



Progress Report 1 :

Requirement Analysis

Team Number 37: Fizzyo Gaming Team 3

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Introduction

Most children who suffer with cystic fibrosis tend to avoid monotonous treatments, which take at least an hour a day, severely harming their health and chances at recovery. **Project Fizzyo**, by Microsoft Research in collaboration with University College London Institute of Child Health (UCL), aims to make the treatment process more fun by introducing interactive games for children, controlled by their breath. This promotes essential physiotherapy, and will hopefully lead to children being more incentivised to complete the treatment, and improve their health.

Problem

The main problem that Project Fizzyo is trying to combat is that children are forgoing essential treatments, due to the fact that they are repetitive, monotonous, and boring. This negatively impacts their health, and the effectiveness of their treatments. The children who do undergo the treatments often do not have a way of knowing the quality of their breaths, and receive no immediate feedback.

This also means that doctors or other medical professionals have no way of monitoring the children's performance.

Goal

The goal of the project is to build a fun game for children suffering from cystic fibrosis, which can be controlled simplistically: with their breath and a button. This will promote proper breathing practises and exercises, and lead to a more effective physiotherapy treatment. The game should retain the children's interest; and cannot lose its appeal quickly. It should also be accessible and practical to use for children.

It project should provide a platform for medical professionals to monitor and gauge children's progress, and check if they are completing their treatments as many times as required.

Persona

The project is targeted towards children suffering from cystic fibrosis, and undergoing physiotherapy treatment. The children will be of ages 6 to 16 years old.

Requirements

Must Have

- ✓ Interface with the device used for treatment
- ✓ Simplistic controls
- ✓ Intuitive features to retain interest
- ✓ Easy to use menus and guidance
- ✓ Promotion of interaction and getting involved
- ✓ A way to rate the quality of breath taken
- ✓ A feedback system on the quality of breath taken
- ✓ A sign-in system, allowing for recording progress online

Should Have

- * Achievements and goals
- * Random drops/power-ups

Could Have

- ? Social platform
- ? Leaderboards

Won't Have

- ⊗ Too many controls
- ⊗ Intensive competitions
- ⊗ Penalties for pausing breath