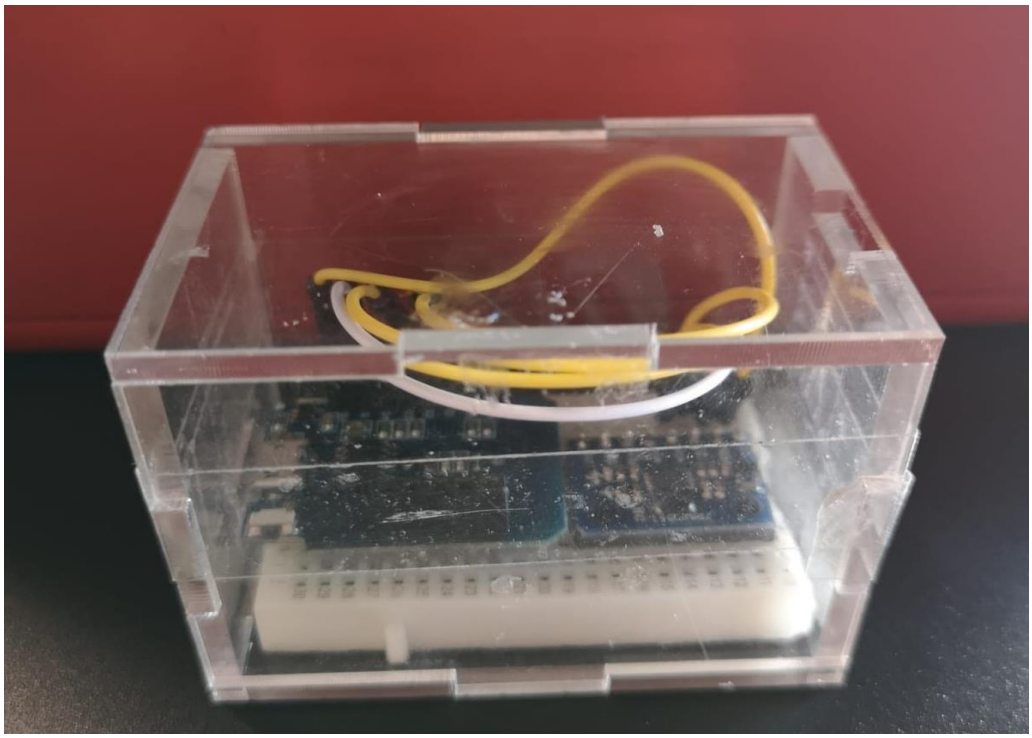
BALANCEBOT

BalanceBot is a project born from an idea of Russo Alessandro, Aime Giacomo e Peirone Matteo.
BalanceBot consists of a device that has to be posed on a proprioceptive platform, that would support the operator while doing his exercise of rehabilitation.
The module creates an hotspot, which makes it possible to access, with your own device, to the website.
On this website there are two different options: you can draw the balance graph, in which the inclination of the board is shown in real time along the longitudinal axis, in order to measure the distance from the horizontal position, and you can play an interactive game based on the movements of the board, appropriate for children, teenagers and adults looking for a funnier rehabilitation!

Technical dossier

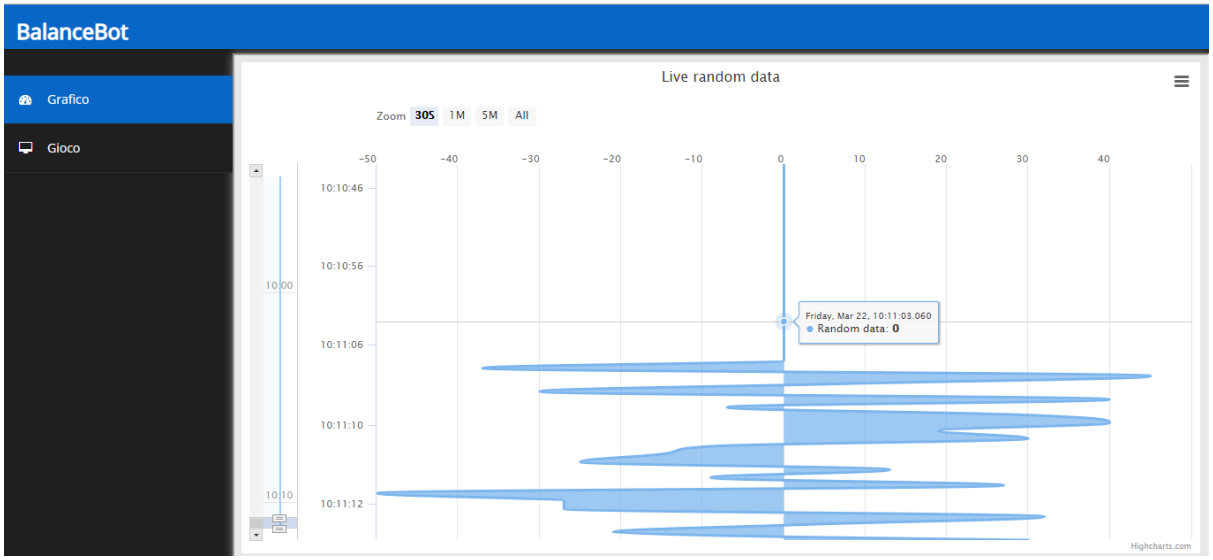
components of BalanceBot :

- wemos
- chip gy-521 (with, internally, the compass, gyroscope, magnetometer..)
- alimentation



Construction / development:

Everything has been assembled inside a box of 60*40*45 cm.
We have linked the wemos to the chip gy-521 and after setting up the alimentation circuit in the right way, we began to work on the code; we have created the website using a Bootstrap page for the front-end part and creating a Javascript for a Websocket so that the device can communicate with our BalanceBot.



We have adapted a funny game made up with Html, Css and Javascript so to make the rehabilitation more interactive.