Having fun at THE Port Hackathon@CERN
Sophy team

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IT LIGHTNING TALKS
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THE Port Hackathon

- THE Port an association born at CERN
- Hackathon - Problem-solving workshop
- 8 topics (and 8 teams :) in this edition
- 6 weeks preparation + weekend 60 hour final hackathon to build working prototypes and tangible solutions for real-life humanitarian problems.
Pior 58: Sophy Team

- Our topic: Sonification & Gamification of Physiotherapy
- 1 coach + 3 mentors with expertise in the fields
- 6 participants from different countries with different backgrounds
- Hard work (2 prototypes): Programming, electronic devices..
- Lots of fun!! :)

Lots of fun!! :)

[Image]
Our problem

Challenge: To motivate patients to stick to the physiotherapy program routine when facing...

• Boredom
• Lack of feedback
• Social Isolation

• ... but physiotherapy is one of the most powerful tools for maintaining physical health!
Our Solution
Final prototype

**SOPHY**
- Sonification
- Turns finger movement into music
- Quantifies key variables associated with performance
- Data can track performance over time networked, and informs physiotherapist of patients progress

**HAPHY**
- Gamification
- Measures ball squeezing
- Measures ball orientation
- Provides vibration with desired performance interfaces with virtual reality for gamification
- Also provides data to the patient and the physiotherapist
My impressions

- Amazing experience
- People brainstorming
- Very hard work (and time)
- Satisfactory results
- Lots of fun :)
- Looking forward to the next one!
http://theport.ch/home/the-port-2016/

Many thanks
QUESTIONS?