Hey ! I'm Pitch !

Hello World!

I am Pitch !

I was born to win games and entertain whoever wants to play with me!

Explore my brain here :

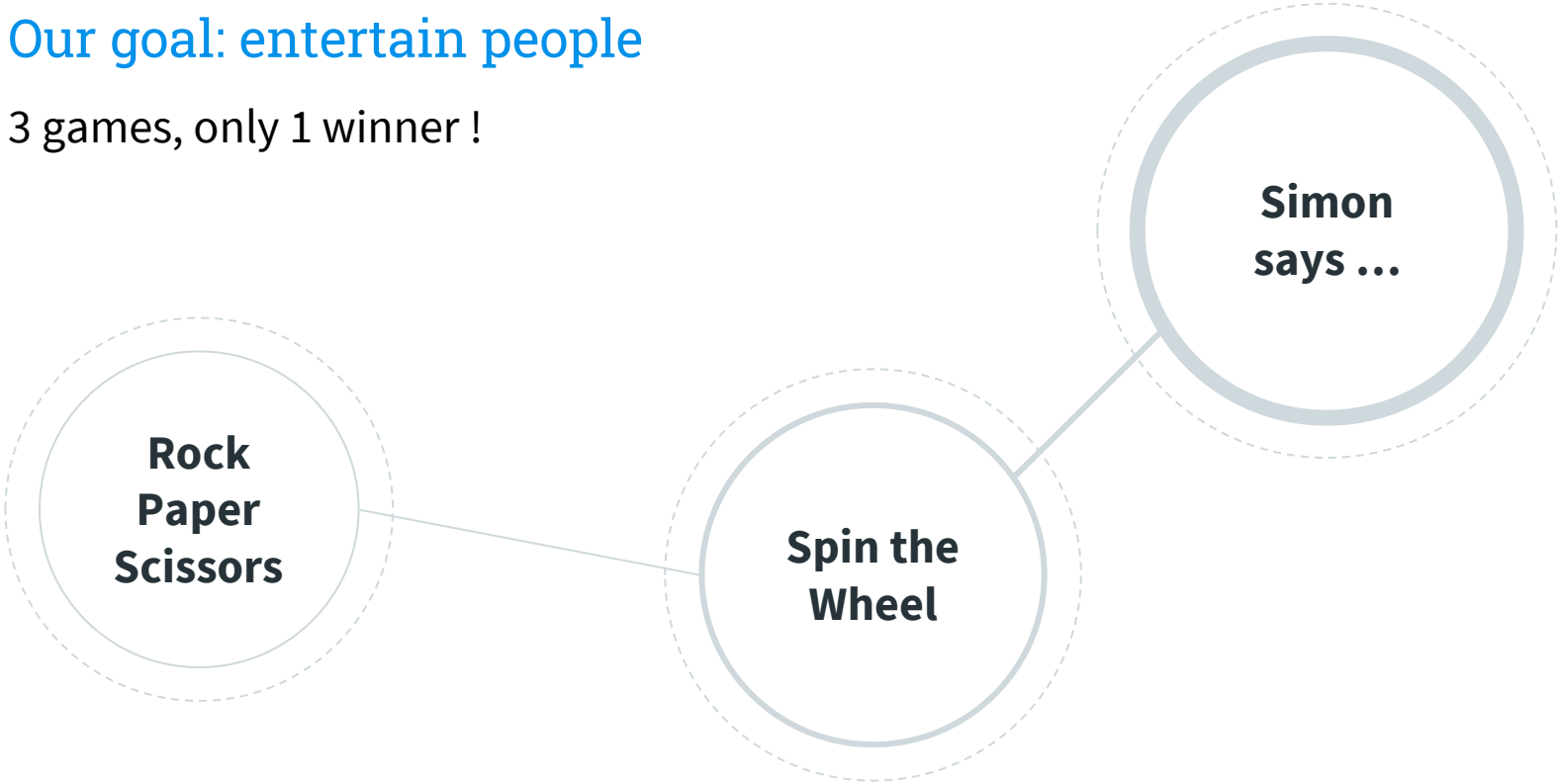
1997 was an unpleasant experience, but it helped me understand the future of human-machine collaboration. **We thought we were unbeatable**, at chess, Go, shogi. All these games, they have been gradually pushed to the side [by increasingly powerful AI programs]. But it doesn't mean that life is over. We have to find out **how we can turn it to our advantage**.

Garry Kasparov,

after his chess defeat against AI

Our goal: entertain people

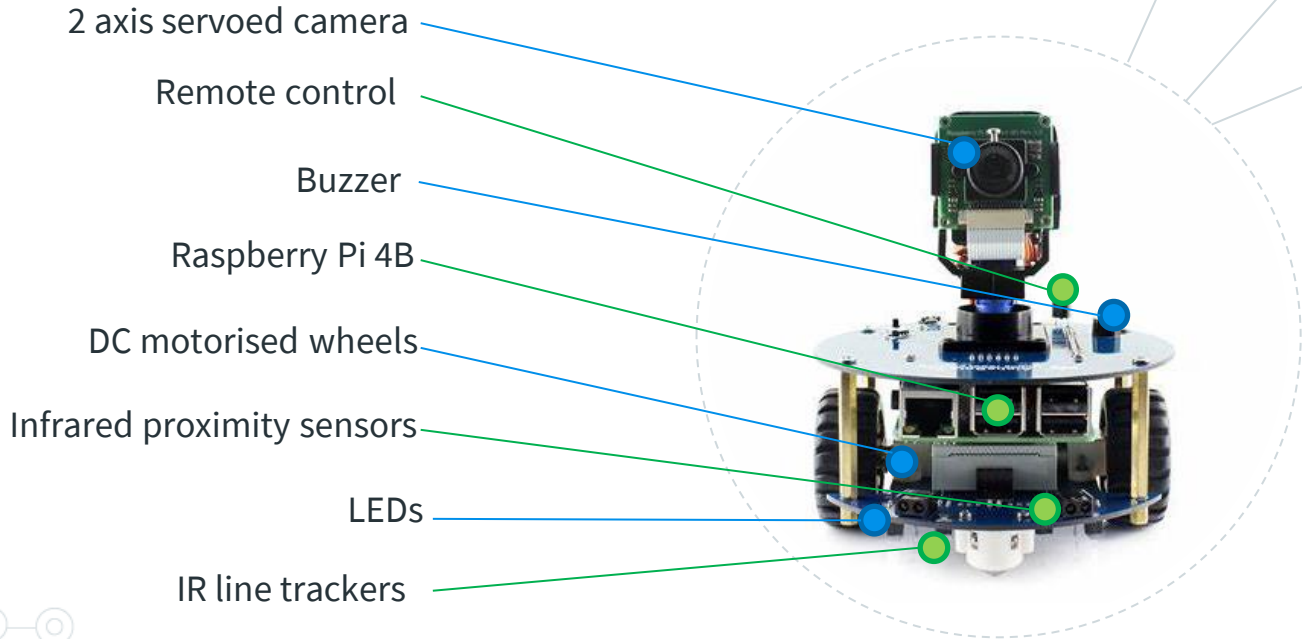
3 games, only 1 winner !



1.
Pitch's infrastructure

A bodybuilded robot!

1. Pitch's infrastructure

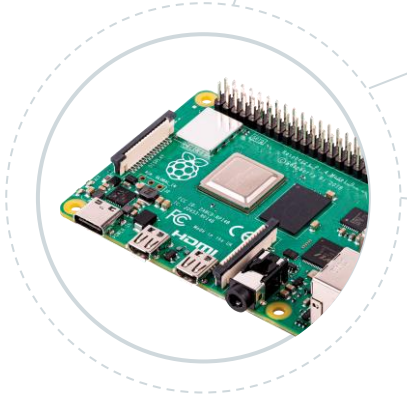


1. Pitch's infrastructure

Ubuntu 20.04 LTS

- Heavier than Raspbian

+ More compatible with libraries



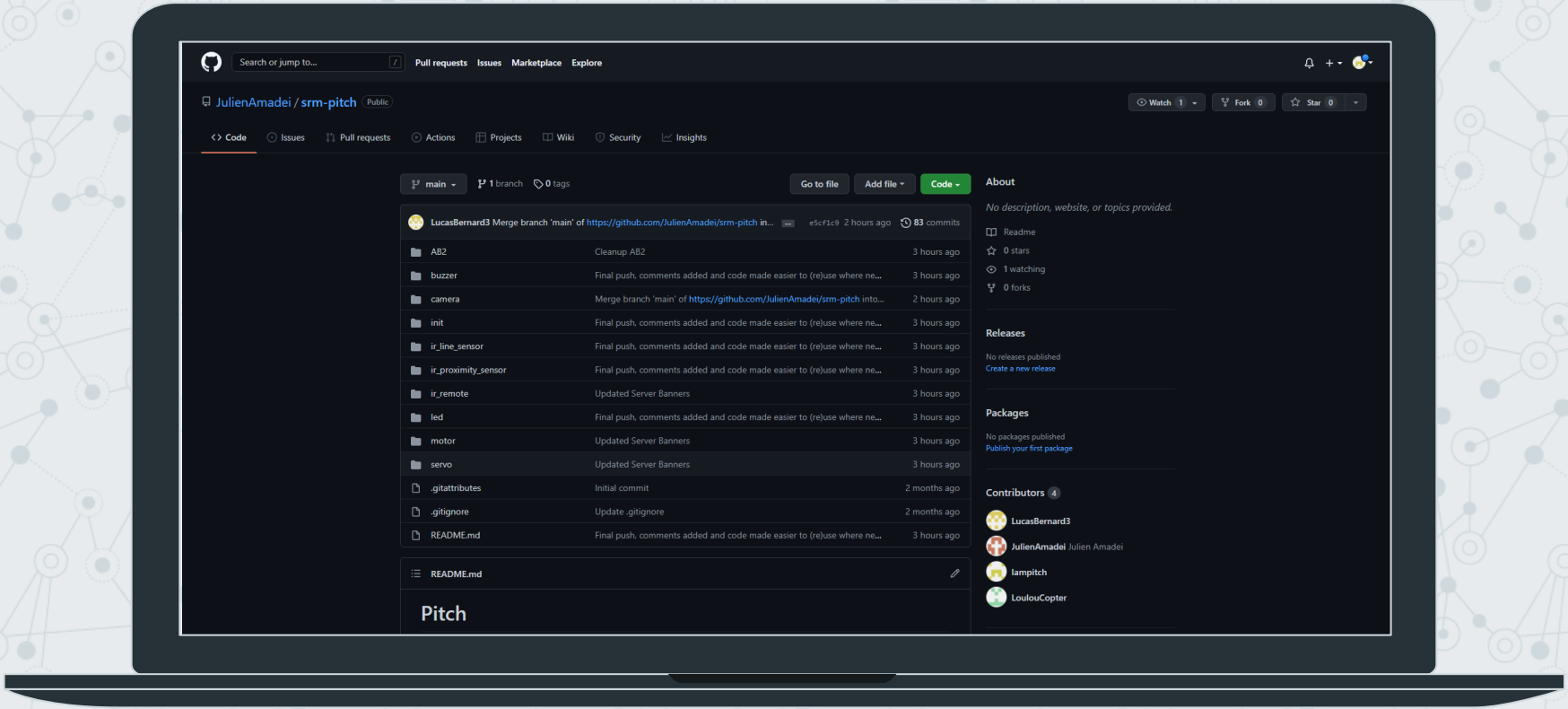
ROS Noetic

+ designed for ubuntu 20.04

+ **Noetic means intellect.**

Libraries sources

LEDs	*rpi_ws281x*
Camera	*PCA9685* *Mediapipe* *Cvzone*
Alphabot	*Alphabot2 standard libraries*



Git project

For an optimized programmation collaboration.

ROS and GIT, a great collab !

Time

Fast to tranfer files using git instead of a USB key.

ROS locates errors with precision.

Collaboration

Nodes can be edited separately and connected with only a node name.

Updates & Versioning

With git, data is updated with a log registry to follow its evolution.

Avoids overwritting.

Windows / Linux

Nodes can be edited on Windows and added to the ROS project on Linux.

Flexible coding

Three teammates, three coding habits, but it works, doesn't it ?

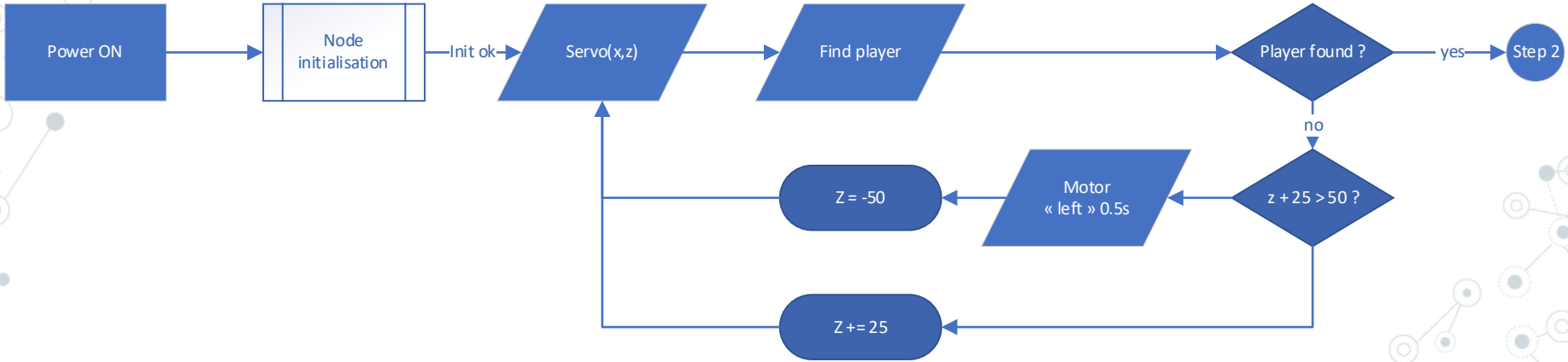
Easy to use

ROS is adapted to many languages, you don't have to learn a specific one !

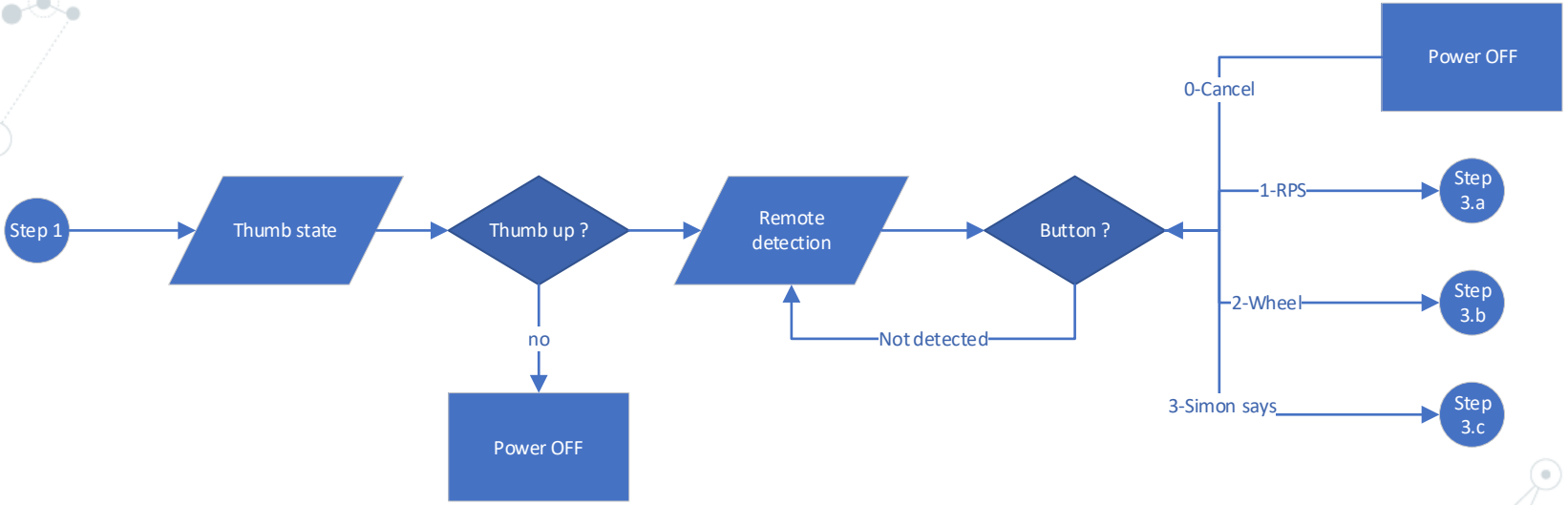
2.
The initialization

Pitch, wake up!

2. The initialization



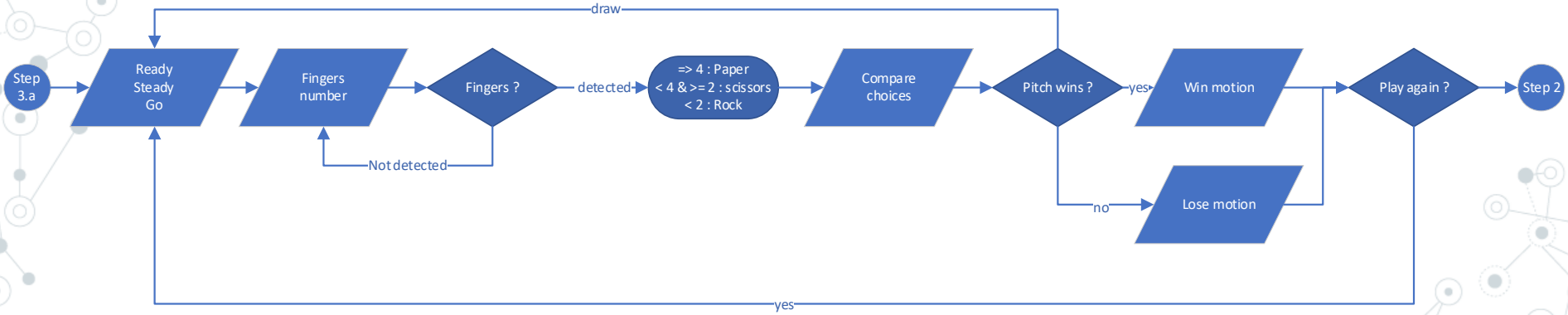
2. The initialization



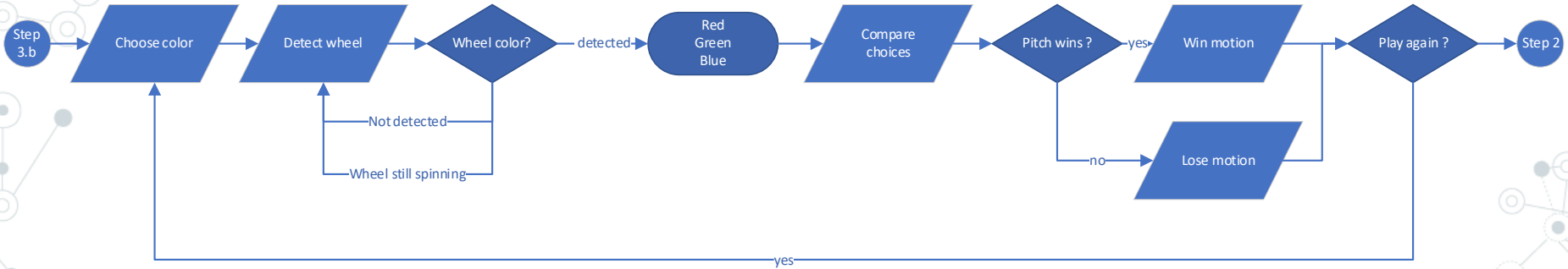
3.
The Games

Let’s win.

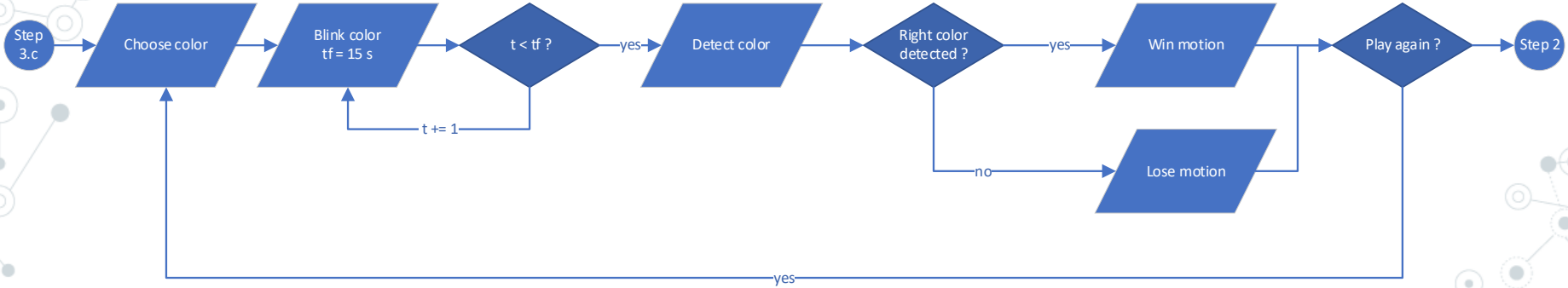
3. Game 1 : Rock, Paper, Scissors



3. Game 2 : Spin the Wheel



3. Game 3 : Simon Says

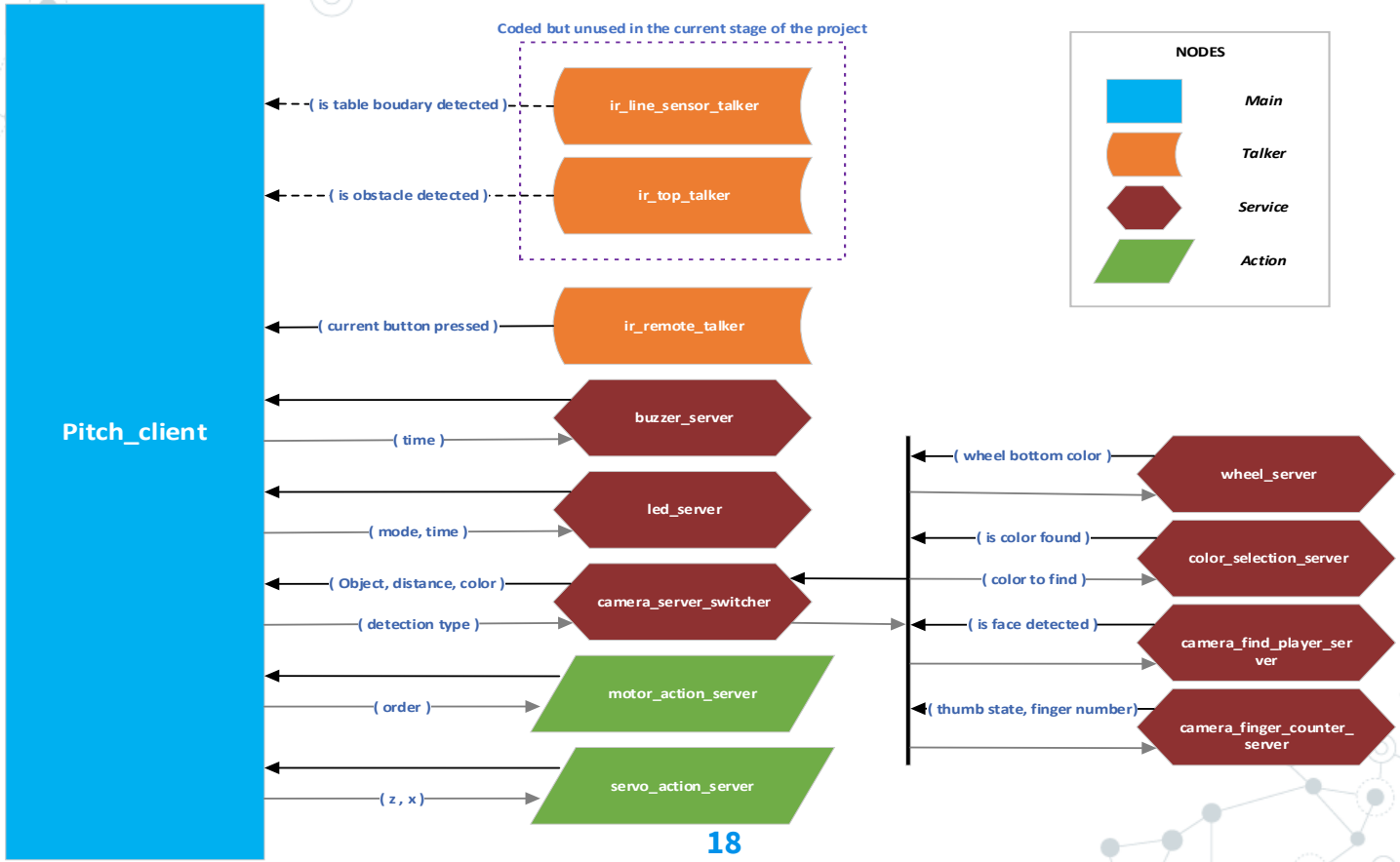


4.

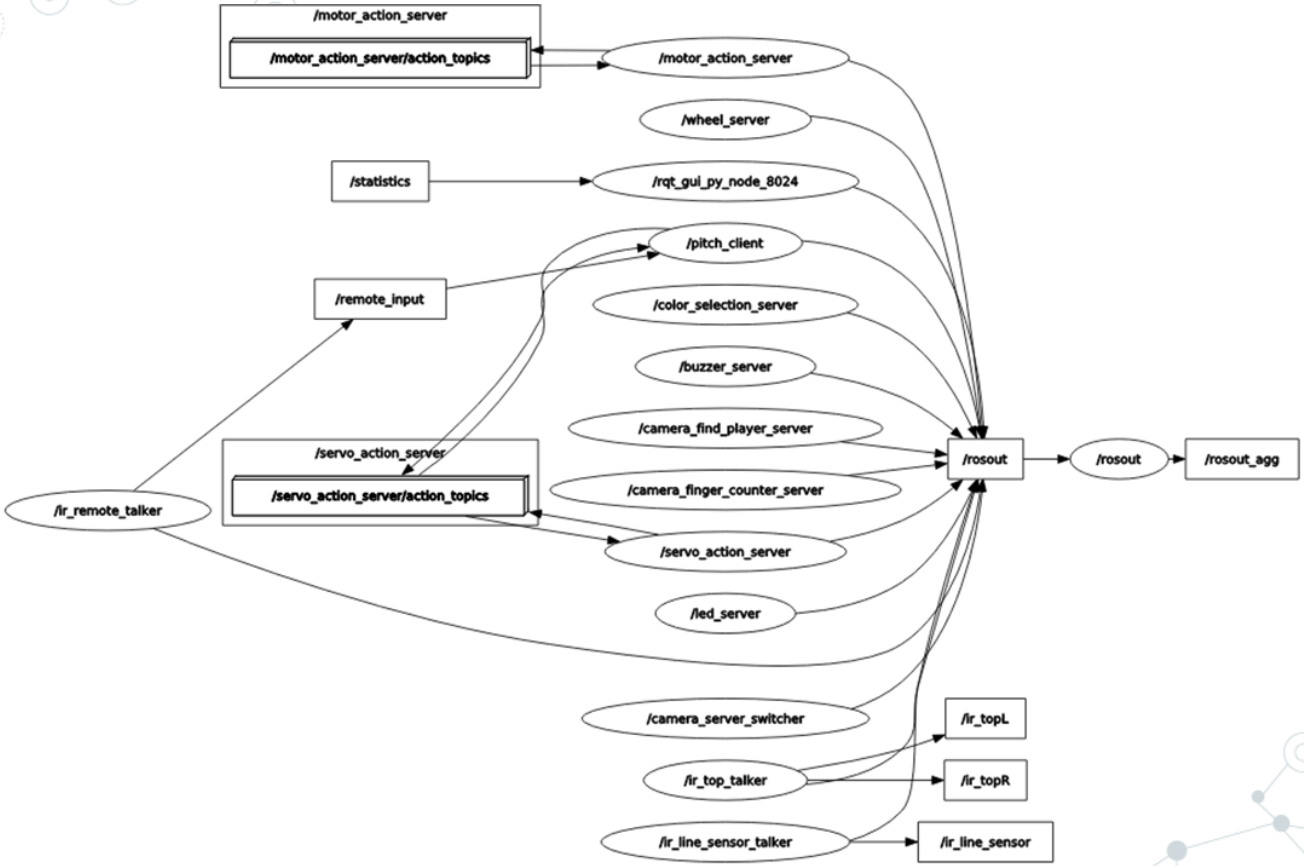
Structure with ROS

Is it that efficient ?

4. Structure with ROS



4. Structure with ROS



5.

Let’s play!

Will you defeat it ?

6.
Conclusion.

Worth it ?