT

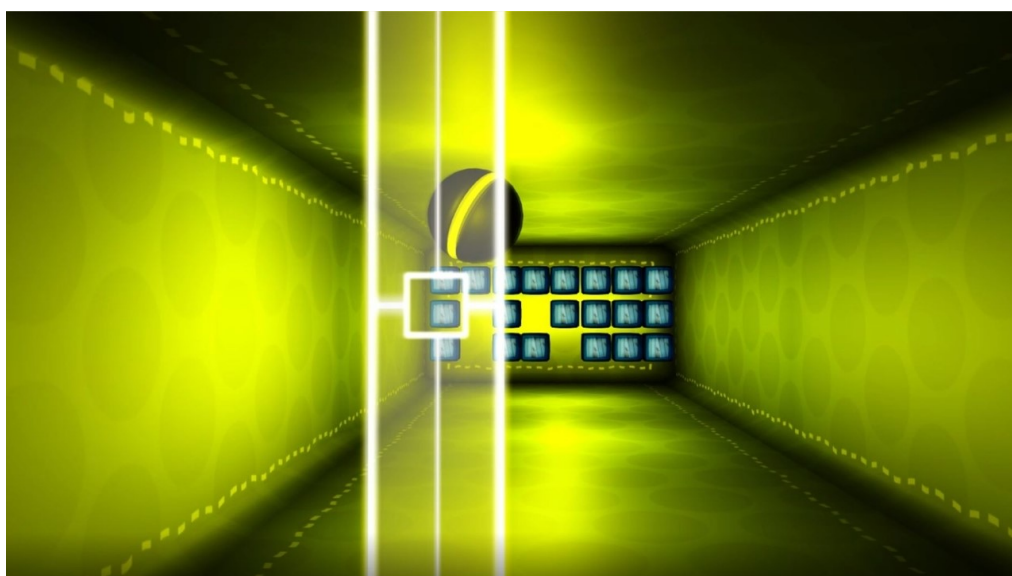
Destroy as many boxes as you can



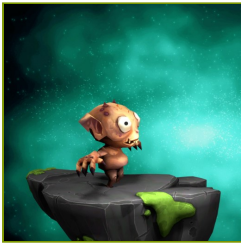
## SAMPLE SETTINGS



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%

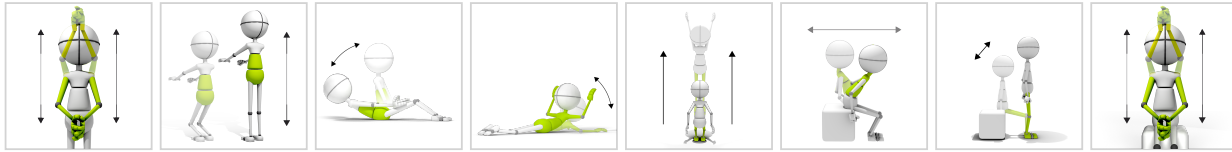


# FUNCTIONAL MOVEMENTS

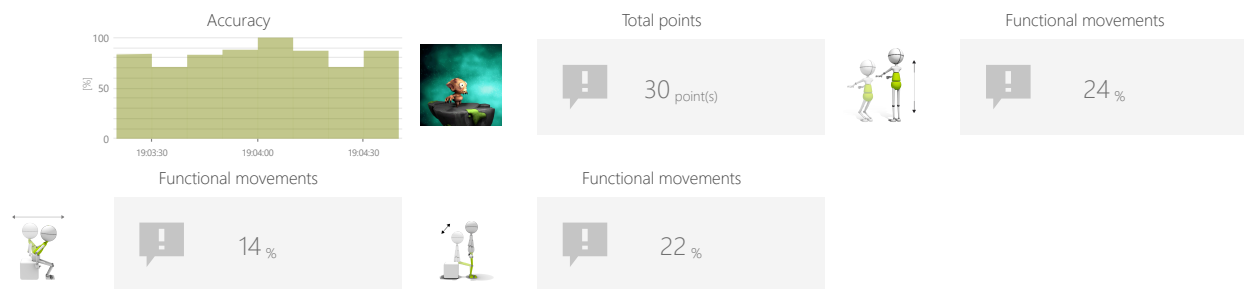
## ROCKET JUMPING

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.

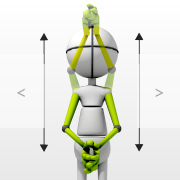
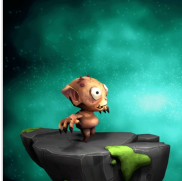


# FUNCTIONAL MOVEMENTS

ROCKET JUMPING

## SAMPLE SETTINGS





◀

Difficulty

▶

1/3

◀

Duration

▶


90s

◀

Range

▶

20% - 80%



◀

Time between objects

▶

5s

◀

Bomb format

▶

1

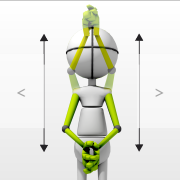
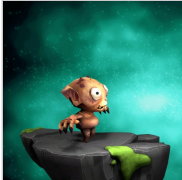
◀

Speed of objects

▶

100%





◀

Difficulty

▶

Custom

◀

Duration

▶


90s

◀

Range

▶

20% - 80%



◀

Time between objects

▶

5s

◀

Bomb format

▶

2

◀

Speed of objects

▶

100%

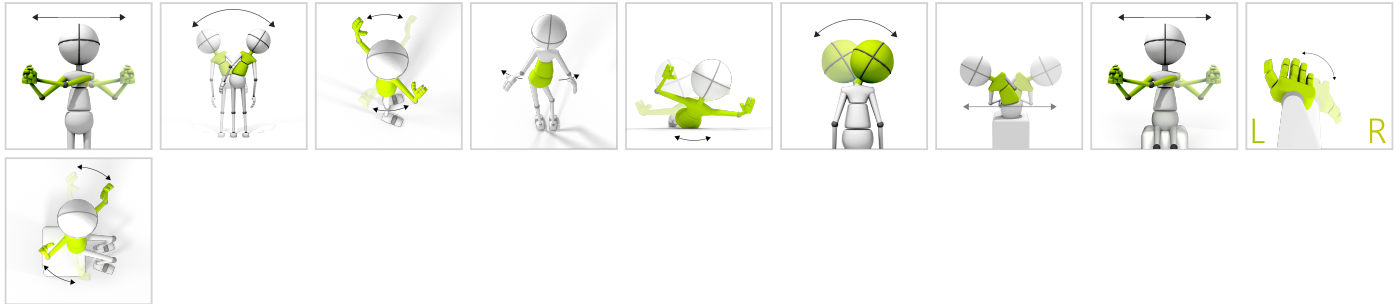


# FUNCTIONAL MOVEMENTS

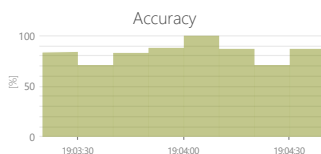
## RAILS

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.

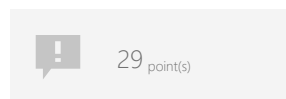
## CONTROL MODES



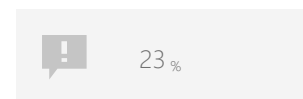
## RESULTS



Total points



Functional movements



## ADJUSTMENTS

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

## 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 <b>1/3</b>	
Duration 90s	Range 20% - 80%
Route shape 	Enable derailling No
	Enable obstacles No
Time between objects 5s	Player speed 100%



Difficulty <b>3/3</b>	
Duration 90s	Range 20% - 80%
Route shape 	Enable derailling Yes
	Enable obstacles No
Time between objects 5s	Player speed 200%

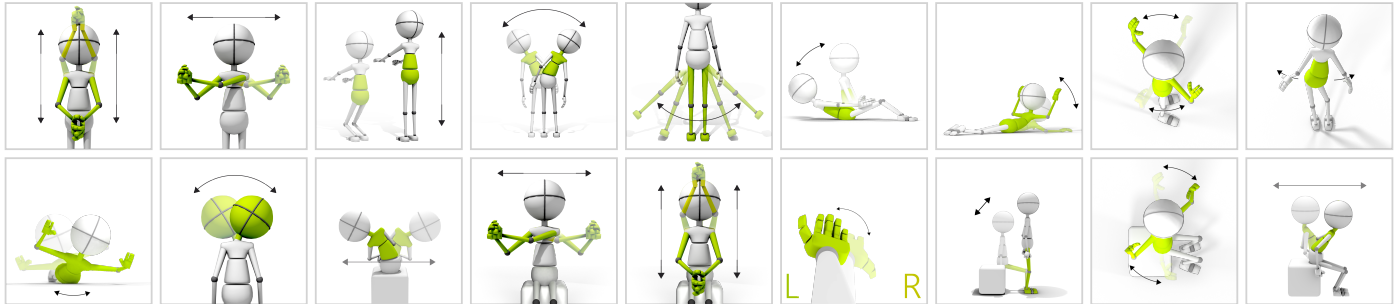


# FUNCTIONAL MOVEMENTS

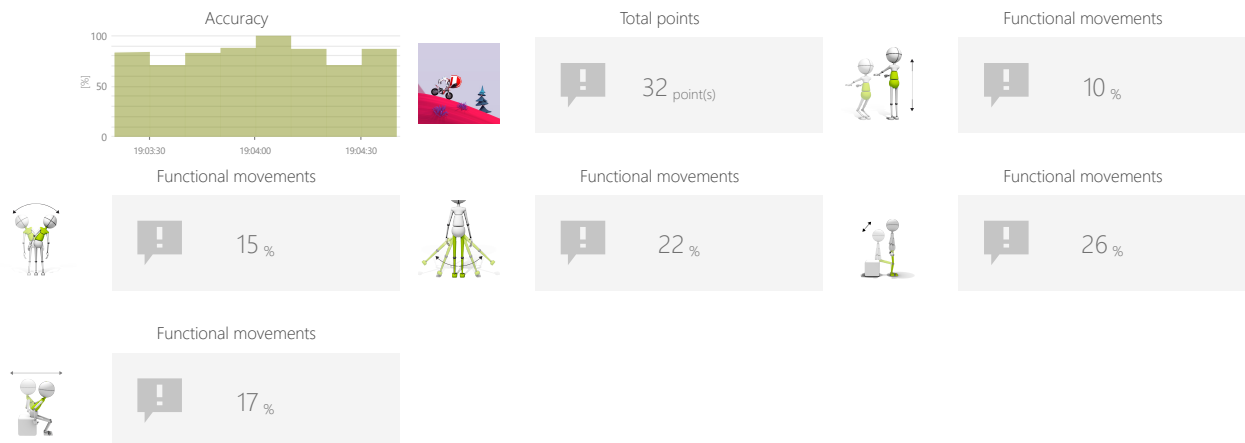
## MOTOCROSS

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

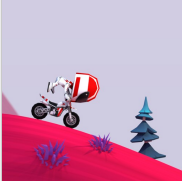
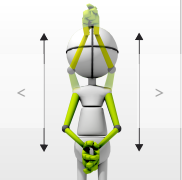



## INSTRUCTION FOR PATIENT

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>		



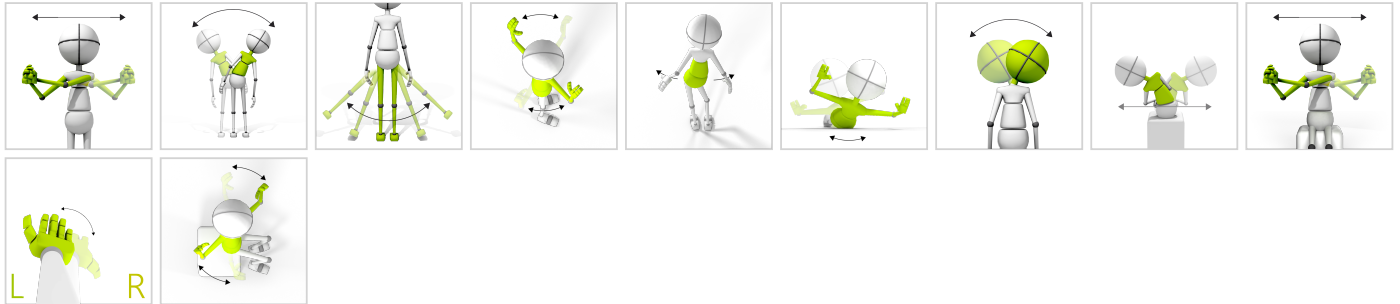


# FUNCTIONAL MOVEMENTS

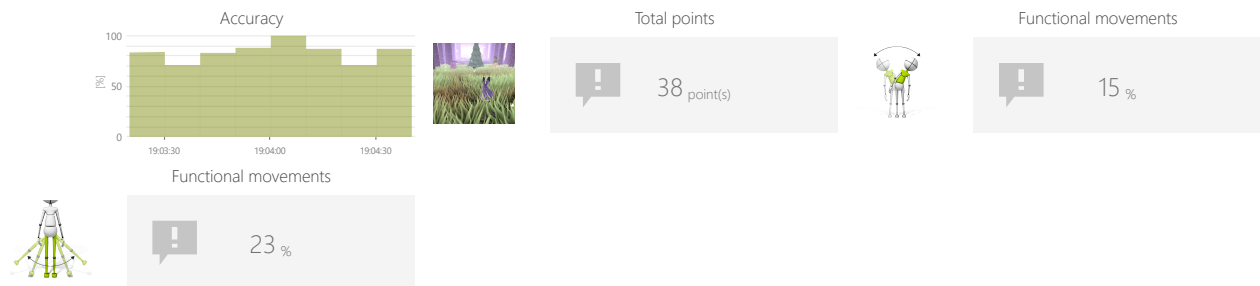
## FOREST RUNNER

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

- Task duration
- Range
- Player speed

## OBJECTIVES

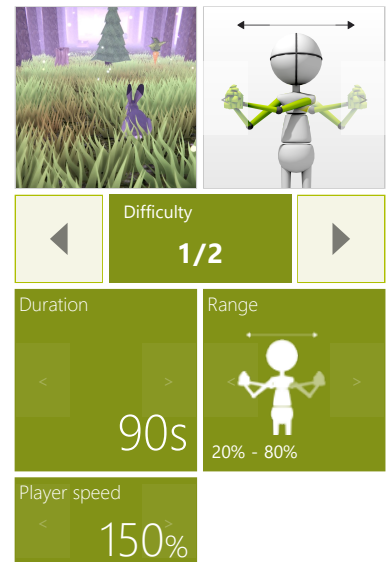
- Dynamics of planned movements
- Focusing
- Planned movements
- Speed of movement

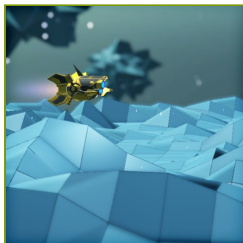
## INSTRUCTION FOR PATIENT

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



## SAMPLE SETTINGS



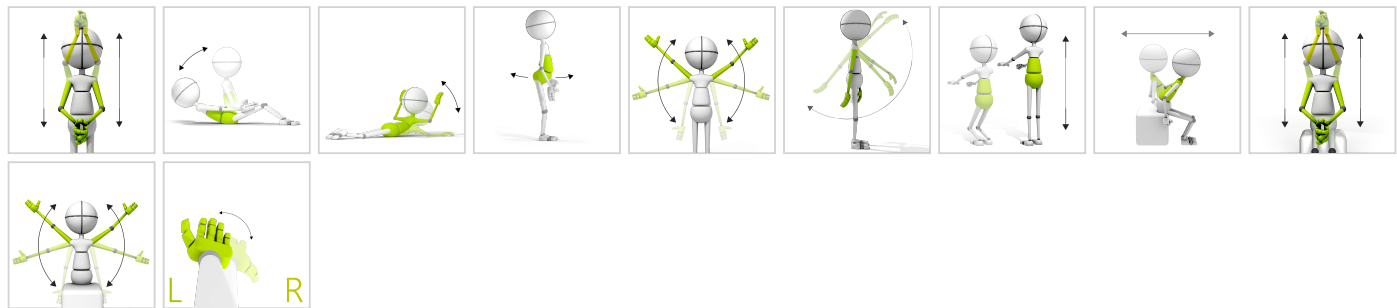


# FUNCTIONAL MOVEMENTS

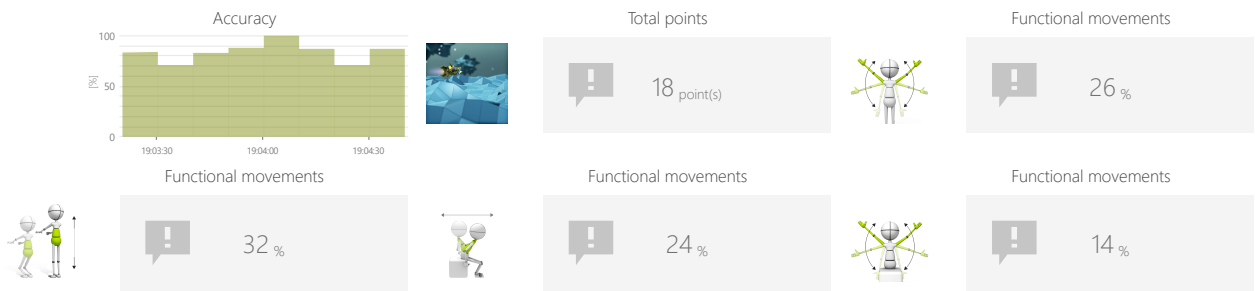
## GEOMETRY FLIER

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

- Task duration
- Range
- Player speed

### OBJECTIVES

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

### INSTRUCTION FOR PATIENT

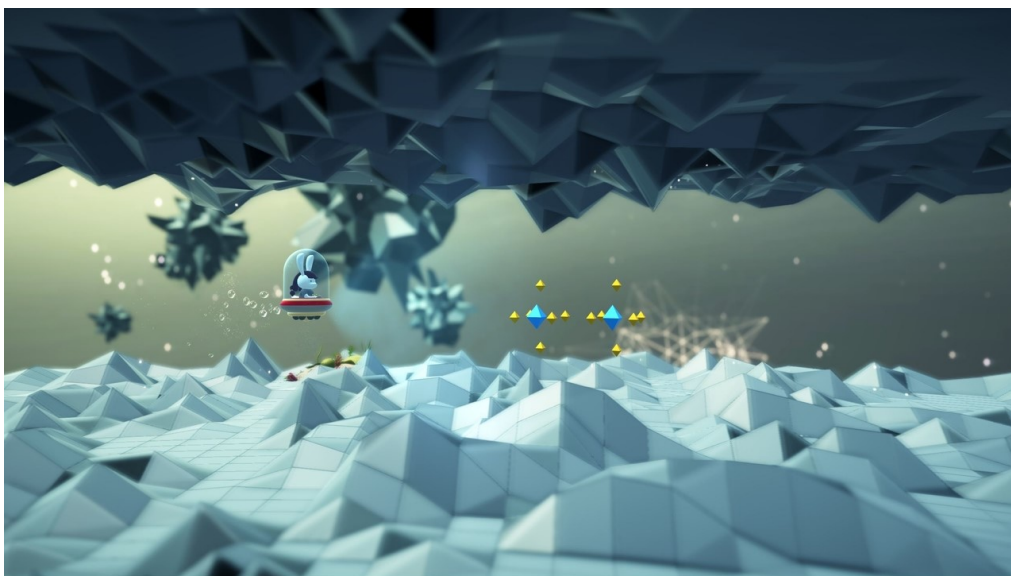
Control the vehicle to avoid the obstacles



# FUNCTIONAL MOVEMENTS

GEOMETRY FLIER

## SAMPLE SETTINGS

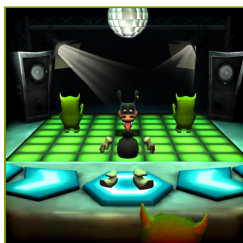


Difficulty  
**1/3**

Duration  
< 30s >

Range  
20% - 80%

Player speed  
< 100% >

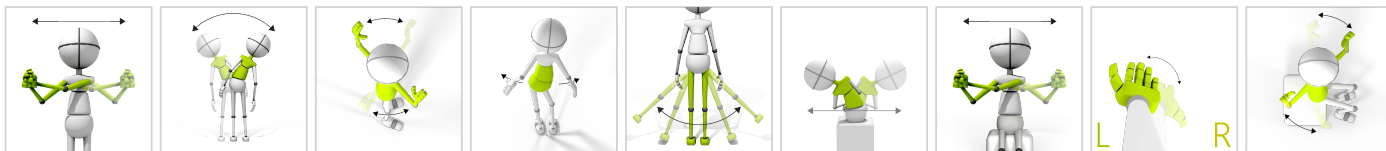


# FUNCTIONAL MOVEMENTS

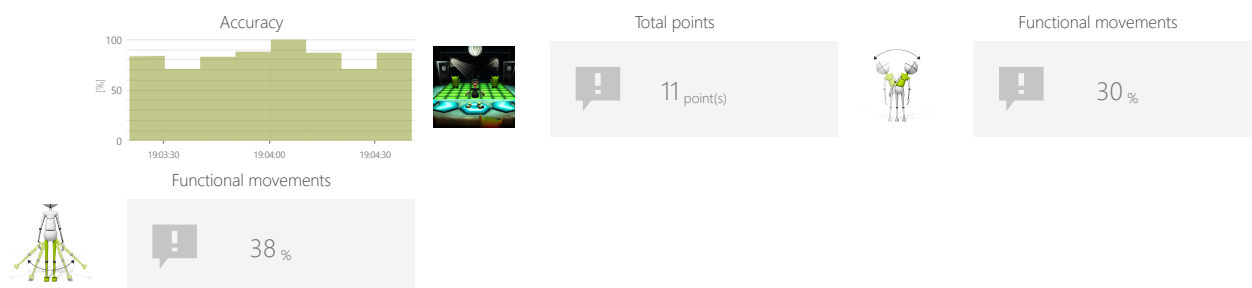
## DANCEMAN

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
- Spawn rate level
- Advanced scoring
- Song index

## OBJECTIVES

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

## INSTRUCTION FOR PATIENT

Hit the green characters when they come close



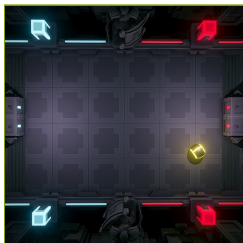
# FUNCTIONAL MOVEMENTS

## DANCEMAN

### SAMPLE SETTINGS



	Difficulty <b>1/6</b>	
Duration <b>90s</b>		Range  20% - 80%
Spawn rate level <b>Easy</b>		Advanced scoring <b>No</b>
		Song index <b>0</b>

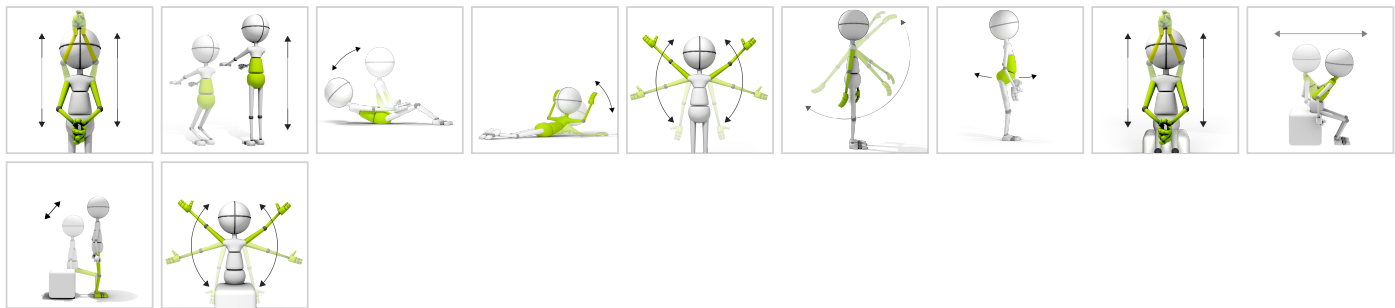


# FUNCTIONAL MOVEMENTS

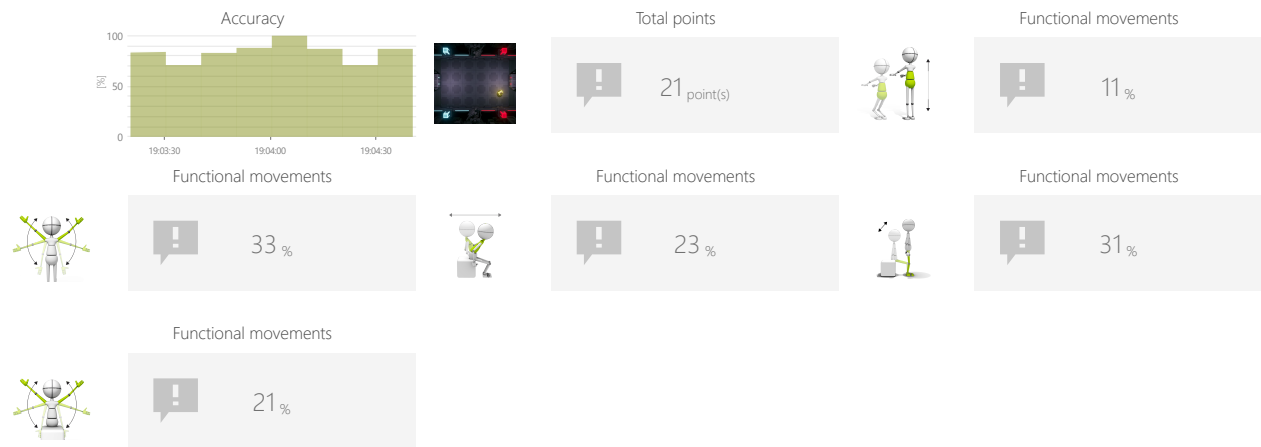
## PONG

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

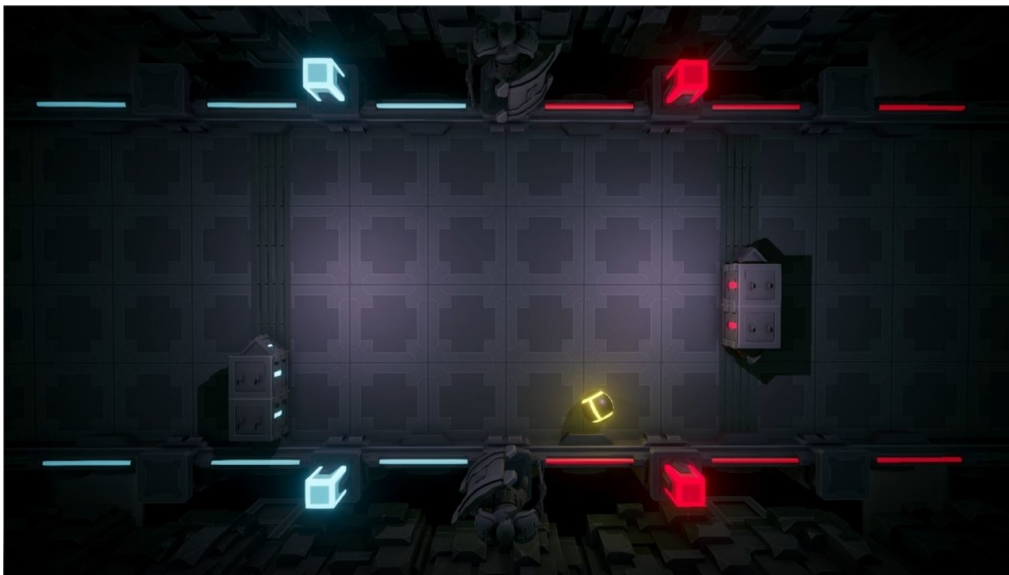
Use the paddles to hit a ball back and forth

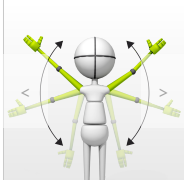
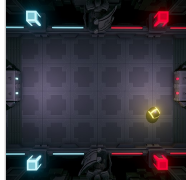



# FUNCTIONAL MOVEMENTS

## PONG

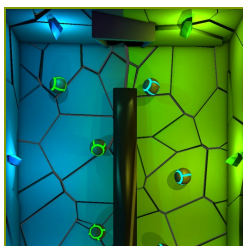
### SAMPLE SETTINGS





◀	Difficulty <b>1/3</b>	▶
Duration <b>90s</b>		Range 20% - 80% 
Speed of objects <b>100%</b>		

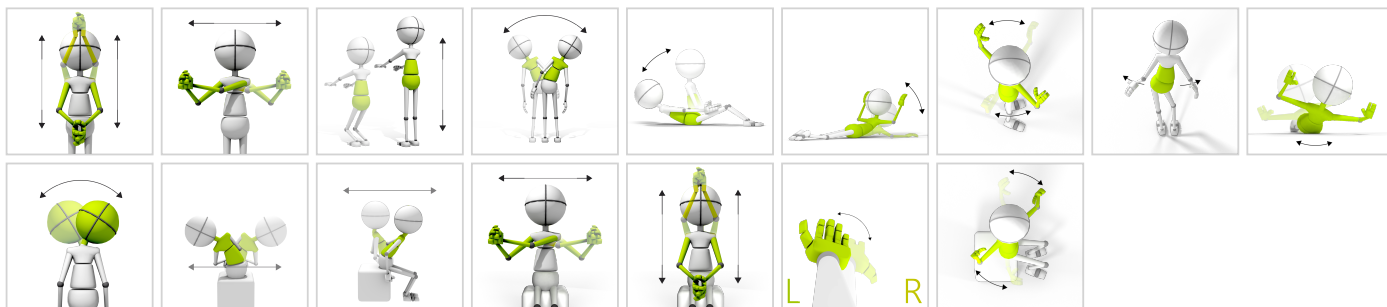




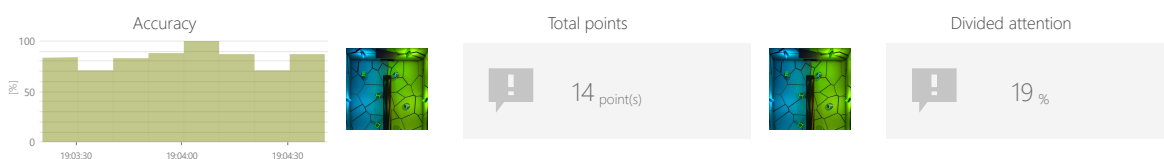
# DIVIDED ATTENTION SORTER

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

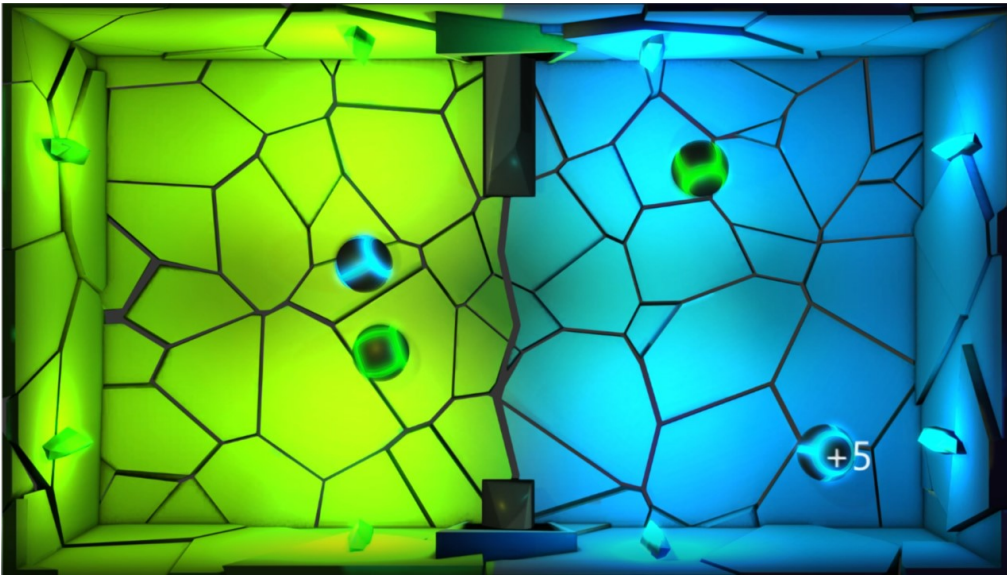
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.

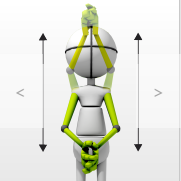
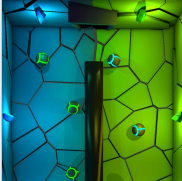


# DIVIDED ATTENTION

## SORTER

### SAMPLE SETTINGS





◀

Difficulty  
**1/3**


▶

◀

Duration  
**30s**

▶

◀

Range  
20% - 80%  


▶

◀

Number of objects  
**4**

▶

◀

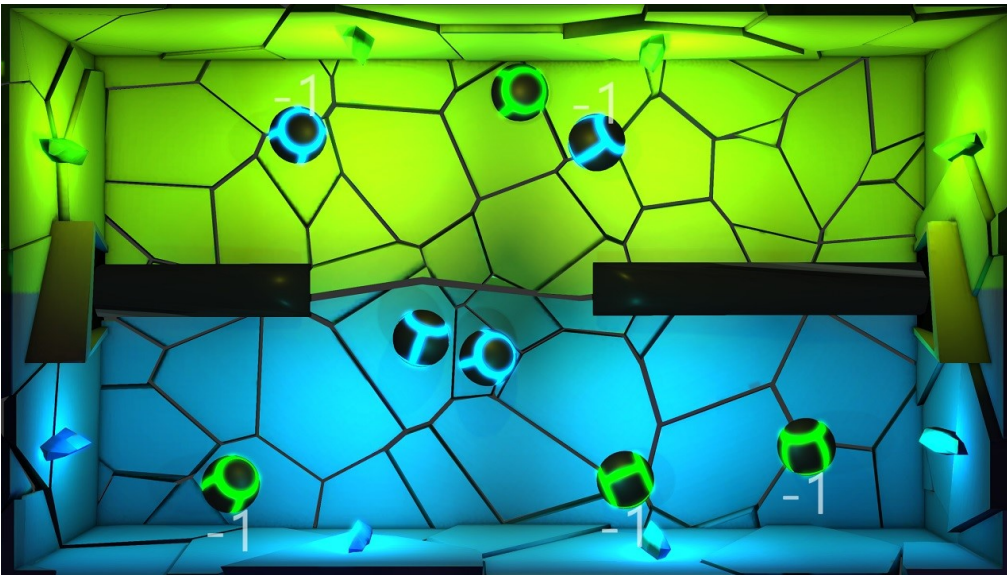
Gap size  
**150%**


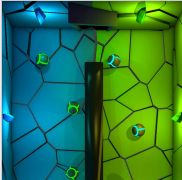
▶

◀

Speed of objects  
**100%**

▶





◀

Difficulty  
**1/3**


▶

◀

Duration  
**30s**

▶

◀

Range  
20% - 80%  


▶

◀

Number of objects  
**4**

▶

◀

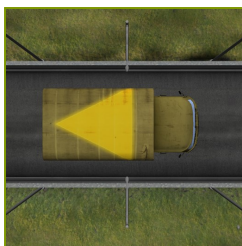
Gap size  
**150%**

▶

◀

Speed of objects  
**100%**

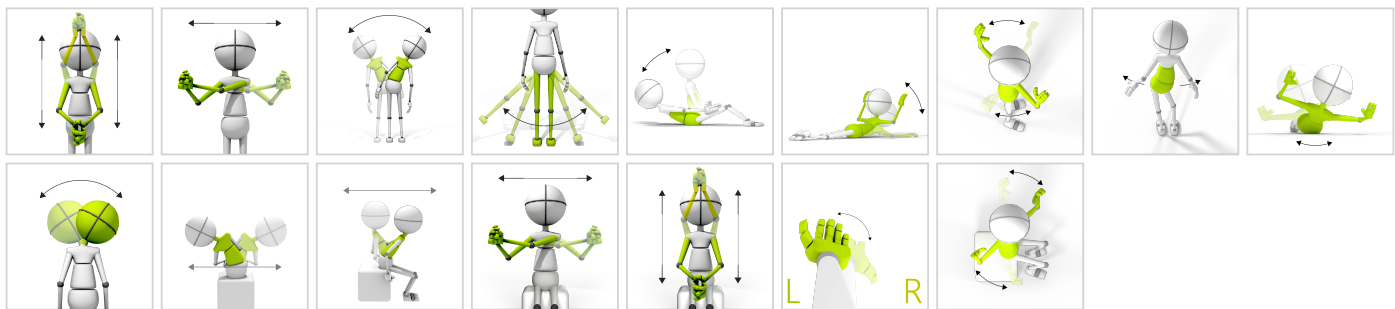
▶



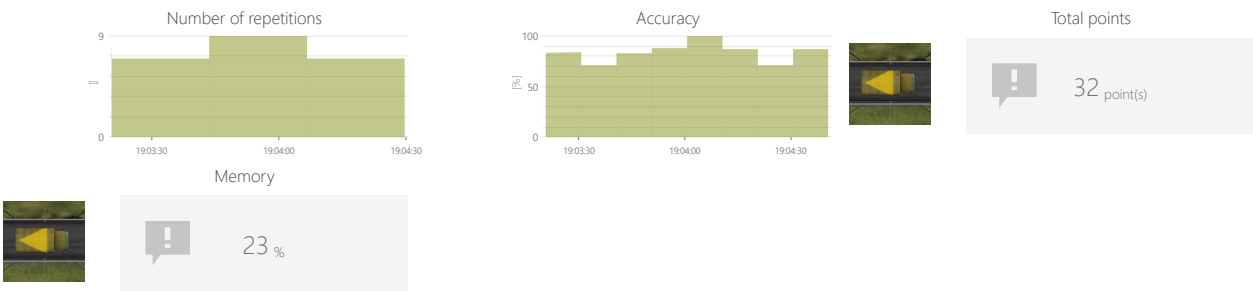
# MEMORY TRUCKS

Measure and train individual's skills to memorize information.

## CONTROL MODES



## RESULTS



## ADJUSTMENTS

- Task duration
- Range
- Variations

## OBJECTIVES

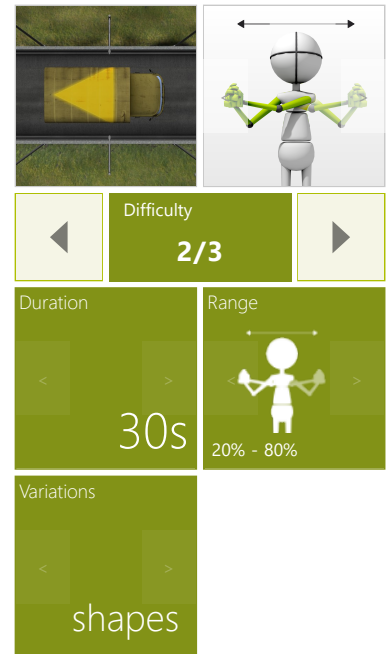
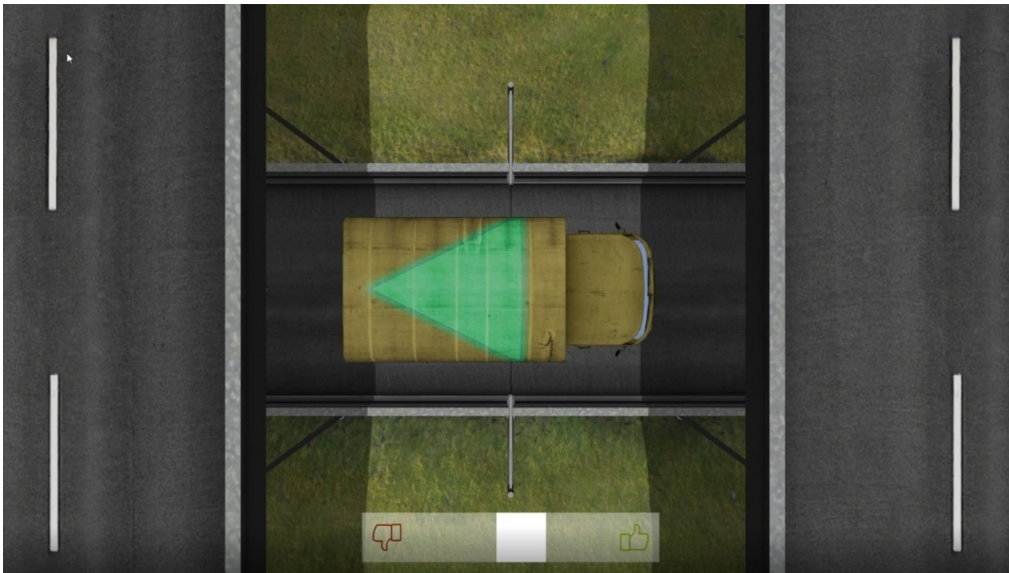
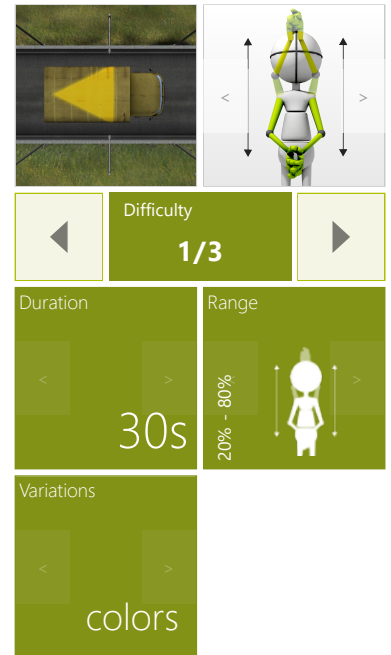
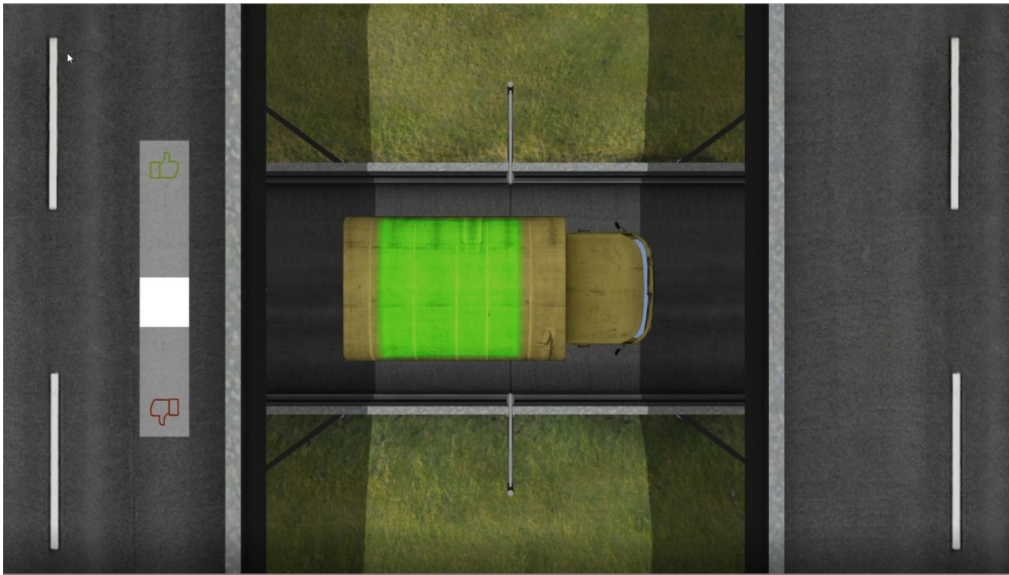
- Logical tasks
- Focusing
- Perceptivity

## 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





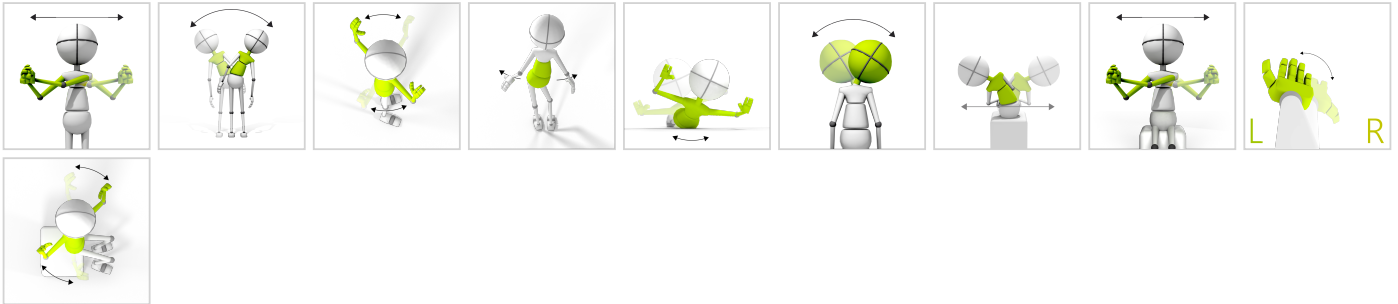


# PROBLEM SOLVING

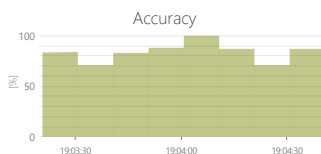
## CLONES

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



Total points

10 point(s)



Problem solving

33 %

## ADJUSTMENTS

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

## OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

## INSTRUCTION FOR PATIENT

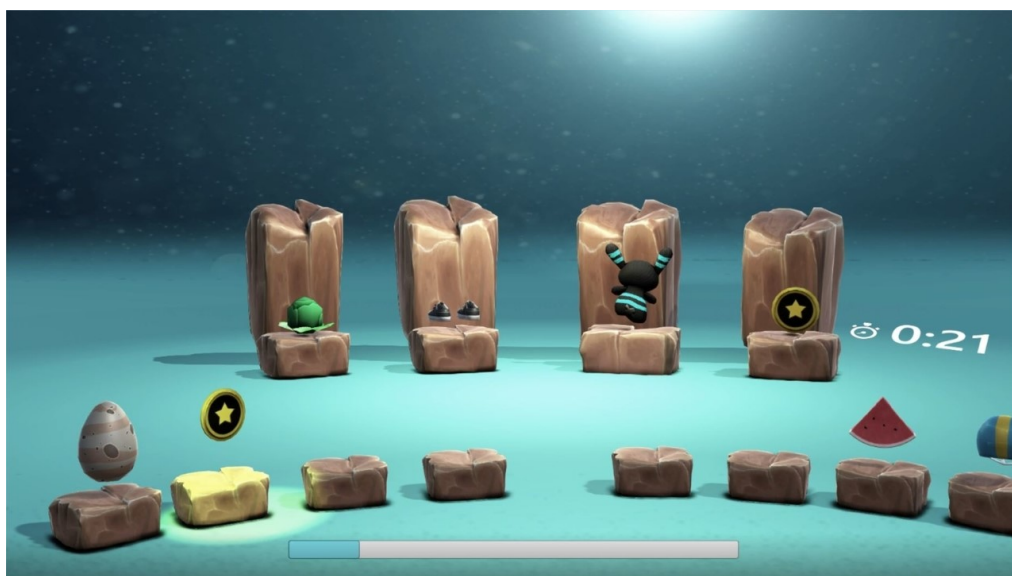
Select the item which has a pair on the screen



# PROBLEM SOLVING

CLONES

## SAMPLE SETTINGS



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



# PROBLEM SOLVING

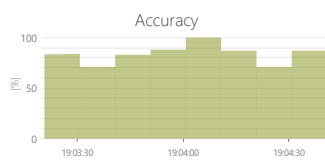
## MAZE

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

24 point(s)



Problem solving

16 %

## ADJUSTMENTS

- Task duration
- Range
- Show path
- Maze size

## OBJECTIVES

- Logical tasks
- Planned movements
- Planning and Strategy

## INSTRUCTION FOR PATIENT

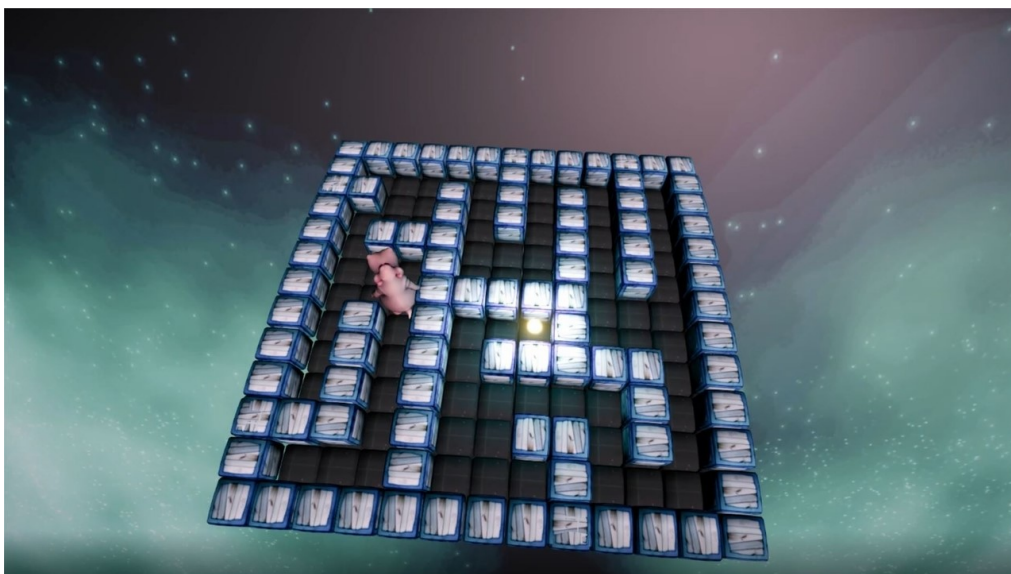
Lead the hippo through the maze to the glowing target.

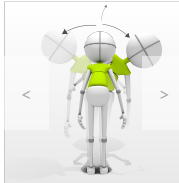



# PROBLEM SOLVING

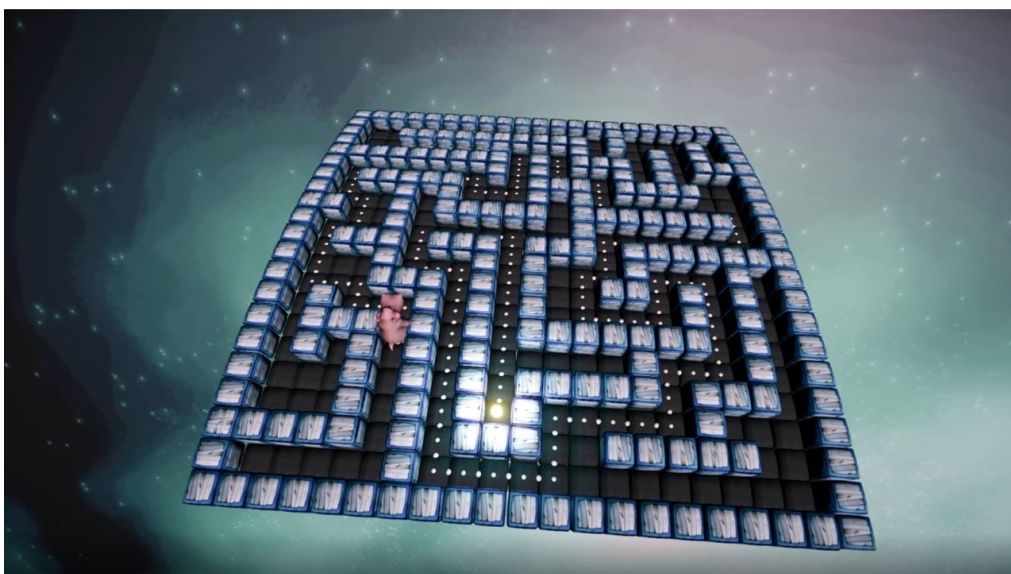
MAZE

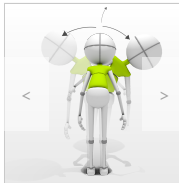
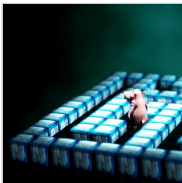
## SAMPLE SETTINGS





◀	Difficulty <b>2/4</b>	▶
Duration 90s		Range 30% - 70% 30% - 70%
Show path No		Maze size 6





◀	Difficulty <b>Custom</b>	▶
Duration 90s		Range 30% - 70% 30% - 70%
Show path Yes		Maze size 10