OTTO robot

Otto robot a mini robot, its contolled via a mobile app to perform movements:

- go forward
- go backward
- go left
- go right

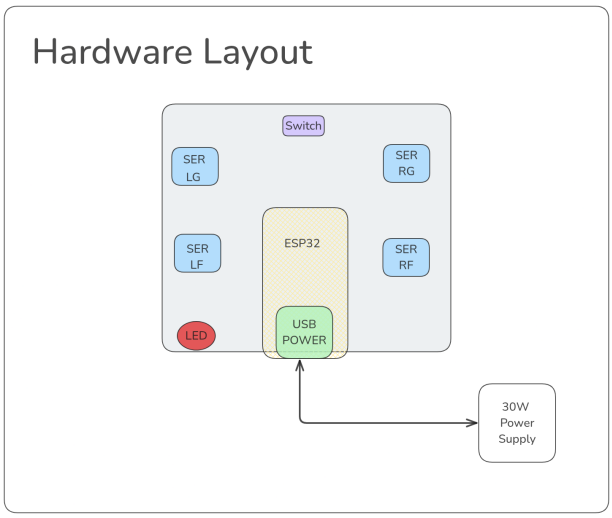
This project was initiated by 4C-ISI, they provided the 3D printed parts of the robot, and we assembled and brought life into the robot.

Materials:

The materials used are :

- ESP32
- 4 Servo motors
- 1 ultrasonic sensor
- LED
- Switch

The is a hardware overview



> **Important:** the main issue we faced, is power.

How we can provide power for the robot.

The stright forward approached we followed is to provide power via a noram USB and a phone charger (SAMSUNG)

once we added Bluetooth, the ESP32 stated rebooting, we are consuming more power than the charger provieds so, we saught to uppgrade the charger.

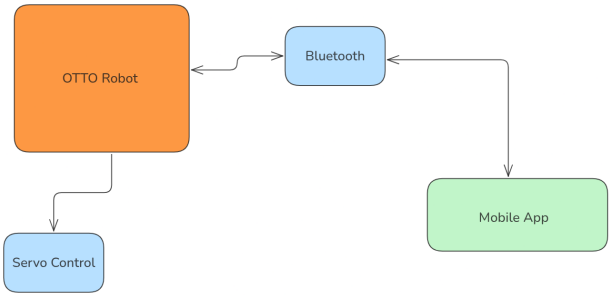
The best sollution we have found is **30W charger**.

For the best performance **YOU NEED TO POWER THE ROBOT WITH 30W CHARGER**.

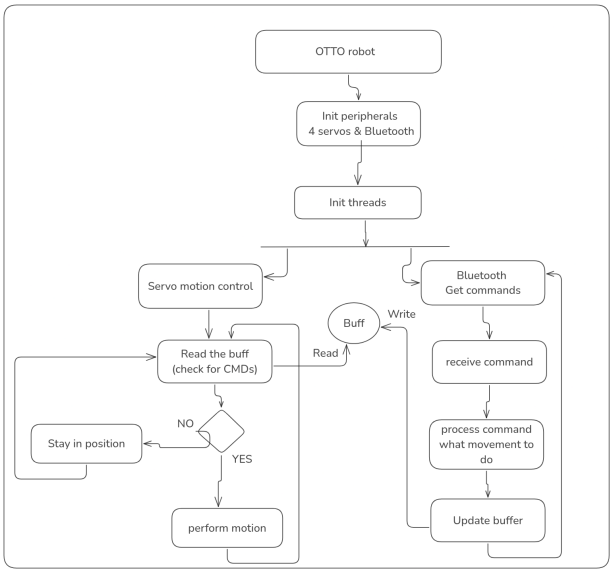
We are looking to power up the robot with a battery, but its under development.

How does the Code works

this is an oveview of how the code works. As i have said before we get the commands from a mobile app via bluetooth, then we handle those commands accordingly so the robot moves.



Above is a general design on how we approched the requirement.



What is next:

- Find a sollution to power up the Robot from a battery.
- Create a PCB for the robot.
- Add support for the Ultrasonic sensor.