

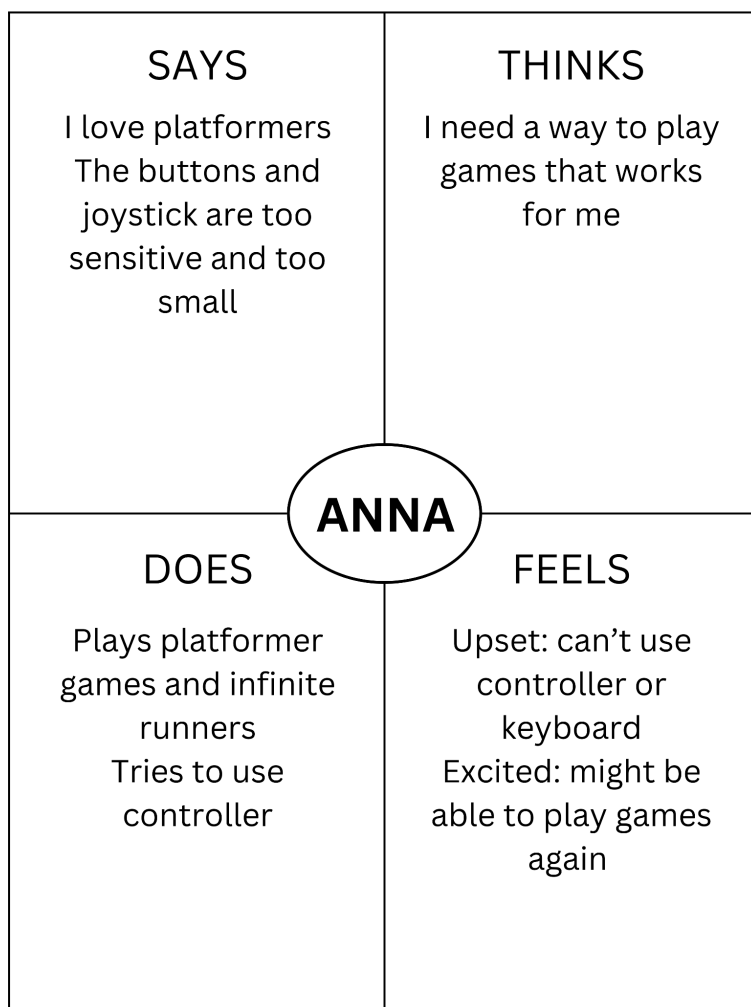
Planning

Anna, Joystick, buttons, ultrasonic sensor maybe

Statement of intent

I intend to create a game controller for Anna. The controller will have enlarged buttons and some sort of large, less sensitive joystick or a group of ultrasonic sensors. It will be in a chassis to hold all the components together.

Empathy map



Existing designs

Xbox adaptive controller:



This controller is great for people with physical difficulty, and my design takes inspiration from the box shape of this controller. However, the controllers buttons are likely too large for Anna. This controller is also very expensive, coming in at \$129.99 AUD without any addons, which are almost necessary.

Stickless:



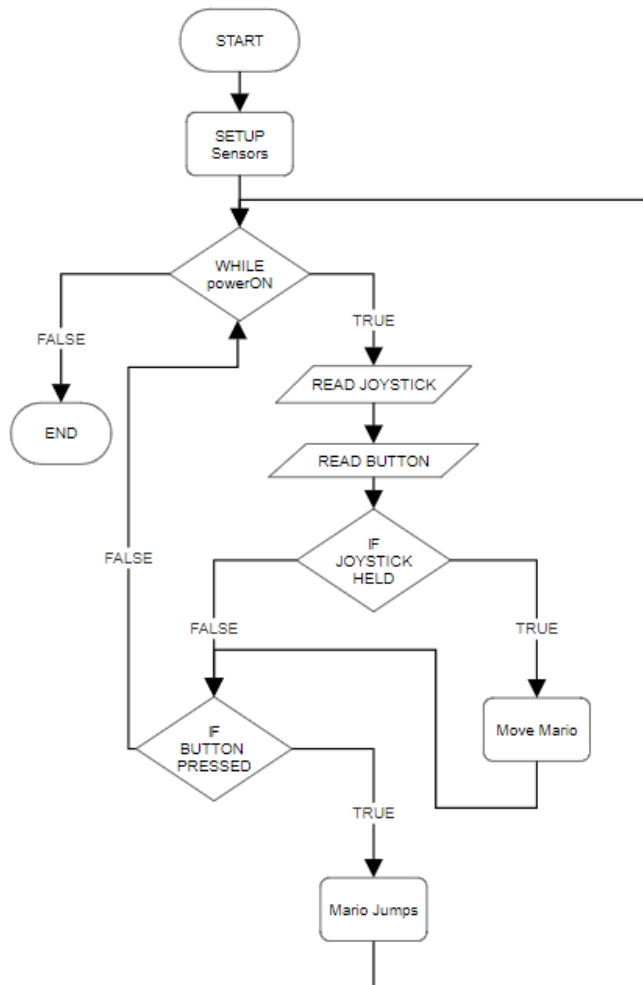
This controller is a good idea, but doesn't work very well for Anna as she will likely find the buttons too small for easy use.

Inclusive Inc.



These controllers come in a large variety of options, which some of them are good for Anna. The buttons and joystick are also good, as the customisation options allow for an exact match for her needs. However, the controller is again, very expensive, starting at \$149 AUD.

Flowchart



Pseudocode

```
START
SETUP Sensors
WHILE powerON
    READ JOYSTICK
    READ BUTTON
    IF JOYSTICK HELD
        Move Mario
    END IF
    IF BUTTON PRESSED
        Mario Jumps
    END IF
END WHILE
END
```

Communication log

Person	Method	Details
Anna	Email	Initial message about problems with controller
Anna's doctor	Email	Sent specifications about Anna's muscular dystrophy

Pictorial

