Lab03 Report

Lab03

Section: 4

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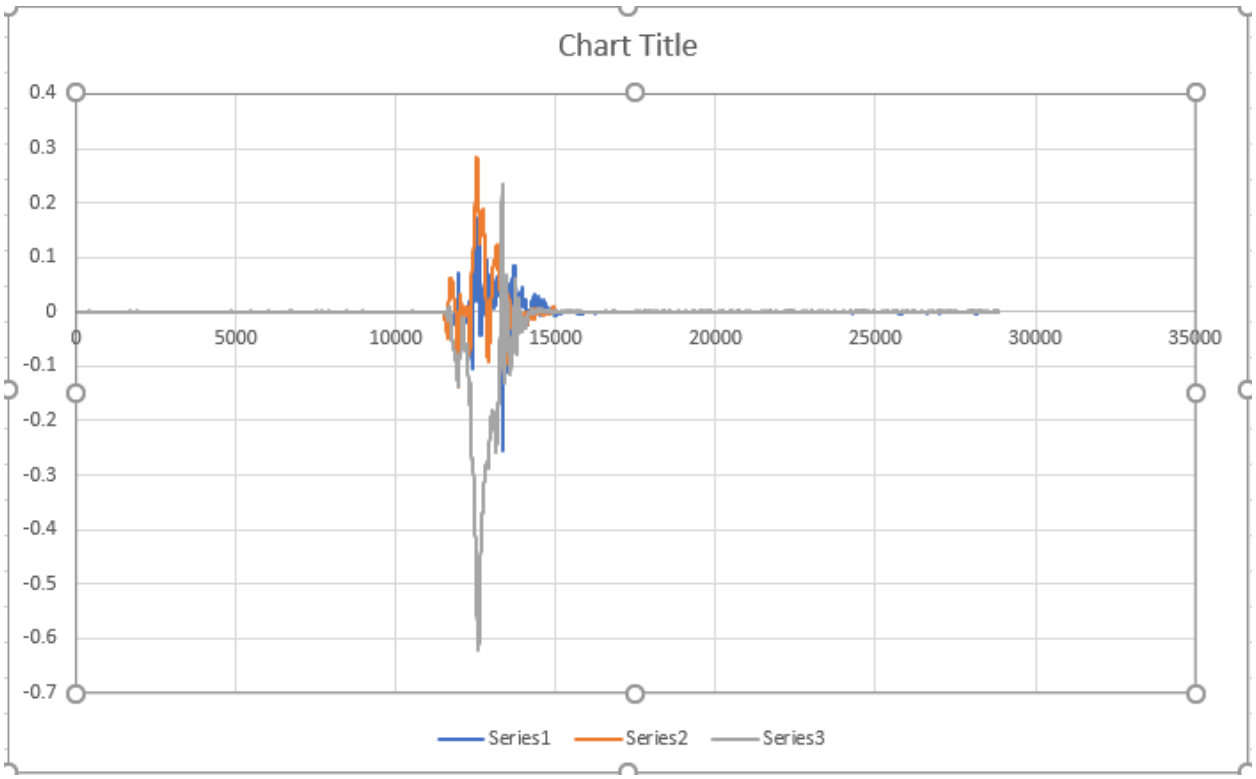
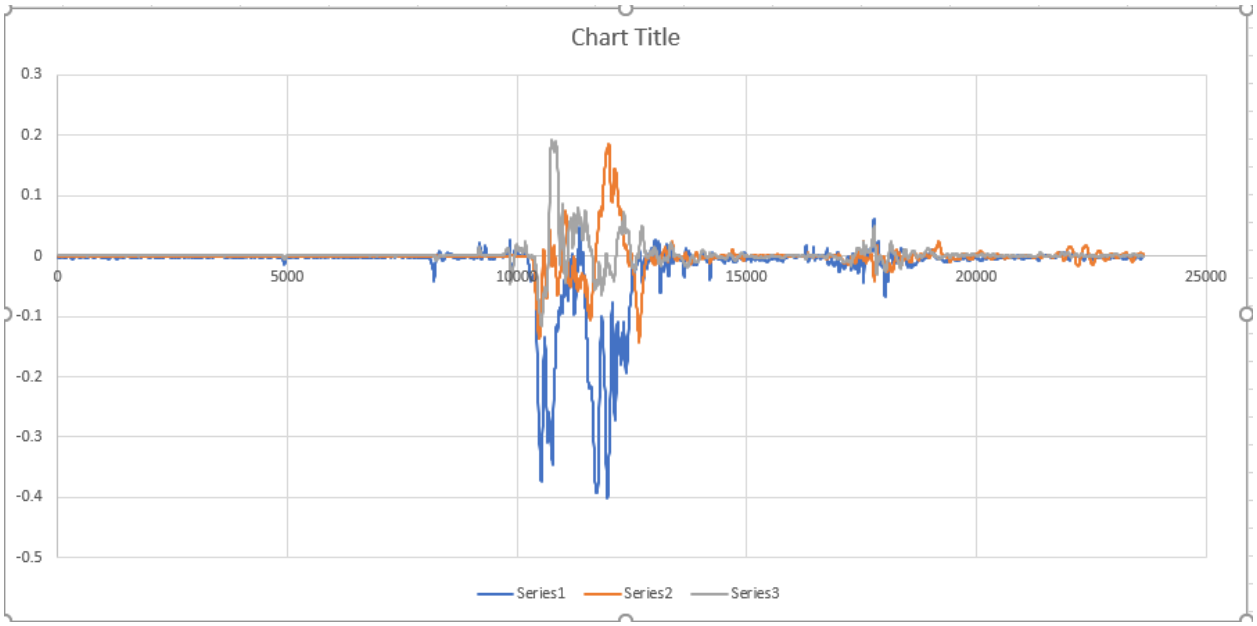
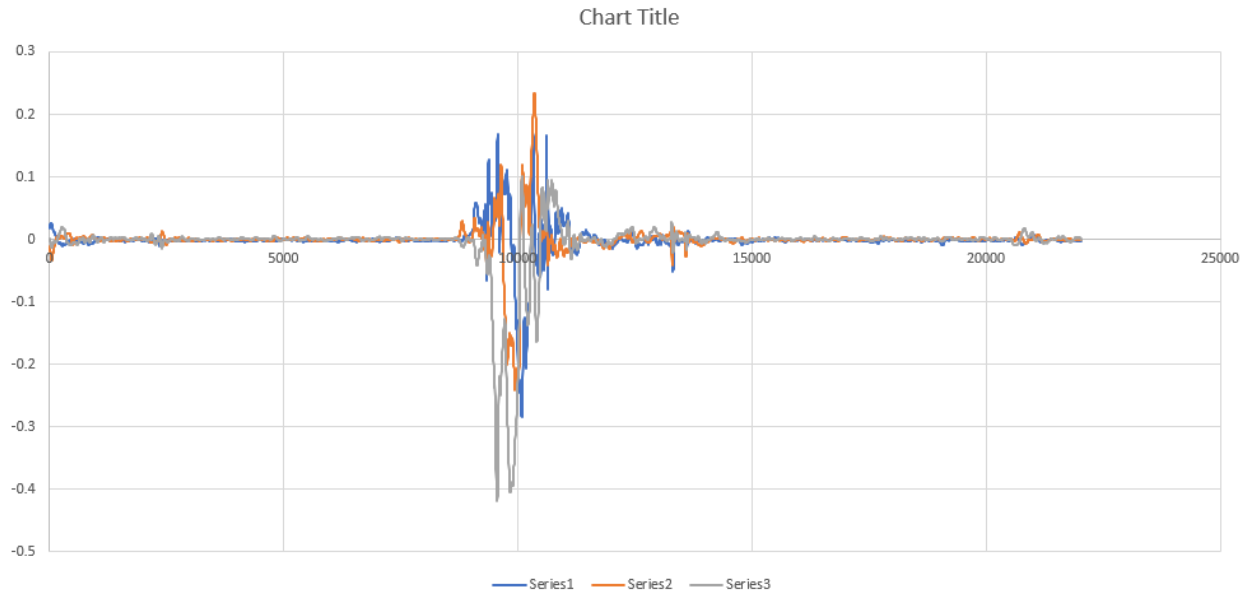
Problem 1:
Create 3 graphs representing movements of the dualshock 4 controller as they are read by cygwin.
Analysis:
Program teaches how to use a dualshock controller.
Design:
Ran the code and outputted to an excel spreadsheet. Used excel to make graphs
Testing:
Nothing to test
Comments:
No comments
Screenshots:
Flat:



Front:



Custom:



Problem 2:

Edit a program that reads dualshock 4 inputs to determine the magnitude of controller as well as displaying the time in a different way

Analysis:

Program reads inputs and modifies them

Design:

Edited the print statement so it displayed the time in seconds by dividing milliseconds by 1000. I then edited the method given to determine the magnitude using the equation given. I then created 3 functions the would determine the amount of minutes seconds and milliseconds from a value of milliseconds.

Testing:
Tested the program after each major step to ensure everything was still working.
Comments:
No comments
Screenshots:

```
At 17581 ms, the acceleration's magnitude was: 0.976482
At 0 minutes, 17 seconds, and 581 milliseconds it was: 0.976482
Echoing output: 17, 0.000977, 0.964478, 0.221802
At 17585 ms, the acceleration's magnitude was: 0.979415
At 0 minutes, 17 seconds, and 585 milliseconds it was: 0.979415
Echoing output: 17, 0.000610, 0.965820, 0.223999
At 17589 ms, the acceleration's magnitude was: 0.982984
At 0 minutes, 17 seconds, and 589 milliseconds it was: 0.982984
Echoing output: 17, 0.001709, 0.963013, 0.220581
At 17593 ms, the acceleration's magnitude was: 0.976053
At 0 minutes, 17 seconds, and 593 milliseconds it was: 0.976053
Echoing output: 17, 0.000244, 0.962524, 0.223145
At 17597 ms, the acceleration's magnitude was: 0.976246
At 0 minutes, 17 seconds, and 597 milliseconds it was: 0.976246
Echoing output: 17, -0000488, 0.966431, 0.223999
At 17569 ms, the acceleration's magnitude was: 0.984165
At 0 minutes, 17 seconds, and 569 milliseconds it was: 0.984165
Echoing output: 17, 0.001099, 0.962769, 0.222778
At 17573 ms, the acceleration's magnitude was: 0.976555
At 0 minutes, 17 seconds, and 573 milliseconds it was: 0.976555
Echoing output: 17, 0.001465, 0.963257, 0.223267
At 17577 ms, the acceleration's magnitude was: 0.977714
At 0 minutes, 17 seconds, and 577 milliseconds it was: 0.977714
```

Problem 3:
Create a program that reads inputs from the dualshock 4 button presses and determine how many buttons are being pressed.
Analysis:
A program that tests the users ability to use inputs from the DS4
Design:
I first created a scanf statement that would read all of the inputs from the dualshock 4. With this I determined that the 4 buttons I needed were the first 4 inputs and created a function that would add all these up to determine how many buttons were being pressed. I then printed this value.
Testing:
Tested the program after the function was written
Comments:
No comments
Screenshot:


/cygdrive/c/Users/bhodzic/downloads/lab03
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