

Novadrink V1

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Novadrink is a *robotized drink dispenser* based on Telegram, Python and Arduino.

On telegram, once logged-in, you will find an easy-to-use bot that will help you order your drink!

Most of the robot parts have been 3D printed with FLSUN Q5

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Novadrink relies on a safety feature designed in order to prevent youngsters to buy alcoholic drink:

The script, included in "Admin Telegram Bot", the bot that adds or removes user from the database, scans the barcode of the "*italian sanitary service card*", and gets the exact date of birth of the user.

Once got the date of birth, the script gets the current date and calculates the age of the user.

Each attempt of login-in will start another check of the date of birth of the user, so if you are gonna be 18 in few minutes... don't worry!

The project is based on Telegram with two bots, one for logging new users and another to allow them to order their drink.

In this case all data is shared on a mysql database hosted on my personal pc.

The database has 3 different sub-tables:

- Customers
- Black List
- Ordered Cocktails

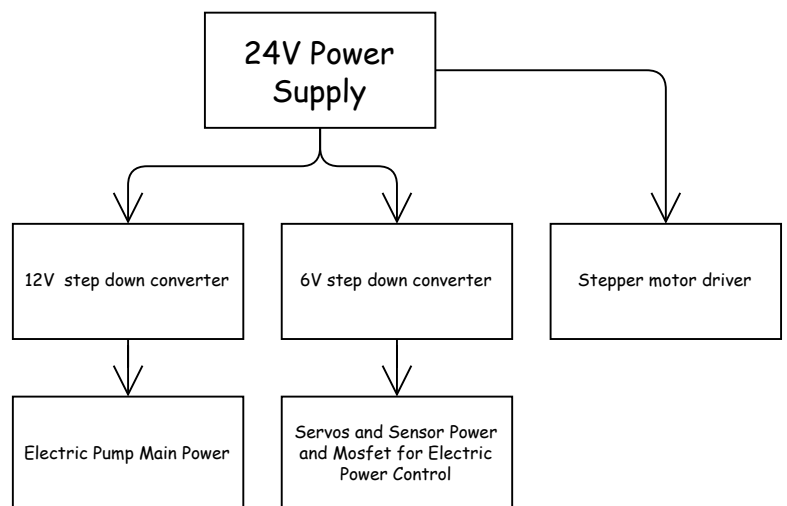
Blacklist is used in order to avoid overflow of the robot, each user can order his drink every 10 minutes.

Python Script then communicates **via serial interface** with arduino.

Arduino is connected to a PCA9685 (a driver for servos), and to a stepper motor driver.

The electrical scheme is very simply: there are

- 12V power for electric pumps
- 6V power for servos and sensors
- 24V for the stepper motor



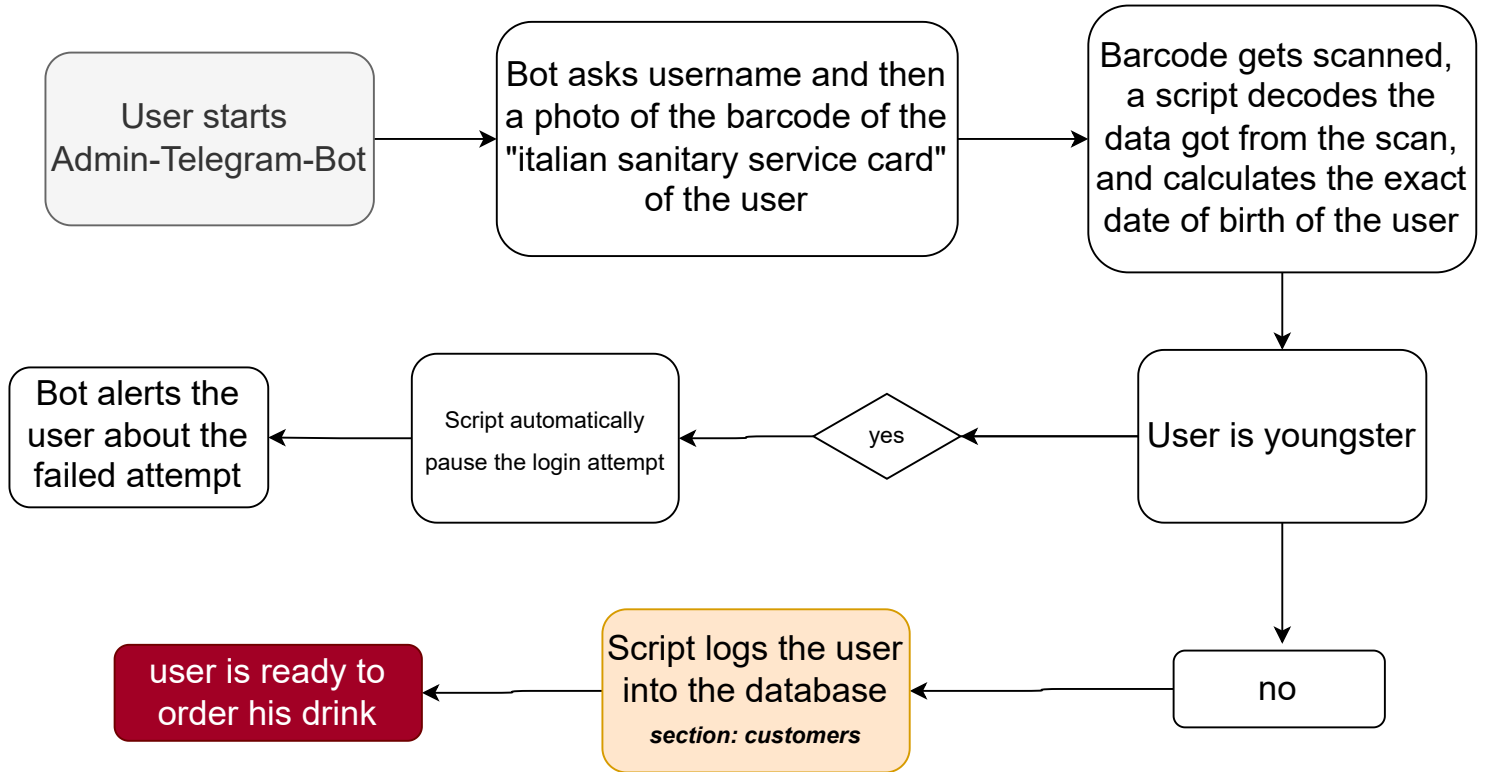
Novadrink is entirely designed and coded by me, except for:

- Cup Dispenser designed by ThatRobotGuy
- Braccio designed by Overlord71

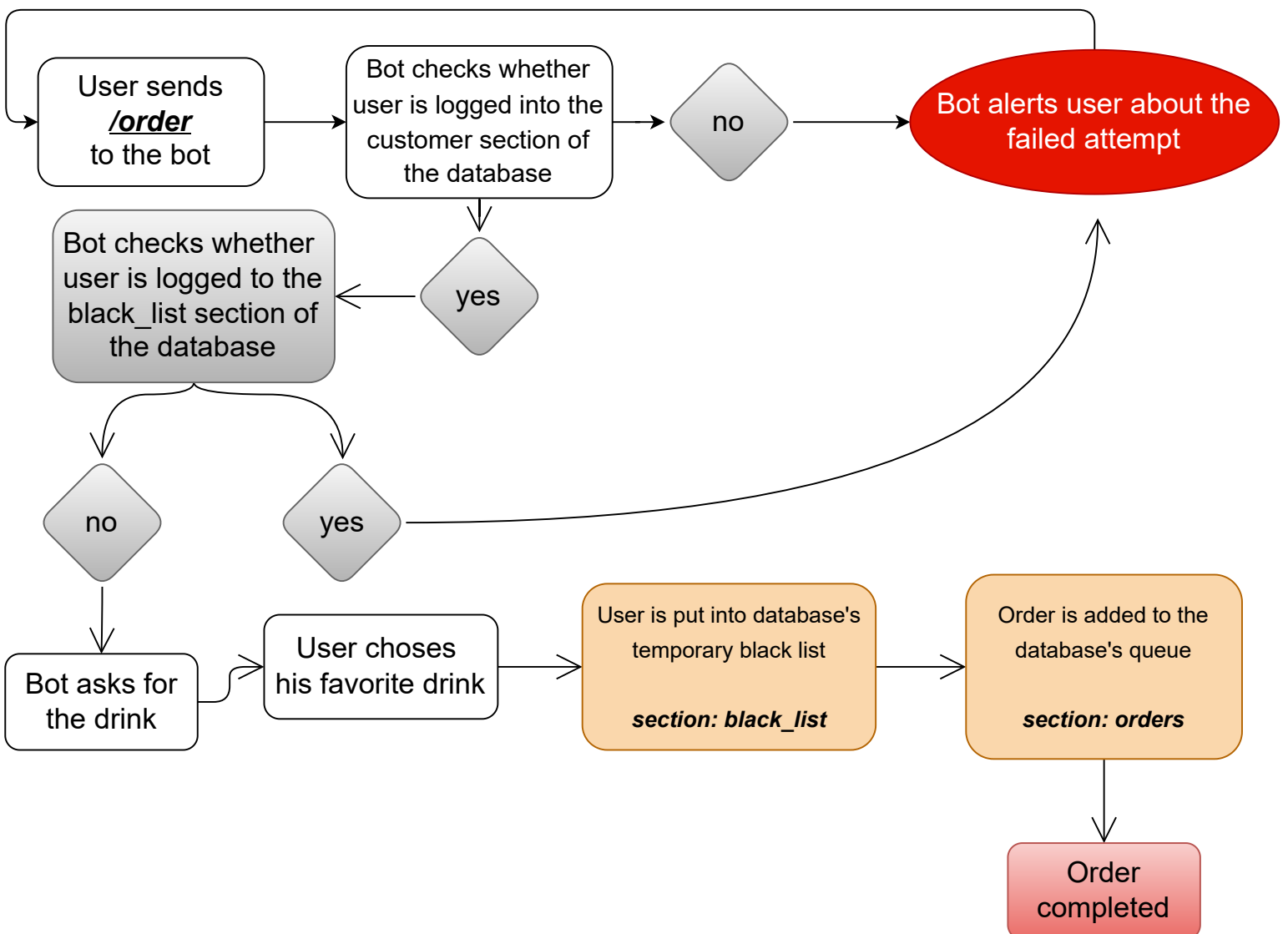
giuseppebarberaph@gmail.com

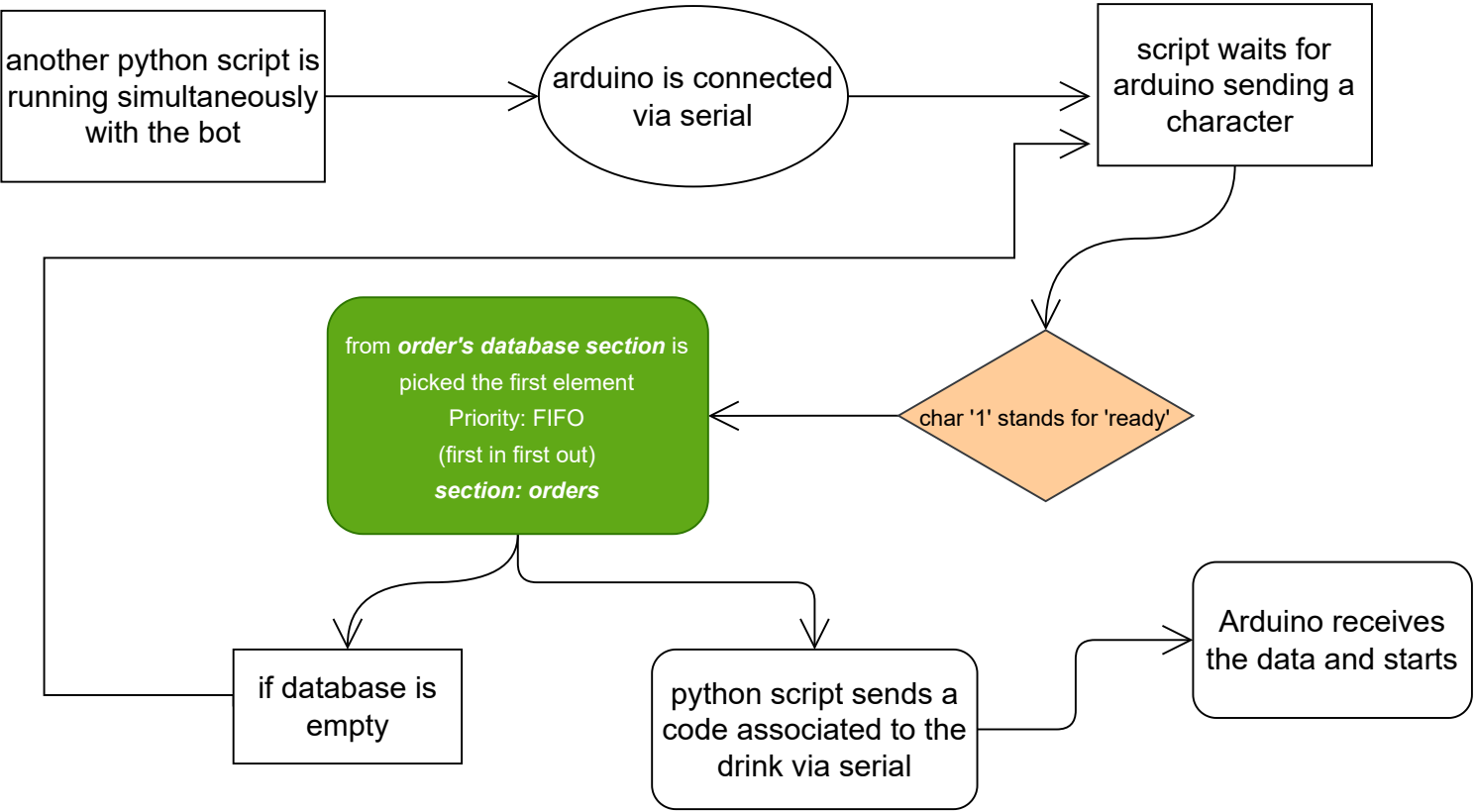
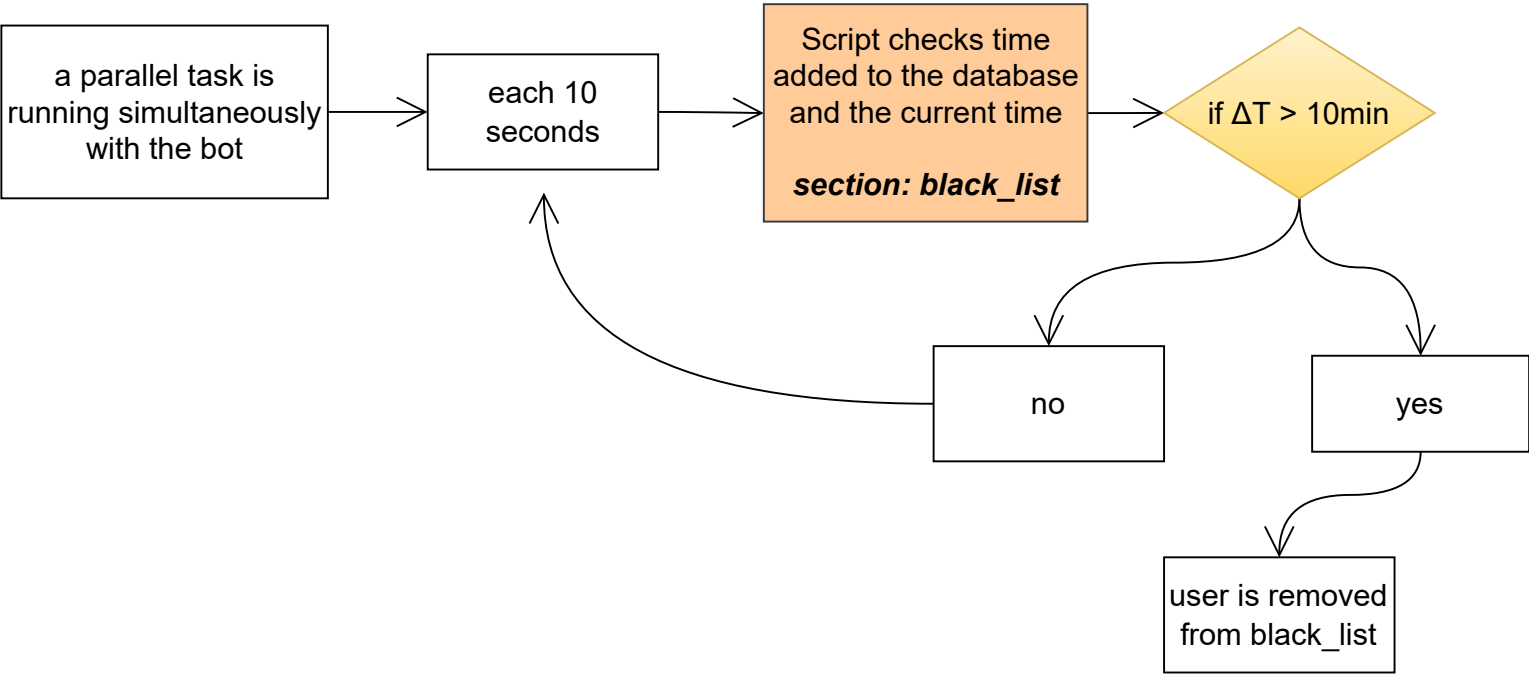
Giuseppe Barbera

Admin Telegram Bot

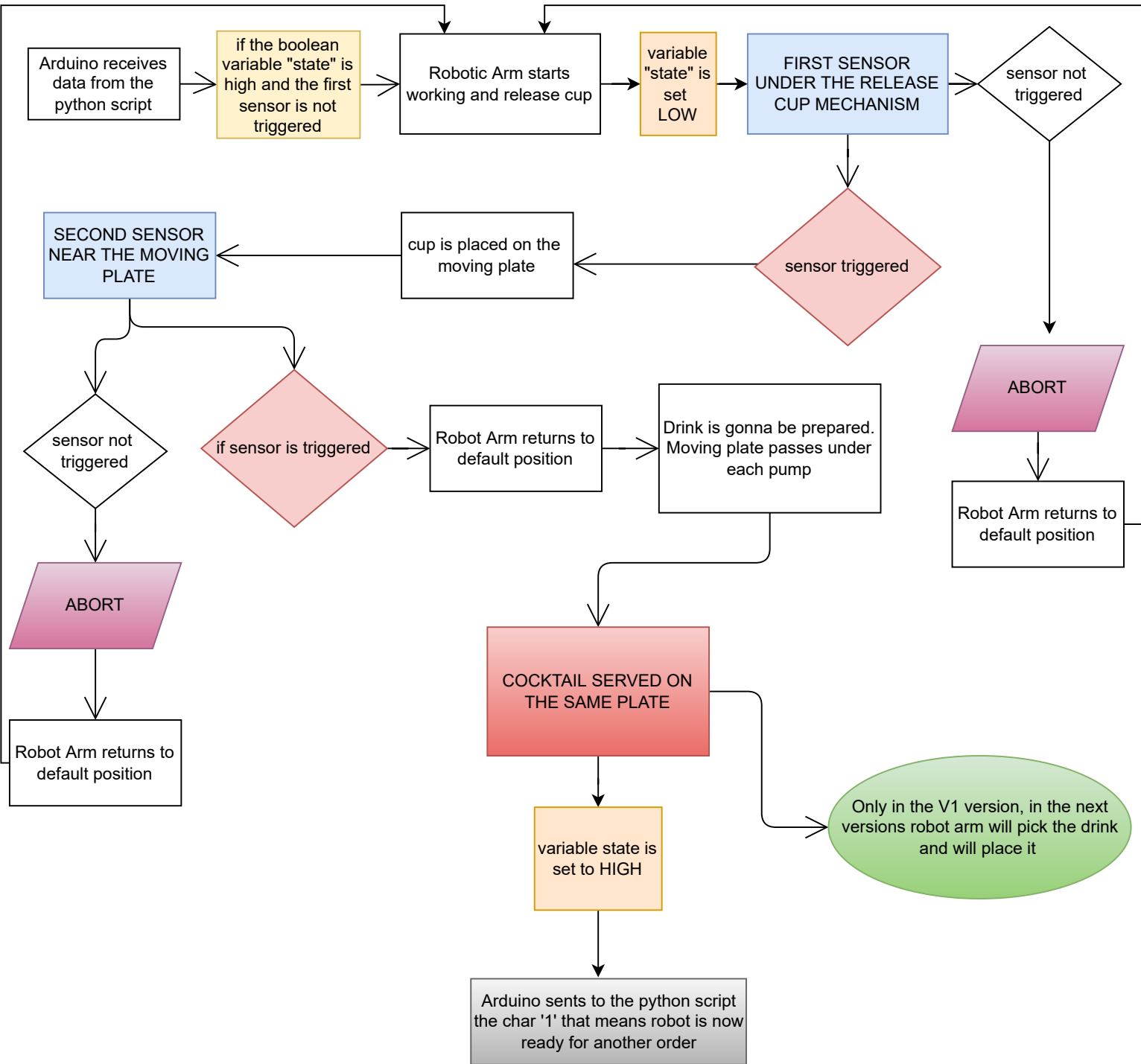


Client Bot





Arduino Logic Scheme



ATTENTION



when abort occurs
Arduino stops and restarts
over and over again until
cocktail process is fully
completed

V2 will have a counter, so
that after 3 processes
aborted, admin can fix the
problem directly