# **Device Drivers**

# LAB -2

## Exercise 4

Prepared by: Maria Philna Aruja CED171028

1. List all input devices before connecting the mouse:

```
sus-Inspiron-5570: ~
maria@jesus-Inspiron-5570:~$ xinput
  Virtual core pointer
                                                  id=2
                                                          [master pointer

↓ Virtual core XTEST pointer

                                                  id=4
                                                          [slave pointer
    4 DELL0810:00 044E:120A Touchpad
                                                  id=11
                                                          [slave
                                                                  pointer

↓ AlpsPS/2 ALPS GlidePoint

                                                  id=16
                                                          [slave
                                                                  pointer
  Virtual core keyboard
                                                  id=3
                                                          [master keyboard
    4 Virtual core XTEST keyboard
                                                  id=5
                                                          [slave keyboard
    4 Power Button
                                                  id=6
                                                          [slave keyboard
    4 Video Bus
                                                  id=7
                                                          [slave keyboard
    4 Power Button
                                                  id=8
                                                          [slave keyboard (
    4 Sleep Button
                                                          [slave keyboard (
                                                  id=9

↓ Integrated_Webcam_HD: Integrate

                                                  id=10
                                                          [slave keyboard (3)
    4 Intel HID events
                                                  id=12
                                                          [slave keyboard (3)
                                                                  keyboard (3)
    4 Intel HID 5 button array
                                                  id=13
                                                          [slave
                                                                  keyboard (3)1
    ▶ Dell WMI hotkeys
                                                  id=14
                                                          slave
                                                                  keyboard (3)1
    ↳ AT Translated Set 2 keyboard
                                                          [slave
```

2. List all input devices after connecting the mouse:

```
+ NI II alistateu set z keyboai
                                                        [Stave Keyboald (3)]
maria@jesus-Inspiron-5570:~$ xinput
 Virtual core pointer
                                                id=2
                                                        [master pointer
                                                                         (3)]
                                                id=4
    4 Virtual core XTEST pointer
                                                        [slave pointer
                                                                         (2)1
                                                id=11
    4 DELL0810:00 044E:120A Touchpad
                                                        [slave pointer
                                                                         (2)]
    4 AlpsPS/2 ALPS GlidePoint
                                                id=16
                                                        [slave pointer
                                                                         (2)]
                                                        [slave pointer
    4 YSPRINGTECH USB OPTICAL MOUSE
                                                id=17
 Virtual core keyboard
                                                id=3
                                                        [master keyboard (2)]
    4 Virtual core XTEST keyboard
                                                id=5
                                                        [slave keyboard (3)]
    4 Power Button
                                                        [slave keyboard (3)]
                                                id=6
    4 Video Bus
                                                id=7
                                                        [slave keyboard (3)]
    4 Power Button
                                                id=8
                                                        [slave keyboard (3)]
                                                id=9
                                                        [slave keyboard (3)]
    4 Sleep Button
    4 Integrated Webcam HD: Integrate
                                                id=10
                                                        [slave keyboard (3)]
    4 Intel HID events
                                                id=12
                                                        [slave keyboard (3)]
    4 Intel HID 5 button array
                                                id=13
                                                        [slave kevboard (3)]
    → Dell WMI hotkeys
                                                id=14
                                                        [slave keyboard (3)]
    4 AT Translated Set 2 keyboard
                                                id=15
                                                        [slave keyboard (3)]
```

#### 3. Creating another pointer:

```
maria@jesus-Inspiron-5570:~$ xinput create-master Pointer2
maria@jesus-Inspiron-5570:~$ xinput
  Virtual core pointer
                                                     id=2
                                                              [master pointer (3)]
                                                                                 (2)]
(2)]

        → Virtual core XTEST pointer

                                                     id=4
                                                              [slave pointer
    4 DELL0810:00 044E:120A Touchpad
                                                              [slave
                                                     id=11
                                                                       pointer
                                                                                 (2)]
                                                              [slave
    4 AlpsPS/2 ALPS GlidePoint
                                                     id=16
                                                                       pointer
                                                                       pointer
    4 YSPRINGTECH USB OPTICAL MOUSE
                                                     id=17
                                                              [slave
                                                                                  (2)
                                                              [master keyboard (2)]
  Virtual core keyboard
                                                     id=3
                                                              [slave keyboard (3)]
    4 Virtual core XTEST keyboard
                                                     id=5
    4 Power Button
                                                              [slave keyboard (3)]
                                                     id=6
                                                              [slave keyboard (3)]

↓ Video Bus

                                                     id=7
                                                                       keyboard (3)]
keyboard (3)]
keyboard (3)]
                                                              [slave
    4 Power Button
                                                     id=8
                                                              [slave
    4 Sleep Button
                                                     id=9
                                                              [slave

↓ Integrated_Webcam_HD: Integrate

                                                     id=10
                                                              [slave keyboard (3)]
[slave keyboard (3)]
[slave keyboard (3)]
    ▶ Intel HID events
                                                     id=12
    ▶ Intel HID 5 button array
                                                     id=13
    id=14
    AT Translated Set 2 keyboard
                                                     id=15
                                                              [slave keyboard (3)]
                                                              [master pointer (19)]
  Pointer2 pointer
                                                     id=18
                                                              [slave pointer (18)]
[master keyboard (18)]
    4 Pointer2 XTEST pointer
                                                     id=20
  Pointer2 keyboard
                                                     id=19
                                                              [slave keyboard (19)]
    ♣ Pointer2 XTEST keyboard
                                                     id=21
```

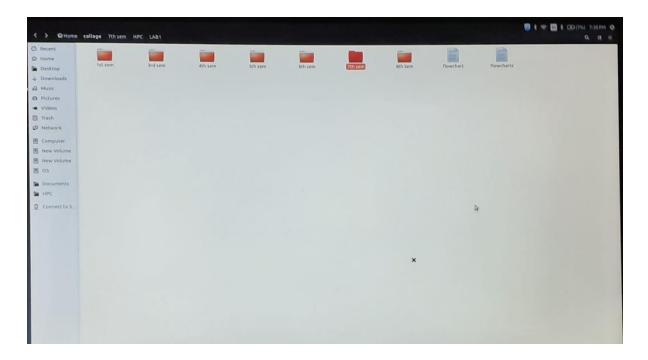
#### 4. Reattaching

```
HPOINTER AREST RESPONDED

maria@jesus-Inspiron-5570:~$ xinput reattach 17 18

maria@jesus-Inspiron-5570:~$ xinput
                                                                                           |Stave Keyboard (19)|
                                                                                             [master pointer (3)]
[slave pointer (2)]
[slave pointer (2)]
[slave pointer (2)]
[master keyboard (2)]
   Virtual core pointer
                                                                               id=2
       4 Virtual core XTEST pointer
                                                                               id=4
       4 DELL0810:00 044E:120A Touchpad
                                                                               id=11
   4 AlpsPS/2 ALPS GlidePoint
Virtual core keyboard
                                                                               id=16
                                                                               id=3
                                                                                            [master keyboard (2)]
[slave keyboard (3)]
       4 Virtual core XTEST keyboard
                                                                               id=5
       4 Power Button
                                                                               id=6
       ⊌ Video Bus
                                                                               id=7
       → Power Button
→ Sleep Button
                                                                               id=8
                                                                               id=9
       ↳ Integrated_Webcam_HD: Integrate
                                                                               id=10
       → Intel HID events
→ Intel HID 5 button array
                                                                               id=12
                                                                               id=13
       ↳ Dell WMI hotkeys
                                                                               id=14
       AT Translated Set 2 keyboard
                                                                               id=15
   Pointer2 pointer
4 YSPRINGTECH USB OPTICAL MOUSE
                                                                               id=18
                                                                                             [master pointer
                                                                                                                        (19)]
                                                                               id=17
                                                                                             [slave
                                                                                                         pointer
                                                                                                                         (18)
                                                                                             [slave
                                                                                                         pointer
       4 Pointer2 XTEST pointer
                                                                               id=20
                                                                                                                         (18)
   Pointer2 keyboard
                                                                                             [master
                                                                                                         keyboard (18)
                                                                               id=19
       4 Pointer2 XTEST keyboard
                                                                               id=21
                                                                                             [slave keyboard (19)
```

### 5. Two pointers on screen



### 6. Removing Pointer2

```
ullable to Ithia device Politerz
maria@jesus-Inspiron-5570:~$ xinput remove-master 18
maria@jesus-Inspiron-5570:~$ xinput
                                                                                    [master pointer (3)]
[slave pointer (2)]
[slave pointer (2)]
[slave pointer (2)]
[master keyboard (2)]
[slave keyboard (3)]
  Virtual core pointer
                                                                         id=2
      4 Virtual core XTEST pointer
                                                                         id=4
      → DELL0810:00 044E:120A Touchpad
                                                                         id=11
  4 AlpsPS/2 ALPS GlidePoint
Virtual core keyboard
                                                                         id=16
                                                                         id=3
      4 Virtual core XTEST keyboard
                                                                         id=5
      4 Power Button
                                                                         id=6
      4 Video Bus
                                                                         id=7
      4 Power Button
                                                                         id=8
      4 Sleep Button
                                                                         id=9

↓ Integrated_Webcam_HD: Integrate

                                                                         id=10
                                                                                     [slave keyboard (3)]
[slave keyboard (3)]
      4 Intel HID events
                                                                         id=12

        Intel HID 5 button array

                                                                         id=13
                                                                                                 keyboard (3)]
                                                                                     [slave keyboard (3)]
[slave keyboard (3)]
      4 Dell WMI hotkeys
                                                                         id=14
      AT Translated Set 2 keyboard
                                                                         id=15
~ YSPRINGTECH USB OPTICAL MOUSE
                                                                                     [floating slave]
                                                                         id=17
maria@jesus-Inspiron-5570:~$
```