Beskrivelse av Real-Time prosjekt

DSA3102-1 20H Intelligente sanntidssystemer

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Group members

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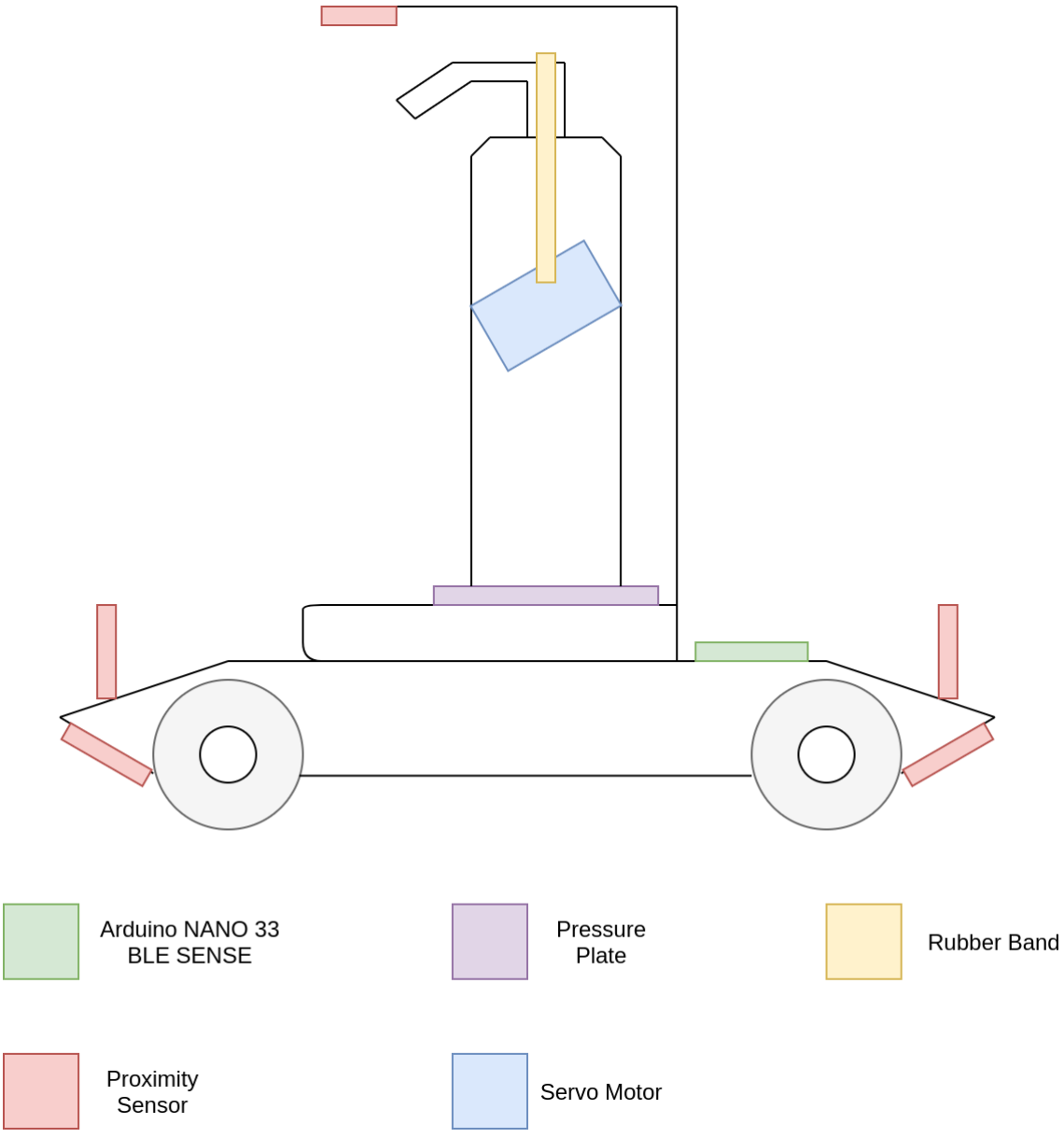
Description

Autonomous vehicle with attached antibac for driving on tables or floor.
Proximity sensors forward/backward and sloped forward/backward.
It has servos to automatically dispense a small amount of antibac if a hand is detected. It has a pressure plate to detect if the antibac is empty. When the antibac container is running low, the car will trigger an alarm.

Initially the car will drive in a random direction until it either meets a wall or a cliff, which will result in a change in direction. It will over time build a map of the area, and therafter visit each possible location in sequence, perhaps by making use of a graph theory algorithm like Dijkstra.

Prototype drawing



Hardware

- Four wheels
- Chassis
- Wheel steering
- Rear wheel drive
- Weight sensor / pressure plate
- Four or five extra proximity sensors
- Two servos for squeezing antibac

Budget

Vare	Pris	URL
Antibac	119,9	https://bit.ly/3hdS8GH