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# Healing Cocoon

## Sponsor

The sponsor of this project is Instituto Superior de Engenharia do Porto. ISEP

## Project Brief

The goal of the Healing Coccon is a self-contained immersive pod designed for hospitalized children to escape into a fully personal sensory world. By stepping inside the cocoon, children are surrounded by projected visuals, ambient sound, and therapeutic scents that create a safe, isolating them from the clinical environment and reducing stress, anxiety, and pain perception during their hospital stay.

The project requirements are:

1. Our project requirements:
    1. Therapeutic Design: Create an enclosed, calming sensory environment that emotionally disconnects the child from the hospital setting during use.
    2. Smart Technology: Enable content personalization, drawing-to-projection features and caregiver app integration.
    3. Modular & Scalable Design: Ensure the cocoon is easy to assemble, transport between rooms, and adaptable to different content and hospital needs.
    4. Energy Efficiency: Optimize power consumption for continuous hospital use.
    5. User Accessibility: Design the entry, interior space, and controls to accommodate children

of all ages, sizes, and physical conditions, including those with limited mobility.
    6. Health & Safety Compliance: Meet European regulations for medical-grade electrical equipment, enclosed-space ventilation, and infection control standards.
    7. Durability & Hygiene: Ensure all interior and exterior surfaces withstand regular clinical disinfection without degradation.
    8. Business Feasibility: Consider cost-effective production, hospital procurement and storage constraints, and long-term operational viability.
2. Comply with the following EU Directives:
    1. Electromagnetic Compatibility Directive (EMCD);
    2. Low Voltage Directive (LVD);
    3. Machinery Directive (MD);
    4. Radio Equipment Directive (RED);
    5. Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (ROHS);
3. Mandatory adoption and use of the International System of Units (The NIST International Guide for the use of the International System of Units)
4. Use open source software and technologies.

# Participants

**Institution**: Instituto Superior de Engenharia do Porto

**Team N.**: 6

**Students**:

- Ronja Kruse
- Hanna Kaczmarek
- Julie Bonnet
- Kemal Yilmaz
- Anouc Daindu Goedhart
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**Client**:

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# Contents

Milestones Milestones

Logbook: Weekly Report, Meetings, Activities

Report: Report

Deliverables: Links to all deliverables

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# Utilities

- DokuWiki Syntax
- Videos on how to use DokuWiki

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