Subject: Re: Touchscreen on raspberry: problem with events Posted by Giorgio on Thu, 10 Aug 2017 14:22:37 GMT

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Ok, I found the problem and a verrrrrrrrrrrrrry nasty solution.

This is the cycle of gtk events and Switch methods with a real mouse:

GDK_BUTTON_PRESS
GDK_PROPERTY_NOTIFY

Switch::MouseMove: pushindex: 3 value: 002 Switch::LeftDown: pushindex: 3 value: 002

GDK EXPOSE

GDK_BUTTON_RELEASE

Switch::LeftUp (before the outer if cycle): pushindex: 3 value: 002 Switch::LeftUp (inside the outer if cycle): pushindex: 3 value: 002

Switch::LeftUp (inside the inner if cycle): pushindex: 3 v: 005 value: 002

Switch::LeftUp: pushindex: -1 value: 005

And this is the cycle with the touch screen:

GDK_BUTTON_PRESS
GDK_PROPERTY_NOTIFY

Switch::MouseMove: pushindex: 3 value: 002

GDK EXPOSE

Switch::MouseMove: pushindex: 3 value: 002 Switch::LeftDown: pushindex: 3 value: 002

GDK_EXPOSE

GDK_MOTION_NOTIFY GDK_BUTTON_RELEASE

Switch::MouseMove: pushindex: -1 value: 002

GDK EXPOSE

Switch::LeftUp (before the outer if cycle): pushindex: -1 value: 002

Switch::LeftUp: pushindex: -1 value: 002

With the real mouse the LeftUp method is called immediately after the LeftDown; with the touch screen there is a MouseMove method in between. This MouseMove method set pushindex to -1. Now let's go where the variable "value" (the variable containing the value of the selected case) is set: inside the LeftUp method.

This is the relevant code:

```
if(pushindex >= 0 && pushindex < cs.GetCount()) {
  RefreshCase(GetIndex());
  const Value& v = cs[pushindex].value;
  if(v != value) {
    value = v;
    UpdateAction();</pre>
```

```
}
RefreshCase(pushindex);
}
```

As you can see, the value is set only if pushindex >=0, but the MouseMove method has set it to -1.

Let's see what the MouseMove method does:

```
int i = GetIndex(p);
int a = -1;
if(keyflags & K_MOUSELEFT)
  a = i;
if(pushindex != a) {
  RefreshCase(pushindex);
  RefreshCase(a);
  pushindex = a;
}
```

Honestly I don't understand what that code actually does; I tried to comment out the whole method and the application crashes, so I modified it as follows:

```
int i = GetIndex(p);
// int a = -1;
int a = pushindex;
if(keyflags & K_MOUSELEFT)
a = i;
if(pushindex != a) {
   RefreshCase(pushindex);
   RefreshCase(a);
   pushindex = a;
}
```

With this modification the Switch control works also with the touch screen and the application does not crash. Of course that code is there for some reason, so I am not so comfortable with my modification. I will try to reach out the person who wrote Switch.cpp to see how we can work out things in a way that the touch screen is supported. Thanks a lot Klugier for the support. Regards,

Gio