TITLE The DS4 Equalizer

LAB #7

SECTION #1

FULL NAME

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SUBMISSION DATE:3/28/23

DATE

Problem

The objective for this lab is to practice top-down program design, problem-solving in C. and writing functions to a specification. Emphasize the importance of branching and looping structures. Practice using output parameters

Analysis

In this lab I needed to apply the roll/ pitch using loops and conditional statements to show the state of the controller, either being left or right

Design

The design of the lab consisting of for/while loops with if-else statements to imply where the controller is at either left or right

Testing

The testing for the lab is to use the readings on the DualShock 4 to roll/pitch using loops and conditional statements to imply the roll/pitch

Comments

The lab was a bit difficult to process and figuring out how to apply an and create to was hard to manage, but it was doable. The process of creating an avatar was cool it. Overall checking my work and asking questions helped me a lot to get the lab done.

Screen Shots

```
PRE: num >= 0

This function prints the character "use" to the screen "num" times
This function is the ONLY place printf is allowed to be used
POST: nothing is returned, but "use" has been printed "num" times
             double x, y, z; /* Values of x, y, and z axis*/
int t; /* Variable to hold the time value */
int Up, Down, Left, Right; /* Variables to hold the button statuses */
int j_LX, j_LY, j_RX, j_RY; /* Variables to hold the joystick statuses */
int scaled_pitch, scaled_roll; /* Value of the roll/pitch adjusted to fit screen display */
int scaled_joy; /* Value of joystick adjusted to fit screen display */
int p;
/* Put pre-loop preparation code here */
int number;
do
{
                          read_input(&t, &x, &y, &z, &Up, &Right, &Down, &Left, &j_LX, &j_LY, &j_RX, &j_RY);

/* Scan a line of input */
scanf("%d, %lf, %lf, %lf, %lf, %d, %d, %d, %d, %d, %d", &t, &x, &y, &z, &Up, &Right, &Down, &Left, &j_LX, &j_LY, &j_RX, &j_RY);

/* Calculate and scale for pitch AND roll AND joystick */
if (Up == 1)
                                                                                                                                                                                   length: 7,152 lines: 216 Ln:4 Col:21 Pos: 209
  □ ^ □ 4× 10:26 A
```