pd meds

Let's
breath

Notos

Augmented Reality Mobile App
for Pulmonary Rehabilitation

ABOUT

Notos solves the problem of people after **pneumonia, COVID-19, and surgeries** who abandon prescribed home pulmonary physiotherapy as they get bored and do not see progress. It makes the process engaging due to gamification and presentation of measured results.

It is a simple system that consists of a plastic assembling stand for a smartphone and a mechanical pulmonary trainer with three elevating balls. The design enables registration of the balls' motion during respiratory treatment and uses an estimation of the inspiration speed to control the bird.

WHO ARE WE?

We are a group of true friends who want to make society's living better with the best tool we have – engineering. We are also researchers experienced in mechanical, electronic, and computer science, designers, and engineers with proven track of patenting and commercialization.

KEY FEATURES

GAMIFICATION & ENTERTEINMENT

Repetitive and tiring rehabilitation with the simplest mechanical pulmonary trainers turned into an engaging mobile game, motivating to increase medical performance thanks to regular exercising
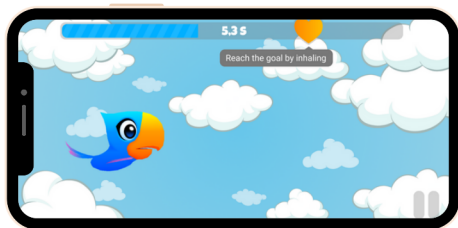
HOME-USE RESISTANCE TREATMENT

The device and the game designed for self-exercising at home with widely available equipment as an enhancement of hospital-based pulmonary rehabilitation to obtain the best results sooner

FOR ANYONE EXCLUSIVELY

Home training for kids and adults after pneumonia, surgeries or COVID-19, but also the ones who want to improve their sports performance or musical skills with breathing exercises

PRECISE TREATMENT GUIDELINES

Constant analysis of the user's performance based on the estimated breathing power changing in time used to define their natural breathing patterns and possible improvements, and visualised intuitively in the game

Boreas

The Device for Gamified Automatic Pulmonary Telerehabilitation

 ABOUT

Boreas solves the problem of insufficient pulmonary physiotherapists in hospitals to provide enough treatment to patients after surgeries or with severe COPD, lung cancer, pneumonia, or COVID-19 by serving numerous patients simultaneously with fleets of devices.

The device is an advanced mechatronic system for pulmonary rehabilitation. It is based on a microcomputer, which controls the resistance of the treatment, measures its parameters, visualises the desired breathing patterns, and sends the data measured to the physician.

KEY FEATURES

FULL AUTOMATION & PERSONALISATION

Exercising sessions tailored to the needs of an individual user based on their treatment history and constantly measured performance providing the best physiotherapy results

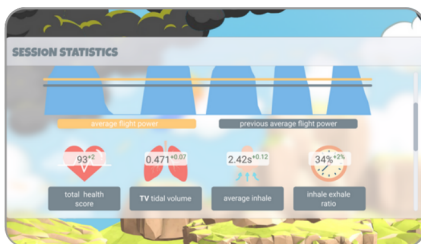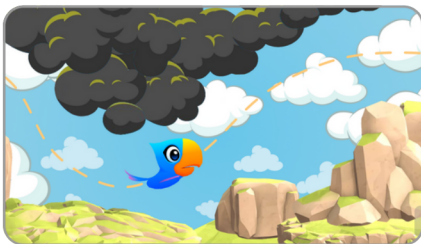## REAL RESISTANCE DURING THE THERAPY

Inhale and exhale resistance of two types automatically controlled while exercising, enabling diversified therapy outperforming traditional methods used for complex therapy of different medical cases

TREATMENT OF MULTIPLE PATIENTS

The device designed for telerehabilitation or exercising with multiple patients after pneumonia, COVID-19, surgeries, with COPD or lung cancers at the same time to maximise the capabilities of a single physician

PRECISE TREATMENT GUIDELINES

Constant analysis of the user's performance based on the precise measurements of inhaling/exhaling parameters used to define their natural breathing patterns and possible improvements, and visualised intuitively

CONTACT US

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