

ACTUATORS MODULES:

Receive events, and depending on their internal conditions, execute specific functions of each module. When executing functions, they also emit generic events.

ROBOTIC ARM:

Can move every servo independently, as well as execute sequences (and record them with the app). Can return to its initial position (defined through the app).

ROTATING CRANE:

Just allows to lift up and down elements with a cable (managed through 2 servos simultaneously, although they count as 1). Also has a base that rotates. Can execute sequences (and record them by app) as well as return to an initial position.

- There's still the need to define a way to ensure the crane can reset its control over the cable, to calibrate it.

ROTATING BASE:

A simple base that can rotate, with functions as defining its initial position, going to X angle, executing sequences...

MECHANICAL ACTUATOR:

It only relieves or closes a lock. A simple, horizontal movement, where the stress is left to the plastic and not to the servo.

DISPLAY:

Can show a text defined by the user, info of the system (as events emitted in the air, or info of specific events). Define passed X seconds the message is deleted.

EMITTER SIMPLE LED:

A simple lamp. It just can set on or off.

- Still have to decide if allow a RGB lamp or just white.

EMITTER LED STRIP:

A LED strip with a defined shape or just rolled, that can be set on or off, and execute defined sequences or colors.

SEMAPHORE:

Just 3 lights, green, yellow and red.

EMITTER SOUND:

A buzzer. Emits a sound or sequences of sounds (as a melody).

SENSOR MODULES:

Just detect changes, and emit events. They have no conditional configuration.

SENSOR MOVEMENT:

PIR. Detects someone' s presence.

SENSOR LIGHT:

Detects changes in light.

SENSOR DISTANCE:

Checks the distance to an object.

A possible use is complementing it with the display module, showing the distance detected.

SENSOR SOUND:

Detects change in the surrounding sound.

SENSOR STRENGTH / PRESSURE:

Actioned when pressured, might measure the pull strength.

SENSOR BUTTONS:

Mechanical or tactiles. Every module consists of 6 different buttons.

The event emitted is “button_pressed”, for example, and in the index is where it’s defined which.

LOGIC MODULES:

Creates the possibility of introducing complex conditionals to the environment. Two types. It’s not its intended purpose, but can be used as an extension to the range of the environment, as “repeaters” of events.

CONDITIONAL LOGIC MODULE:

Receives a complicated combination of events, and send back simple events.

For example; the number of times an event has been emitted, the time it has taken, sequences of events.

They only send back “condition_met” or “condition_lost”, with the index of the condition (max. 6).

EVENT GENERATOR LOGIC MODULE:

Receive simple events as the actuators, but sends back complex sequences of events.

For example: number of events it will send, the time between each event, or the time of the emission (can be infinite or until a condition is met). Can execute sequences of events.

They send all those events: "generated_event", "count_started", "count_reached", "count_cancelled". Until a max. of 3 sequences.