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 is great candidate for being game controller and manifests all kinds of technique we have learned in class, so we decided to implement a car racing game like Mario Kart for our final projects.

Expected results:

We expect 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 and handle jump, together with some i/o buttons and throwing items which are obtained from racing track 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 to computer based on data in STM32 through wi-fi instead of keyboards.
3. Decided format: {Left: “0/1”, Right: “0/1”, Jump:”0/1”, item front:”0/1”, item back: “0/1”, Acc: “0/1”}
4. Github link: <https://github.com/yenyuuuuu/esys_final_project>

Reference:

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