Adaptive Hungry Hippos Game

Gameplay Instructions

How to Set Up and Play

1. **Plug in the adaptive switches and connect the servos.**

2. **Plug in the power supply.**

3. **Within 10–20 seconds,** a green or blue LED under the electronics case lid will turn on.

4. **The game is ready to play** — just press the adaptive switches to control the hippos.

(For full gameplay instructions, refer to the original *Hungry Hungry Hippos* manual.)

Gameplay Modes

There are two modes that control how long the hippos remain extended when activated:

    • **Mode 1:** The hippo remains extended for a fixed duration of ½ second before automatically retracting.

    (This duration can easily be adjusted in the code.)

    • **Mode 2:** The hippo remains extended as long as the player holds down their adaptive switch, and retracts when the button is released.

Players can toggle between the two modes by **double-tapping** their adaptive switch within **½ second**.

(This timing is also adjustable in the code.)

Mode 2 provides more direct control for the player, while Mode 1 may be easier for some children depending on their physical ability. The LED under the lid indicates the current mode: **green** for one mode, **blue** for the other.

Notes

• **Check for servo heat:**

Occasionally touch each servo during or after gameplay. They should stay relatively cool in this implementation. If you notice one getting hot, unplug the game to give it a break ("let the hippos rest") and check the servo's mechanical connection or adjust the programmed open/close angles in the Arduino code (hippos/hippos.ino). Servos shouldn't have to fight to hold position in this design.

• If a hippo becomes "bound up":

Gently move it by hand to ensure the mechanical parts are operating freely.

• Servo chatter:

The servos may hum or "chatter" occasionally depending on their adjustment. However, they should not chatter loudly or continuously, as this can cause premature wear. If this occurs, you may need to adjust their physical connection to the hippos or fine-tune the programmed rotation angles in the Arduino code (hippos/hippos.ino).