**User Manual**

**1. Intrduction to B.o.b**

B.o.b stands for Bertrandt-office-bot.

He will be used for operating and assisting around the office.

Its primary use will be to bring coffee to a very thirsty Employee.

He will be doing that autonomously using image detection and Machine Learning.

B.o.b is approximately 60 cm long and 30 cm wide.

B.o.b has a camera mounted to a pole at approximately 1.2 Meters so its view is not obstructed.

B.o.b uses two Motor drivers which are connected to the two motorized Hoverboard wheels to steer.

At the front he uses a single wheel to stabilize.

You will also be able to drive B.o.b using a XBoxOne controller.

**2. User interface**

B.o.b will be using a very simple Button Layout to allow for an easy introduction to the Product.

**Button Layout**

Left Joystick Steering

Left Shoulder Button Accelerate

Right Shoulder Button Decelerate

B Button Emergency Stop

Y Button Stop Movement

Ein Bild, das Gamecontroller, Joystick, Eingabegerät, Elektronisches Gerät enthält.

Automatisch generierte Beschreibung

**3. Start-up Step by Step**

1. **Connect internal battery**
2. **Connect Raspberry Pi to Powerbank**
3. **Power on the Xbox Controller**

**The Program will start automatically and you can move B.ob**

**According to the button layout.**

**To stop the Program just press the B-Button.**

**If you want to restart the program use**

**cd BOB/src/catkin\_ws/src**

**roslaunch bob XBoxController.launch**

**4. Safety Warnings**

* Do not put heavy Objects on B.o.b
* Do not stand directly infront of B.o.b
* If at any time B.o.b gets out of control push the Emergency Stop button
* Only use B.o.b on flat terrain
* When not using B.ob disconnect the internal battery