The Peeble

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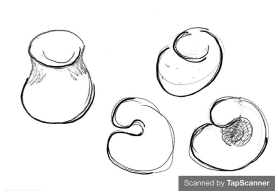
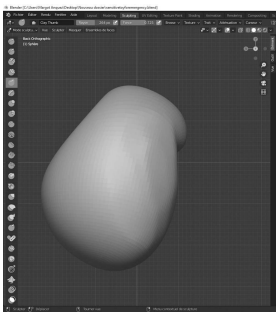
The design is meant to replace the red emergency button at the hospital. It offers several functionalities and allows the nurse to understand the patient's degree of emergency and cater to their needs, and helps the patient to calm down while waiting.

The context

We noticed that while having a crisis at the hospital the patient has only one way to contact the nurse : they must push the red button behind their head. But this has three issues, first it's difficult to reach it when they have a tetania crisis for example, or difficulties to move. Secondly, it is only sending one signal, and no notion of intensity of the urge. And finally, the patient can not know if it worked and if the nurse is on their way.



Sketches for the Peeble's design.



The 3D design on blender.

The mold we used for the silicone.

An exhibition vue (the box, the device, the instructions).

Narrative

If the patient is having a crisis, they can shake the Peeble, softly to send the message that they need to see someone, or strongly for the emergency message. If they can not move, they just have to push the device on the floor and it will automatically send the message.
A lightbulb in your room will turn red when the message is sent.
While waiting, the device will say confort things to you, and offer to play music ; you can interact with it by clapping in your hand.
If the nurse is on their way,the light will turn yellow, and if they are coming in a few seconds, it will turn green.
If they're angry and frustrated because of the wait time, they can throw the device into the wall and it will apologise and be silent.

Storyboard

The patient can listen to it.

The patient can squeeze it.

The patient can shake it to call for help.

The patient can throw it.

How it works

The object is powered by an Arduino board. Various sensors are inside. Those inputs are processed by the board in order to convey signals to the nurse, via a bluetooth protocol.

Materials & tech

PLA
Silicone
Arduino board
Light bulb