

Welcome back.

I promised you all to create some buttons and sliders so here we go ☺

All about buttons

A **button** is another panel element that can be clicked. By clicking on a button you can call any function you made. Buttons can be used in game or as menu items. For our test button I made 3 versions we will need.

01 for normal showing : try01.pcx
02 for roll over effect : try02.pcx
03 for clicking the button : try03.pcx

Here is the button in code:

```
PANEL* main_pan = ///<< the panel on which the button will be shown
{
bmap = "buttonpanel.pcx"; ///<< give that panel a picture we will use try01.pcx
pos_x = 250; ///<< remember these ? right the positions on the screen.
pos_y = 200; ///<< remember these ? right the positions on the screen.
button(250,134,"try03.pcx", "try01.pcx", "try02.pcx", quit_program, NULL, NULL);
layer = 1; <<<///you know how to use layers right ?
flags = OVERLAY | SHOW;
}
```

Place this function above your main : (our button will activate it)

```
function quit_program()
{
while (key_any)
{
wait (1);
}
sys_exit(NULL);
}
```

To make a functional button this is what we need to code:

```
button (x, y, bitmap_normal, bitmap_released, bitmap_over, function_clicked, function_released, function_over);
```

As you look at your button code you can see we did all this. We added the function it should activate when clicked after that the button will be removed. (that's the NULL NULL)

Use mouse mode 2 in your main (You should know how if not have a look back at the previous lessen)
If all went right the button works ☺ it changes when the mouse cursor goes over it and when clicked we see it change again. Simple right? See if you can make more buttons on the screen and give them another function like showing a picture or play a sound. You know now how to create full working buttons. Is this great or is it great ☺
You might notice that you did not have to define each picture used for the button. That's right this is already happening inside the code itself.

All about Sliders

A slider is a panel element that can be dragged with the mouse and is used to set the value for a certain variable. We can have horizontal or vertical sliders and we can set their range. Most of the time the sliders are used to adjust the volume of the sound and music, the gamma factor, etc.

How to create these? Let's figure that out right now.

I created a slide over picture : moveoverme.pcx and a slider button slider.pcx.

Here is a code for the horizontal slider:

```
var speed = 50;///<<speed of slider
```

```
PANEL* main_pan =
{
  bmap = "moveoverme.pcx"; ///<< place the moveover me picture
  pos_x = 250;///<<< yes the position
  pos_y = 200;///<<<<yes the position
  hslider (0, -10, 263, "slider.pcx", 0, 100, speed);///<< hslider means horizontal slider from left to right 0 to 100
  digits (15, 50, 3, *, 1, speed); ///<<<< show the digits (or not) using the speed variable
  flags = OVERLAY | SHOW;///<<<<< you should know what this means now
}
```

After the hslider we see this : 0,-10,263

0 = The button is placed to the most left side of the moveoverme picture.
-10 = Sets the place of the slider picture on top of the moveoverme picture.
263 = Is the total wide pixel of the moveoverme picture.

Place the code and try it. You will see you can now drag the slider to the left and the right without any problem. The digits run up or down while you move the slider. When you familiar enough with coding you can add a sound control function to it for example.

A vertical slider works the same. Instead of hslider, vslider is used. You should know how to do it but I am in a very good mood so here is a code for the horizontal slider using the same slider.pcx picture.

```
var speed2 = 50;///<<speed of slider
```

```
PANEL* main2_pan =
{
  bmap = "moveoverme2.pcx"; ///<< place the moveover me picture
  pos_x = 400;///<<<< yes the position
  pos_y = 200;///<<<<yes the position
  vslider (0, -10, 263, "slider.pcx", 0, 100, speed);///<< hslider means horizontal slider from left to right 0 to 100
  digits (15, 50, 3, *, 1, speed); ///<<<< show the digits (or not) using the speed2 variable.
  flags = OVERLAY | SHOW;///<<<<< you should know what this means now
}
```

There you have it my grasshoppers. Buttons and sliders made easy. You have enough to experiment with. Realize you're not a pro coder yet but you are still learning the basics. But the basics are needed to make a good start and soon you will be able to make your game ideas come to life. Don't rush it take your time. All your learned to this moment you can test and combine. See if you can make more sliders give them your own looks. Create functions for different buttons the sky is the limit.

I'll hope to see you in next chapter.

René Pol aka Realspawn

Realspawn@live.nl