

FULL BODY EVALUATIONS

2021.4

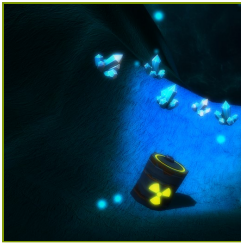
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Range of motion	5
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Balance	16
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WHAT IS NEEDED?

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:

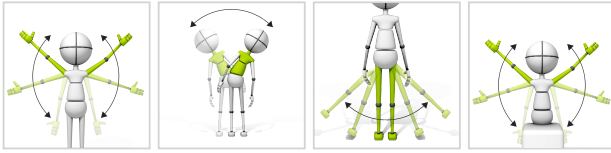
- Windows 10
- INTEL i5 processor
- 8GB RAM
- nVidia RTX2060 graphic card
- Azure Kinect sensor



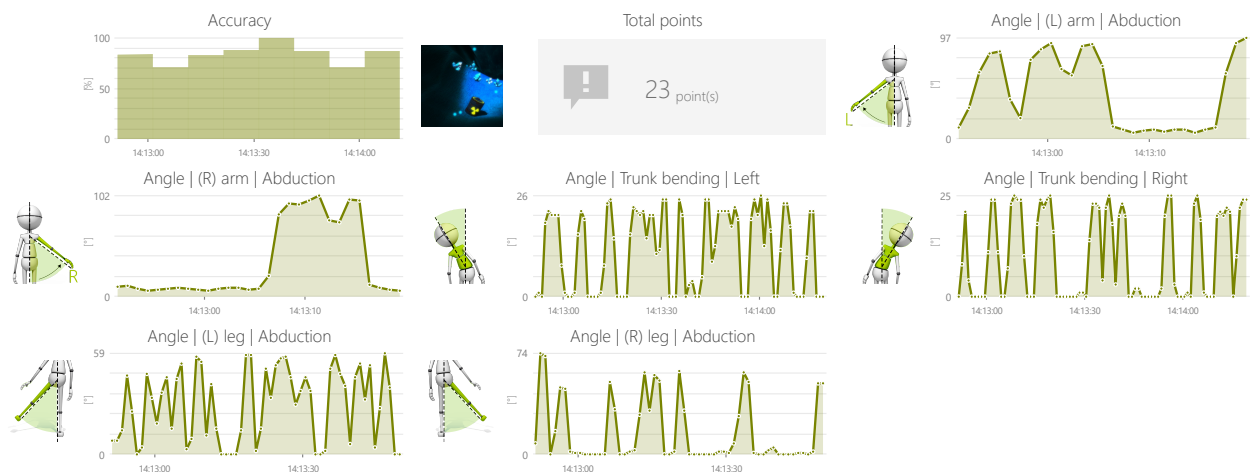
RANGE OF MOTION CRYSTALS

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

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
-
- Player speed

OBJECTIVES

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

INSTRUCTION FOR PATIENT

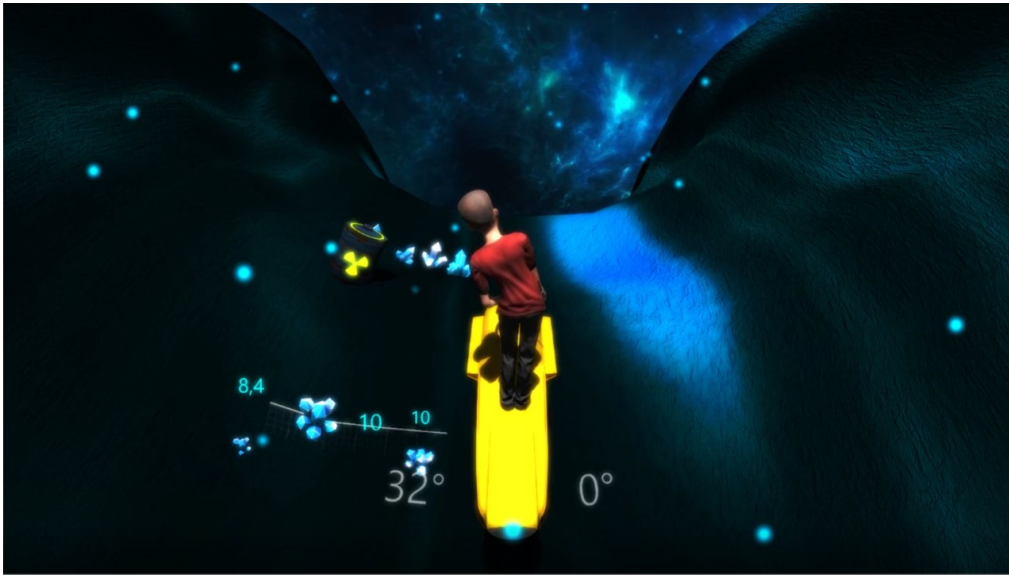
Collect the crystals and avoid the radioactive barrels



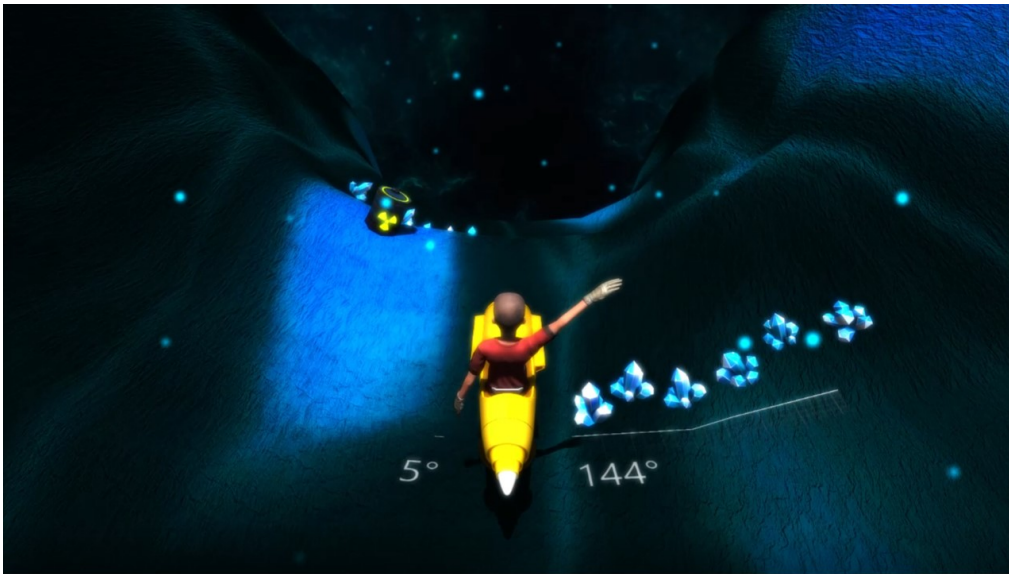
RANGE OF MOTION

CRYSTALS

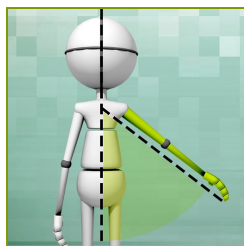
SAMPLE SETTINGS



Difficulty	1/4
Duration	30s
Angle	40°
Angle	40°
Player speed	100%



Difficulty	1/4
Duration	30s
Angle	180°
Angle	180°
Player speed	100%

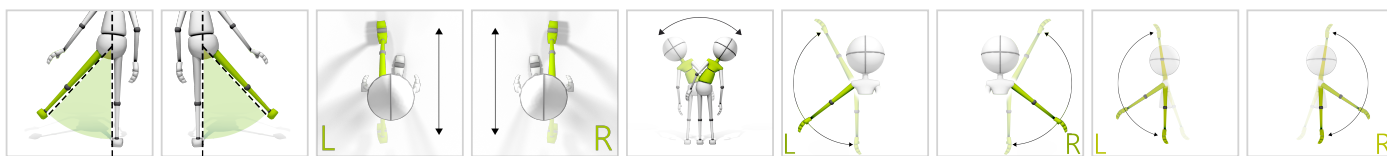


RANGE OF MOTION

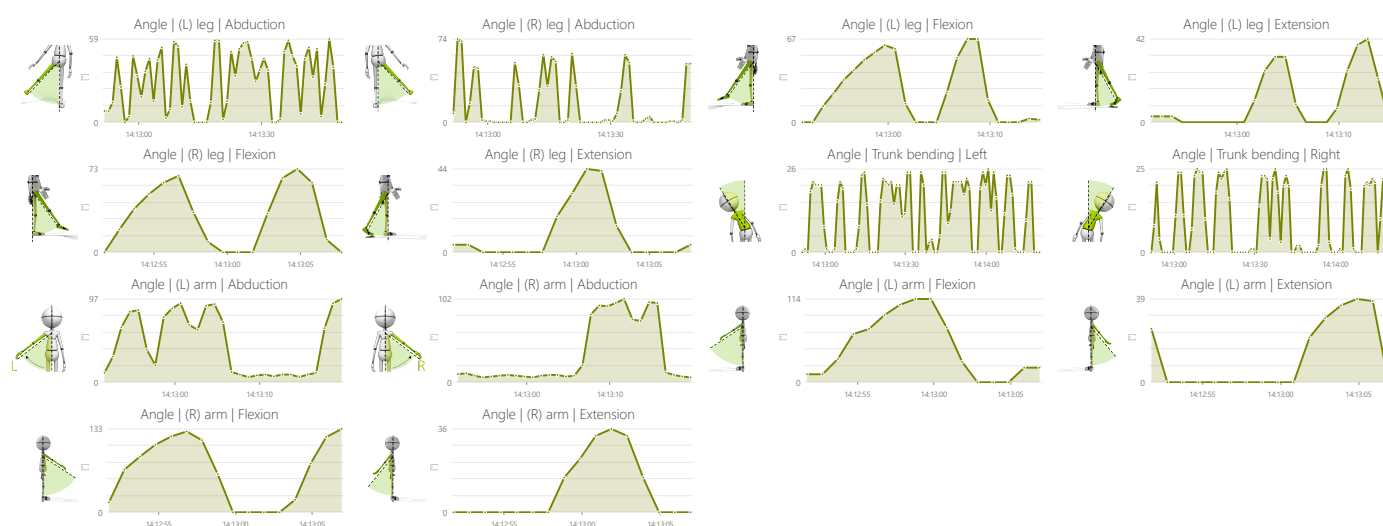
ANGLES EVALUATION

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

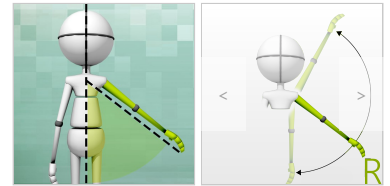
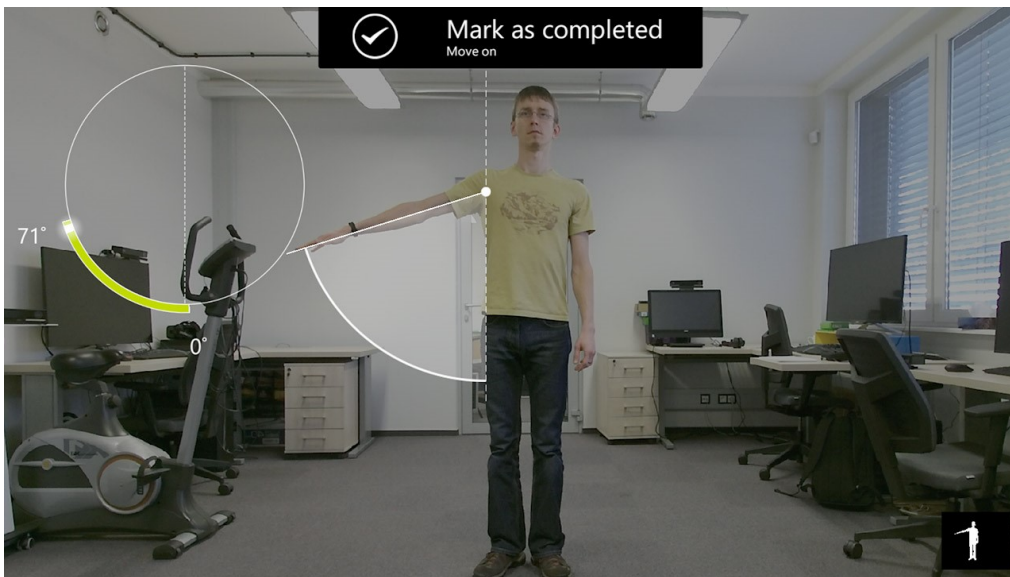
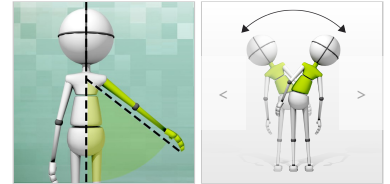
System will measure your range of motion



RANGE OF MOTION

ANGLES EVALUATION

SAMPLE SETTINGS



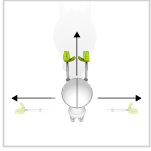
REACH TEST

RANGE OF MOTION

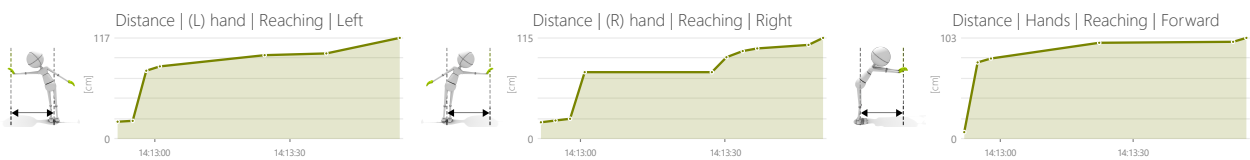
REACH TEST

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

CONTROL MODES



RESULTS



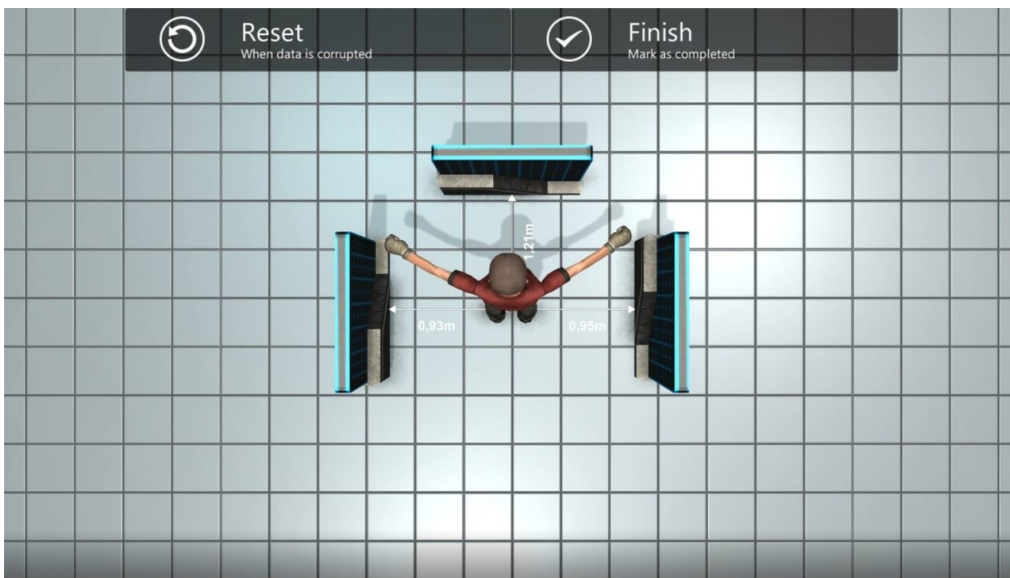
OBJECTIVES

- 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

SAMPLE SETTINGS



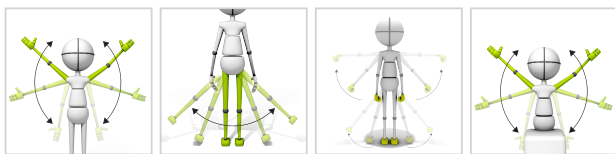


MOVEMENT TIME

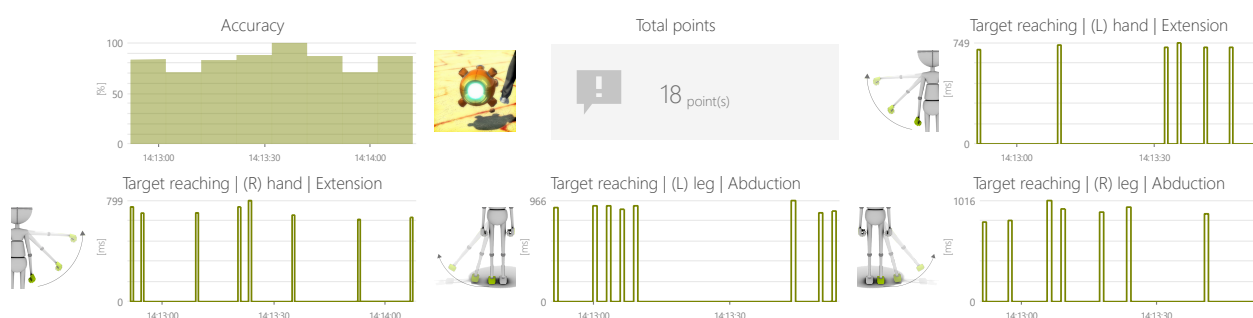
REACT

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
- 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

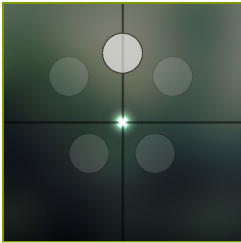
Hit the target as quickly as you can. Then set yourself in rest pose



SAMPLE SETTINGS



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



MOVEMENT TIME

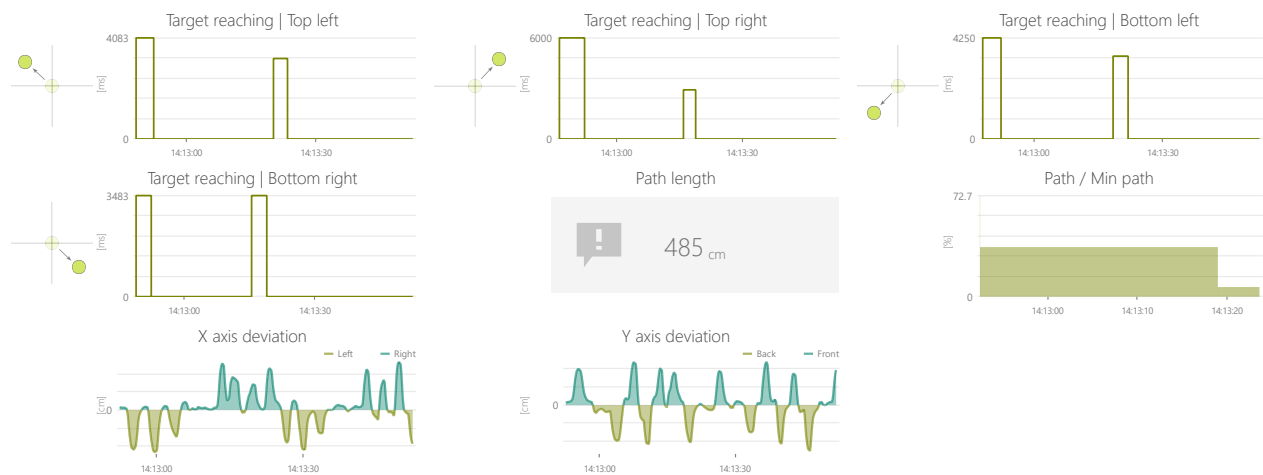
DYNAMIC TEST

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

OBJECTIVES

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

INSTRUCTION FOR PATIENT

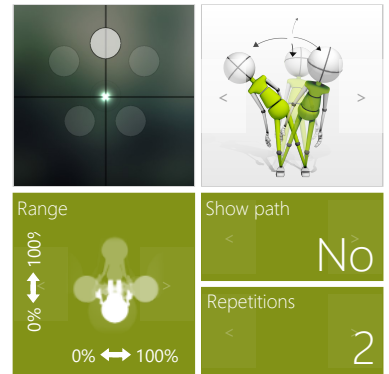
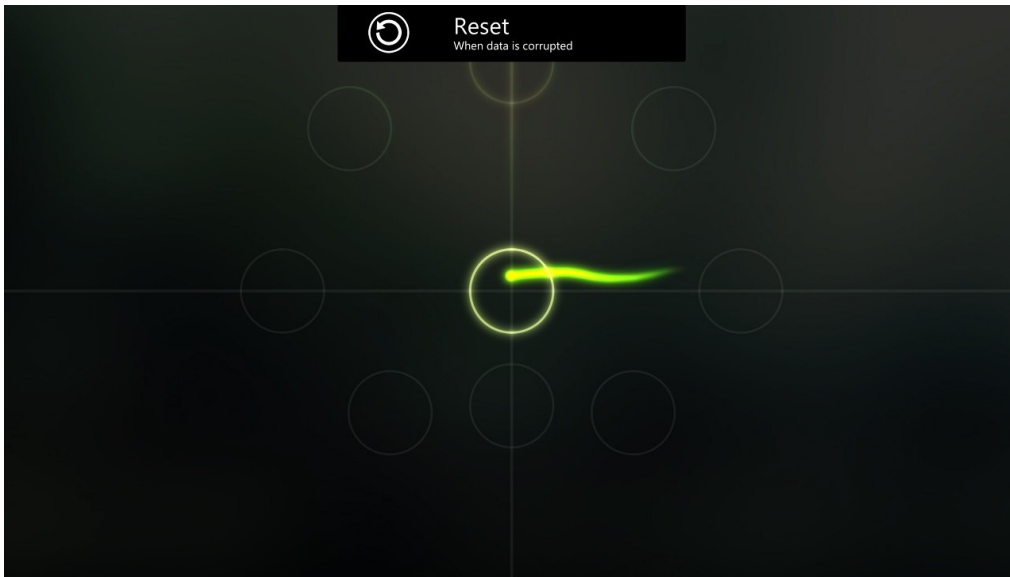
Move the dot to the highlighted target and hold it for a moment. Next target will be highlighted.

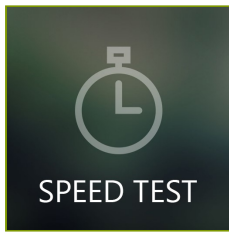


MOVEMENT TIME

DYNAMIC TEST

SAMPLE SETTINGS



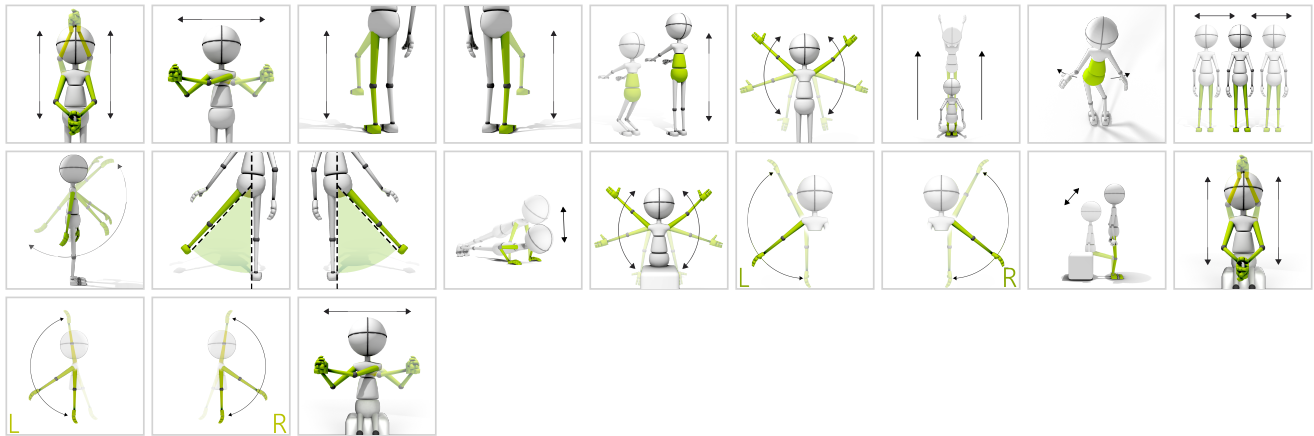


SPEED

SPEED TEST

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

CONTROL MODES



RESULTS

	Speed ! 24 rep(s)/min		Speed ! 15 rep(s)/min		Speed ! 27 rep(s)/min		Speed ! 33 rep(s)/min
	Speed ! 15 rep(s)/min		Speed ! 14 rep(s)/min		Speed ! 36 rep(s)/min		Speed ! 37 rep(s)/min
	Speed ! 12 rep(s)/min		Speed ! 24 rep(s)/min		Speed ! 30 rep(s)/min		Speed ! 26 rep(s)/min
	Speed ! 33 rep(s)/min		Speed ! 19 rep(s)/min		Speed ! 17 rep(s)/min		Speed ! 23 rep(s)/min
	Speed ! 37 rep(s)/min		Speed ! 12 rep(s)/min		Speed ! 39 rep(s)/min		Speed ! 31 rep(s)/min
	Speed ! 13 rep(s)/min						

ADJUSTMENTS

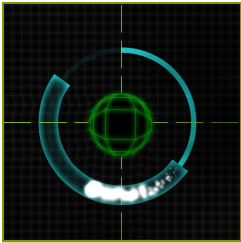
- Time to complete action
- Range

OBJECTIVES

- Speed of movement
- Repetitive movements

INSTRUCTION FOR PATIENT

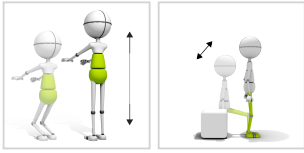
Perform the specified movement pattern as many times as possible



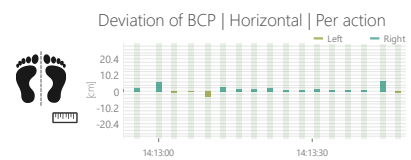
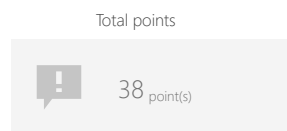
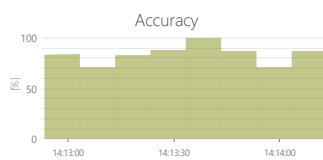
BALANCE GRID

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

CONTROL MODES



RESULTS



ADJUSTMENTS

- Task duration
- Range
- Period

OBJECTIVES

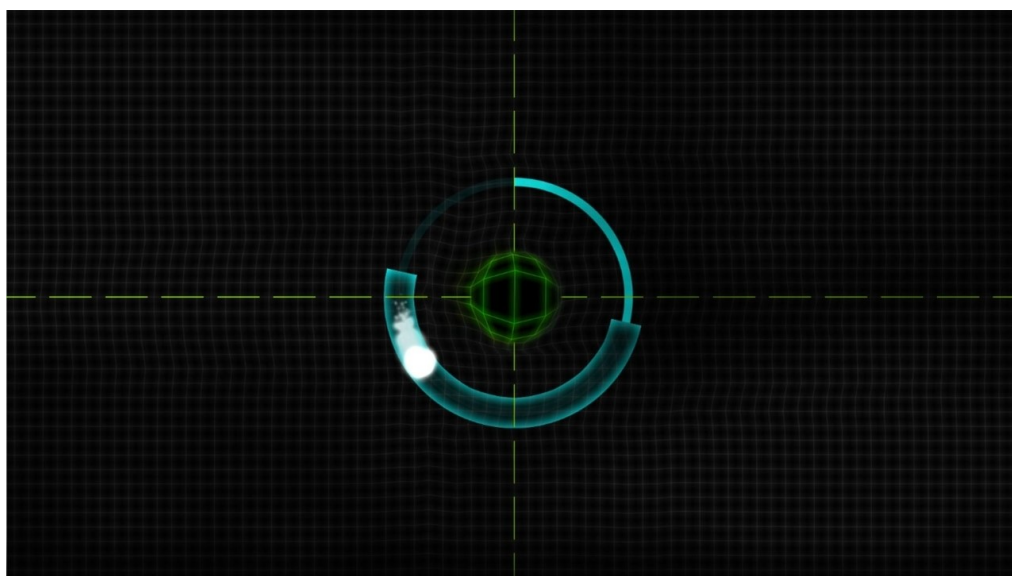
- Balance and equilibrium training
- 3D space movements reproduction
- Activity in a given rhythm

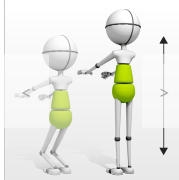
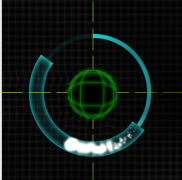
INSTRUCTION FOR PATIENT

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



SAMPLE SETTINGS





◀

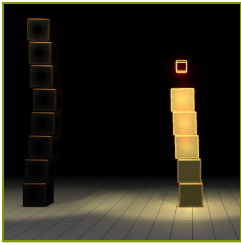
Difficulty
1/3

▶

Duration
< 90s >

Range
5%
50%
0% ↔ 100%

Period
< 6s >

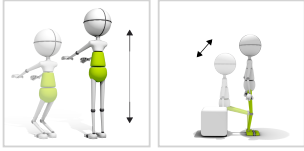


BALANCE

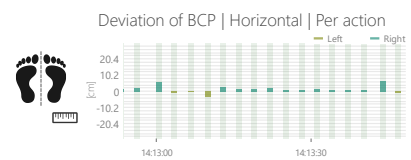
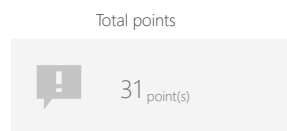
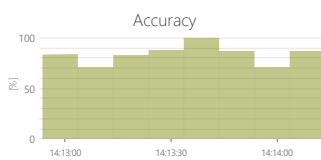
BLOCK BUILDER

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

OBJECTIVES

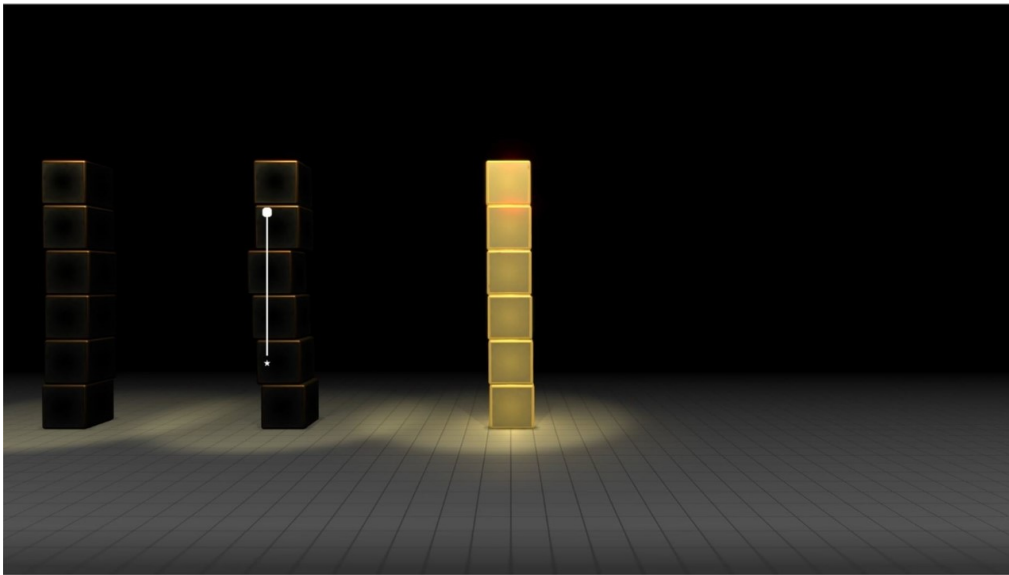
- Movement precision
- Muscle strengthening
- Balance and equilibrium training

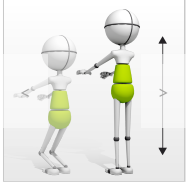
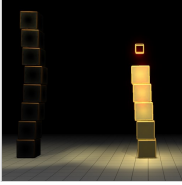
INSTRUCTION FOR PATIENT

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



SAMPLE SETTINGS





◀

Difficulty
1/3

▶

◀

Duration
90s

>

5%
50%
100%

Range
0% ↔ 100%

◀

Stack height
6

>



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

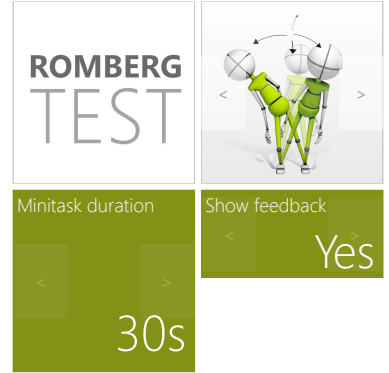
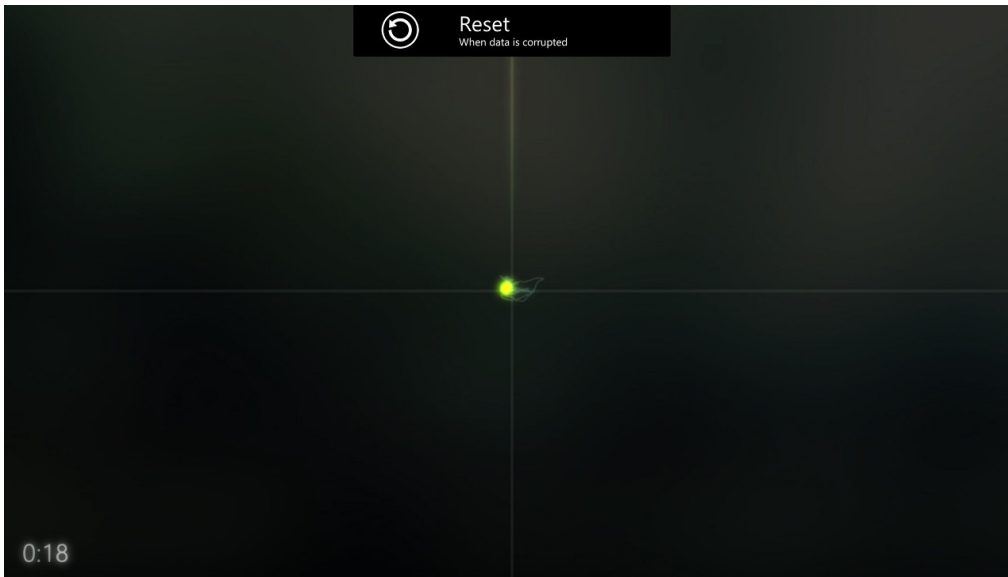
OBJECTIVES

- Assesses static standing balance

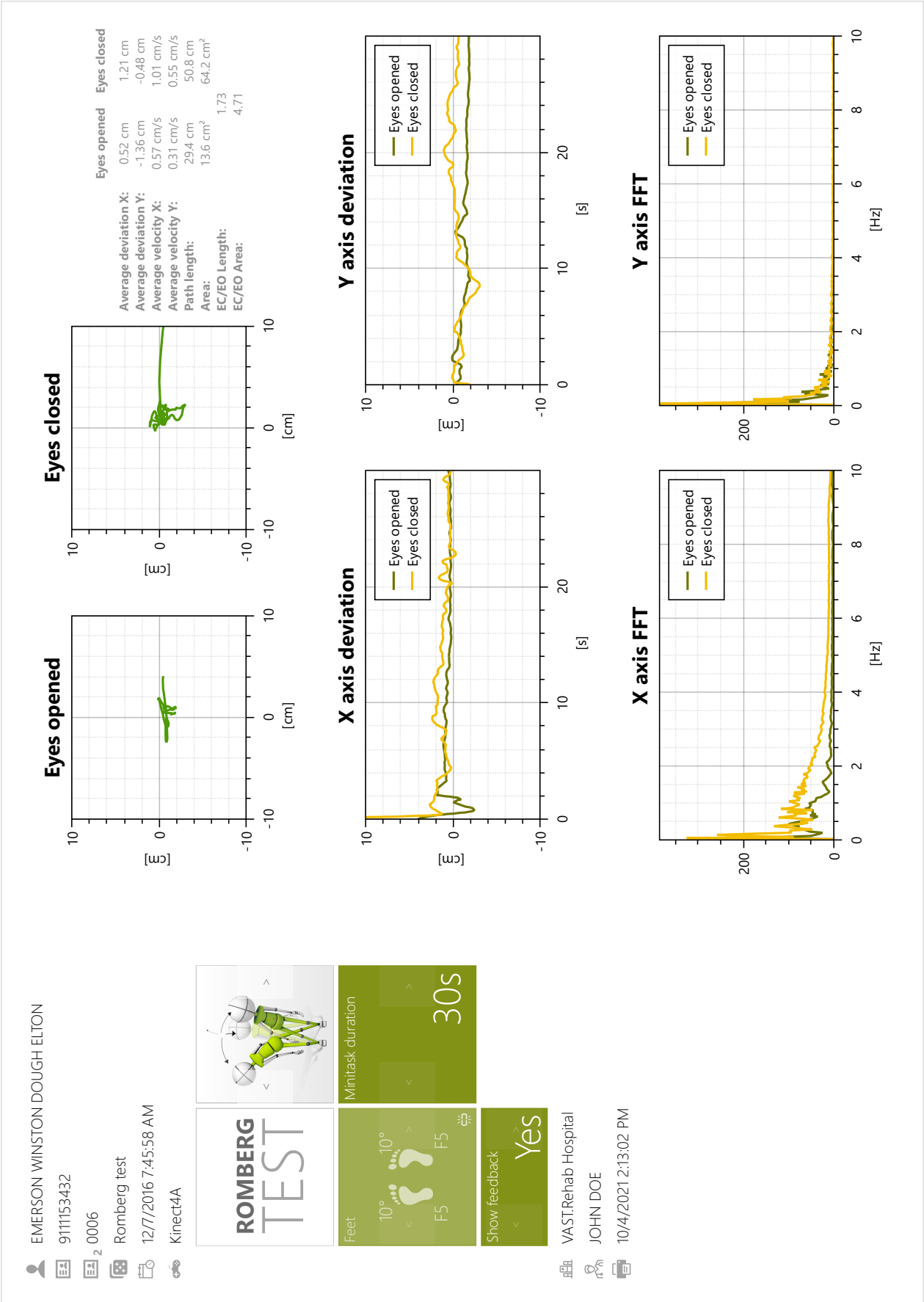
INSTRUCTION FOR PATIENT

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

SAMPLE SETTINGS



SAMPLE REPORTS

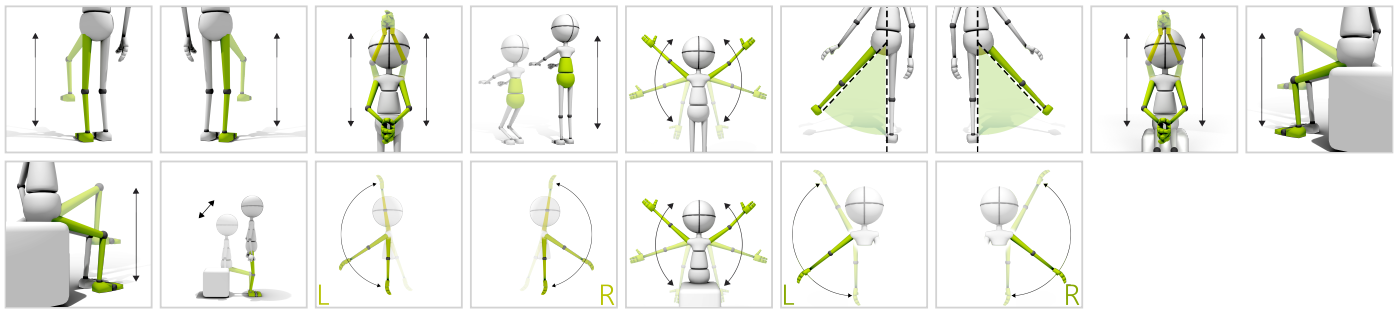




SPECIALIZED GONOGO TEST

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

CONTROL MODES



RESULTS



Number of NoGo impulses noticed (Go or NoGo mode)

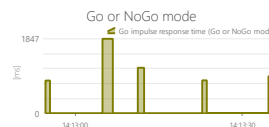
4

Number of Go impulses missed (always Go mode)

0

Number of Go impulses missed (Go or NoGo mode)

1



Time delay caused by distraction

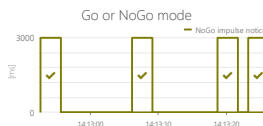
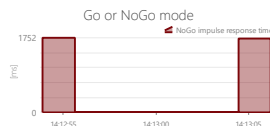
37 %

Number of NoGo impulses hit (Go or NoGo mode)

2

Always Go mode

3000 ms



Go or NoGo mode

3032 ms

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

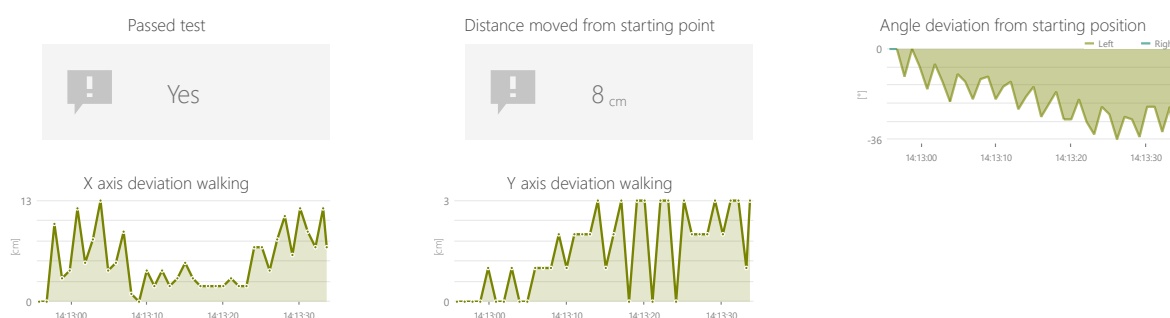
FUKUDA TEST

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

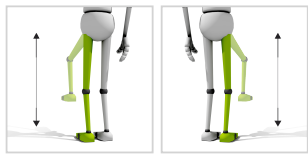
Take 50 steps in place with the eyes closed with arms outstretched at 90°



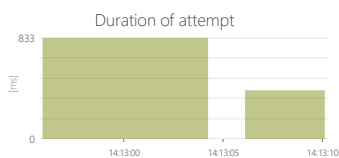
SPECIALIZED SINGLE LEG STANCE TEST

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

CONTROL MODES



RESULTS



ADJUSTMENTS

- Time to complete action

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