Embedded project 1 – Low level programing and unit tests

Purpose

The purpose of the project is to refresh my low-level programing knowledge. I will do this by programing a nRF or Arduino nano card to control a RC with my own written code for Motor drivers and communication with my sensor with as little assistance from libraries as possible.   
I will also write unit tests for my code to get more used to write unit code for all my programs.

Material

* Arduino nano or nRF MCU
* Raspberry pi zero
* Ultra sonic sensor
* Motors with encoders 2x
* RC platform
* Adapter
* Camera

Background

The RC will be assembled as following with the MCU controlling the RC while the RBP (raspberry Pi) acts as the brain.

En bild som visar diagram, linje, Plan, Teknisk ritning

Automatiskt genererad beskrivning

Tech stack

The MCU will be programed with C and C++ and have an interface and mod layer.

The RBP will mainly have python scripts for decision making and if I integrate a camera this is there that code will be.

En bild som visar diagram, text, cirkel, Teckensnitt

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