

Prof Yamani - I got the Logitech driver working! (Assign #6)

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Subject: Prof Yamani - I got the Logitech driver working! (Assign #6)
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Hi Professor Yamani,

I did some more work on Assignment #6, and was able to get the USB driver to talk to the Logitech mouse, and report mouse direction movements (dmesg's below).

Once I setup the URB correctly for an interrupt transfer, I added a command to re-submit the URB in the callback function, and it worked. The updated code + project report attached - DMESG output below.

Maybe I'll clean up the code and submit it to the Linux Journal - there don't seem to be many recent articles on this.

Thanks for a great course !

Best Wishes,

Ken Boorom

```
[ 1041.484059] SKELETON: Initializing function
[ 1041.484105] USB-SKEL: Probe activated
[ 1041.484108] Device Number = 4
[ 1041.484110] Device Path=1
[ 1041.484112] Bus mA=500
[ 1041.484114] Speed is 1
[ 1041.484116] Can submit URBs 1
[ 1041.484118] Product String=USB Optical Mouse
[ 1041.484120] Manufacturer=Logitech
[ 1041.484121] Serial=NULL
[ 1041.484123] Found endpoint 0, type is 3
[ 1041.484125] Packetsize is 4
[ 1041.484127] Endpoint address is 129
[ 1041.484129] This is my interrupt endpoint, setting up URB to receive
information
[ 1041.484132] Allocated buffer of size 4 address ffff880036b95fa0
[ 1041.484142] Return value from usb_submit was 0
[ 1041.484251] USB Skeleton device now attached to USBSkel-0
[ 1041.484298] usbcore: registered new interface driver skeleton
[ 1044.347073] MOUSE moved UP LEFT ....4 bytes in. Vertical=253,
Horizontal=255
[ 1044.355085] MOUSE moved UP RIGHT ....4 bytes in. Vertical=252,
Horizontal=1
[ 1044.363096] MOUSE moved UP RIGHT ....4 bytes in. Vertical=255,
```

Horizontal=3
[1044.371101] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=2
[1044.379052] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=4
[1044.387008] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=2
[1044.395128] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=2
[1044.403137] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=3
[1044.411088] MOUSE moved UP RIGHT4 bytes in. Vertical=254,
Horizontal=4
[1044.419154] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=1
[1044.427165] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=5
[1044.435175] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=5
[1044.443066] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=5
[1044.451079] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=8
[1044.459101] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=5
[1044.467210] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=6
[1044.475219] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=6
[1044.483232] MOUSE moved UP RIGHT4 bytes in. Vertical=254,
Horizontal=5
[1044.491239] MOUSE moved RIGHT4 bytes in. Vertical=0,
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[1044.499130] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=2
[1044.507138] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=2
[1044.515158] MOUSE moved RIGHT4 bytes in. Vertical=0,
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[1044.523285] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=3
[1044.531294] MOUSE moved UP RIGHT4 bytes in. Vertical=255,
Horizontal=2
[1044.539304] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=1
[1044.547307] MOUSE moved RIGHT4 bytes in. Vertical=0,
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[1044.555320] MOUSE moved RIGHT4 bytes in. Vertical=0,
Horizontal=1
[1049.456885] MOUSE moved LEFT4 bytes in. Vertical=0,
Horizontal=255
[1049.464951] MOUSE moved LEFT4 bytes in. Vertical=0,
Horizontal=249
[1049.472965] MOUSE moved LEFT4 bytes in. Vertical=0,

Horizontal=248
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[1049.488923] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1049.504999] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1049.521021] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1049.529026] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1049.536979] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1049.552997] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1053.878030] MOUSE moved UP LEFT4 bytes in. Vertical=254,
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[1053.894044] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1058.923737] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1058.931772] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1058.939843] MOUSE moved LEFT4 bytes in. Vertical=0,
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[1058.947793] MOUSE moved DOWN LEFT4 bytes in. Vertical=1,
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[1058.963773] MOUSE moved DOWN LEFT4 bytes in. Vertical=1,
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[1058.987897] MOUSE moved LEFT4 bytes in. Vertical=0,
Horizontal=253
[1058.995848] MOUSE moved DOWN LEFT4 bytes in. Vertical=1,
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[1059.100026] MOUSE moved DOWN4 bytes in. Vertical=2, Horizontal=0
[1059.107918] MOUSE moved DOWN4 bytes in. Vertical=3, Horizontal=0
[1059.116040] MOUSE moved DOWN4 bytes in. Vertical=5, Horizontal=0
[1059.124052] MOUSE moved DOWN RIGHT4 bytes in. Vertical=5,
Horizontal=2
[1059.132062] MOUSE moved DOWN RIGHT4 bytes in. Vertical=6,
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[1059.140071] MOUSE moved DOWN RIGHT4 bytes in. Vertical=4,
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[1059.212155] MOUSE moved DOWN RIGHT4 bytes in. Vertical=10,
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[1059.220162] MOUSE moved DOWN RIGHT4 bytes in. Vertical=8,
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Horizontal=2
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[1059.268219] MOUSE moved DOWN4 bytes in. Vertical=3, Horizontal=0
[1059.276228] MOUSE moved DOWN LEFT4 bytes in. Vertical=2,
Horizontal=255
[1059.284237] MOUSE moved DOWN LEFT4 bytes in. Vertical=1,
Horizontal=255

usb_skeleton.ko 15 KB

usb_skeleton.c 14 KB

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