

John Romero Programming Proverbs

- 11. “Programming is a creative art form based in logic. Every programmer is different and will code differently. It’s the output that matters.”
- John Romero, “The Early Days of Id Software - John Romero @ WeAreDevelopers Conference 2017”

Adding more assets into touchmap

- more assets are available at: `<http://floppsie.comp.glam.ac.uk/download/targz/touchmap-extra2.tar.gz>`

- to add these assets you can:

```
$ cd $HOME/Sandpit/touchmap-0.2
$ wget http://floppsie.comp.glam.ac.uk/download/targz/touchmap-extra2.tar.gz
$ tar zxvf touchmap-extra2.tar.gz
$ rm touchmap-extra2.tar.gz
```

Adding more assets into touchmap

- to convert these into pngs you can change your Makefile.am as follows:

- `$HOME/Sandpit/touchgui-0.2/Makefile.am`

```
all: doorh.png doorv.png doorh-bw.png doorv-bw.png hingeh.png \  
    wallh.png wallv.png wallh-bw.png wallv-bw.png hellknight.png tick.png \  
    doom3.png rock1sid.png sb_rocket.png sb_nails.png num_colon.png \  
    wizwood1_4.png inv2_sshotgun.png inval_nailgun.png inval_rlaunch.png \  
    inval_srlaunch.png afloor3_1_gloss.png city1_7.png adoor01_2.png \  
    city1_4_gloss.png city2_1.png
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/Makefile.am`

```
°pnmscale -xsize=100 -ysize=100 $< > t.pnm
°pnmtopng t.pnm > $@
°$(RM) t.pnm

city1_4_gloss.png: $(srcdir)/touchmap-extra2/city1_4_gloss.jpg
°convert -resize 100x100 $< $@

city2_1.png: $(srcdir)/touchmap-extra2/city2_1.jpg
°convert -resize 100x100 $< $@

afloor3_1_gloss.png: $(srcdir)/touchmap-extra2/afloor3_1_gloss.jpg
°convert -resize 100x100 $< $@

adoor01_2.png: $(srcdir)/touchmap-extra2/adoor01_2.jpg
°convert -resize 100x100 $< $@
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/Makefile.am`

```
city1_7.png: $(srcdir)/touchmap-extra2/city1_7.jpg
°convert -resize 100x100 $< $@

inv2_sshotgun.png: $(srcdir)/touchmap-extra2/inv2_sshotgun.png
°convert -resize 100x100 $< $@

inval_nailgun.png: $(srcdir)/touchmap-extra2/inval_nailgun.png
°convert -resize 100x100 $< $@

inval_rlaunch.png: $(srcdir)/touchmap-extra2/inval_rlaunch.png
°convert -resize 100x100 $< $@

inval_srlaunch.png: $(srcdir)/touchmap-extra2/inval_srlaunch.png
°convert -resize 100x100 $< $@
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/Makefile.am`

```
wizwood1_4.png: $(srcdir)/touchmap-extra2/wizwood1_4.jpg
°convert -resize 100x100 $< $@

num_colon.png: $(srcdir)/touchmap-extra2/num_colon.png
°convert -resize 100x100 $< $@

rock1sid.png: $(srcdir)/touchmap-extra2/rock1sid.tga
°convert -resize 100x100 $< $@

sb_rocket.png: $(srcdir)/touchmap-extra2/sb_rocket.png
°convert -resize 100x100 $< $@

sb_nails.png: $(srcdir)/touchmap-extra2/sb_nails.png
°convert -resize 100x100 $< $@
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/Makefile.am`

```
hellknight.png: $(srcdir)/images/hellknight.png
^convert -resize 100x100 $< $@

tick.png: $(srcdir)/images/tick.png
^convert -resize 100x100 $< $@

doom3.png: $(srcdir)/images/doom3.png
^convert -resize 100x100 $< $@
```

■ where `^` must be the tab character (tab key)

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
...
next_room = 1 # the next available room number to be used.
last_pos = [] # the last saved position
pointer_name = "cross" # the image name used to mark cursor position on the map
wall_image_name = "city2_1"
door_image_name = "adoor01_2"
...
```


Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
...
class button:
    def __init__ (self, x, y, size):
        self._x = x
        self._y = y
        self._size = size
        self._tile = touchgui.image_tile (blank_list (size),
                                          x, y,
                                          size, size, callback)

    def to_blank (self):
        self._tile.set_images (blank_list (cell_size))
    def to_wall (self):
        self._tile.set_images (wall_list (cell_size))
...
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
...
def assets ():
    return [touchgui.image_tile (private_list ("hellknight"),
                                touchgui.posX (0.95), touchgui.posY (0.9),
                                100, 100, hellknight),
            touchgui.image_tile (private_list ("tick"),
                                touchgui.posX (0.95), touchgui.posY (0.8),
                                100, 100, tick),
            touchgui.image_tile (private_list ("rock1sid"),
                                touchgui.posX (0.95), touchgui.posY (0.7),
                                100, 100, rockets),
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
touchgui.image_tile (private_quake ("sb_nails"),  
                    touchgui.posX (0.95), touchgui.posY (0.6),  
                    100, 100, nails),  
touchgui.image_tile (private_quake (wall_image_name),  
                    touchgui.posX (0.95), touchgui.posY (0.5),  
                    100, 100, wall),  
touchgui.image_tile (private_quake (door_image_name),  
                    touchgui.posX (0.95), touchgui.posY (0.4),  
                    100, 100, door),
```

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■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
touchgui.image_tile (private_quake ("inv2_sshotgun"),  
                    touchgui.posX (0.95), touchgui.posY (0.3),  
                    100, 100, door),  
touchgui.image_tile (private_quake ("inv1_nailgun"),  
                    touchgui.posX (0.95), touchgui.posY (0.2),  
                    100, 100, door),  
touchgui.image_tile (private_quake ("inv1_rlaunch"),  
                    touchgui.posX (0.95), touchgui.posY (0.1),  
                    100, 100, door),  
touchgui.image_tile (private_quake ("inv1_srlaunch"),  
                    touchgui.posX (0.95), touchgui.posY (0.0),  
                    100, 100, door)]
```

Adding more assets into touchmap

■ `$HOME/Sandpit/touchgui-0.2/touchmap.py`

```
def private_quake (name):  
    return [touchgui.image_gui ("%s.png" % (name)).grey (),  
            touchgui.image_gui ("%s.png" % (name)).grey (),  
            touchgui.image_gui ("%s.png" % (name)),  
            touchgui.image_gui ("%s.png" % (name))]
```