Mintendo Switch Online

Team members:

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Motivation:

We would like to build a device that are fun to play with while promoting indoor exercise. Also, STM32 are great candidate for being a game controller and manifests all kinds of technique we learned in class, so we decided to implement a racing game like Mario Kart for our final projects.

Expected results:

We expected our project to be executed based on open source Mario kart game with total 3 STM devices, one as steering wheel(main) the rest as accelerators(optional).

1. Steering wheel:

Control the direction of kart in computer game with some i/o buttons to handle jump and throw some items which is obtained from racing to win the first prize.

1. Accelerator:

Tied on feet, the faster you move the quicker your kart will run

Preliminary lab:

We will split our project into two parts

1. Use STM32 to record our motion and detect button pressed, then successfully sent sensor and button data through wi-fi
2. Sending commands into game based on the STM32 data through wi-fi instead of keyboards.
3. Decide format: {Left: “0/1”, Right: “0/1”, item front:”0/1”, item back: “0/1”, Acc: “0/1”}

Reference:

1. Mario Kart game code(open source on github): <https://github.com/vmbatlle/super-mario-kart>