Nebula - Interactive wall of light

Type of Project

Finished research project

Summary

The Nebula wall is an interactive, touch-sensitive LED wall that can deliver a unique experience to both kids and adults. The Nebula is commonly used in healthcare, rehabilitation, leisure, educational and experience-oriented settings. In collaboration with healthcare professionals applications and games have been developed that can be used to offer clients more fun and effective therapies, specifically suited for these various settings.

The core goal of the Nebula is to modernize care and to make care more engaging and approachable. With the various applications care and therapies become more fun, more effective and let the clients be in control by triggering their intrinsic motivation. Furthermore, with the Nebula wall it becomes possible to offer multiple clients the same therapy at the same time and to track the progress of clients with statistical data.

The Nebula is made to measure and available in many different sizes to accommodate different settings.

More info at www.nyoyn.com/products

Low-tech, high-tech products, services and contexts for play

The Nebula is designed, developed and manufactured in the Netherlands by NYOYN (www.nyoyn.com). The Nebula features a unique combination of high-end hardware and software, but features an accessible design that focuses on fun and experience.

Care
The Nebula creates a relaxed and welcome atmosphere and it can function as a tool for the medical professionals. It has opened doors for a new way of working, like duo therapies or rehabilitating using challenging and playful interactions. In close cooperation with specialists in care, the Nebula has already been successfully implemented in the complex care, such as speech therapy, occupational therapy, and physiotherapy.

Experience
Nebula's impressive light effects and playful interactions attract the attention of both young and old and guarantee a unique experience. The variety in games and product sizes provide endless possibilities. This allow you to use the Nebula in any context, whether it is a big event, a game hall, or a more relaxed public place.

Learn
Children emerge in the wealth of challenges the Nebula offers in the area of education, social interaction, competitive gaming and motor skills. They can play educational games without supervision and the broad range of content keeps the Nebula challenging and fun for all ages.

About NYOYN
NYOYN is a creative company which designs and develops future proof products and projects where interaction and user experience are at the core. NYOYN is the developer of award-winning products such as the SoundSteps and the Nebula, products which are used worldwide in educative, healthcare and play oriented settings.

With a creative and hands-on approach towards technology NYOYN has significant experience in developing hardware and software for various interactive systems. This unique combination of hardware and software allows for the development of intelligent systems. Software is often a part of the project, but it can also be the final product. Serious games for education and health care, developed with experts from the field, are a good example of this.

The context of use

Well-being: e.g. day care, sensor therapy and low level activities.

Complex care & rehabilitation: e.g. speech therapy, occupational therapy, and physiotherapy.

Experience & social: e.g. hospital environments, waiting rooms.

Learning: Special needs schools, after school care.

Type of play in this play system

Cognitive

Practice
Symbolic
Constructive

Rule play (including videogames)

Social

Solitary
Parallel
Associative

Objectives related to play according to ICF-CY

Play for the sake of play: Major life areas - d880 enagement in play

d8800 solitary play
d8802 parallel play
d8809 engagement in play, unspecified

Community social and civic life - d920 recreation and leisure time

d9200 play

Play-like activities: Therapeutic and educational objectives

b1 Mental functions
b2 Sensory functions and pain
b3 Voice and speech functions
b7 Neuromusculoskeletal and movement related functions
d1 Learning and applying knowledge (learning through symbolic play, learning through pretend play)
d2 General tasks and demands
d3 Communication
d4 Mobility

Number of participants

1-5

Chronological Age

0-3 years
3-6 years
6-12 years
12-18 years

Development Age

0-3 years
3-6 years
6-12 years
12-18 years

LUDI Categories of disabilities

Mental/intellectual impairments::
mild
moderate
severe
profound

Visual impairments:
Partially sighted
Communication disorders (speech and language disorders):
Physical impairments:
Mild
Moderate
Multiple disabilities:

Explanation on the use of low-tech, high-tech devices, services or contexts

Explanation

No instruction, self-discovery of the participant/subject
Verbal instruction, language and communication is adapted
Modeling by therapist/researcher
Prompting: therapist/researcher touches the participant as a key for further actions
Guided discovery: therapist/researcher coaches the participant so s/he discovers how to use the assistive technology

Involvement

Adult: therapist/educator/researcher
Parent or significant others
Peer with disabilities
Peer without disabilities

Evaluation of objectives and outcome measures

Description of outcome measure(s)

Observation by professional/researcher providing the play experience
Feedback from client/parents/professionals

Information about availability of outcome measure: publisher, website, contact person

Please contact info@nyoyn.com for more information regarding evaluation experiences.

Summary of achieved effects

Winner of multiple innovation and design awards in care & ICT environments Successful implementation in multiple large rehabilitation centers, care organizations and hospitals. Continuous development of rehabilitation and care applications in cooperation with care professionals. Improved intrinsic motivation in clients (adults and children). Improved therapy results. Duo-therapies.

References to the intervention or research project

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Keywords

Nebula, interaction, design, light, wall, touch, games, rehabilitation, therapy, care, health, well-being, experience, play, motivation, learning, complex care, speech therapy, occupational therapy, physiotherapy, innovation, nyoyn