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# Example code relating to interactive storyboarding
# By Brygg Ullmer, Clemson University
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import sys

WIDTH=1024

knownActorFilenames = ['red-hl-1in-200dpi', 'person-iconic1',
                       'ipanel-cell-selection1']
defaultActorFn      = knownActorFilenames[1]

a1 = Actor(defaultActorFn) #previously: a1 = Actor('red-hl-1in-200dpi')
a2 = Actor(defaultActorFn,  pos=(180, 180))
s1 = Actor('unsdg2',             pos=(550, 100)) #H20
s2 = Actor('unsdg4',             pos=(550, 100)) #NaCl
b1 = Actor('person-add-iconic1', pos=( 80, 500))
m1 = Actor('campus-map8',        pos=(348, 202))
#m1 = Actor('clemson12d2',        pos=(348, 202))

successiveScreens = [s1, s2]
lastSelectedActor = a1

moveableActors = [m1, a1, a2, b1] # chalraha
#moveableActors = [a1, a2, b1] # chalraha
stableActors   = [s1] #achalraha / rukha

actorNames           = {a1: "John", a2: "Jane", s1: "screen",
                        b1: "addUser", m1: "map"}
#                        b1: "addUser"}
actorOriginalPos     = {}
selectedActor        = None
selectedActorName    = None
selectedActorOrigPos = None
defaultEllipseColor    = (0, 200, 200)
defaultEllipseLocation = Rect((800, 600), (850, 650))

###################### draw ######################

def draw():
  screen.clear()
  for actor in stableActors:   actor.draw()
  for actor in moveableActors: actor.draw()

  #placeholder per idea from Yang
  #pygame.draw.ellipse(screen.surface, defaultEllipseColor, defaultEllipseLocation
)
  screen.draw.circle((800, 500), 50, defaultEllipseColor)

###################### on mouse down/press ######################

def addUser():
  #print("map position:", m1.pos)
  newActor = Actor('red-hl-1in-200dpi',  pos=(200, 200))
  moveableActors.append(newActor)
  actorNames[newActor] = 'new actor'

###################### on mouse down/press ######################

def on_mouse_down(pos): # on_press_down
  global selectedActor, selectedActorName, selectedActorOrigPos
  global stableActors, lastSelectedActor

  for actor in (stableActors + moveableActors):
    if actor.collidepoint(pos):
      name = actorNames[actor]
      print("\nactor selected:", name)

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   68:       if name == "screen":
   69:         print("update the virtual screen images")
   70:         stableActors = [s2, b1]
   71:
   72:       elif name == "addUser":
   73:         addUser()
   74:
   75:       else:
   76:         actorOriginalPos[actor] = pos
   77:         lastSelectedActor = selectedActor = actor
   78:         selectedActorName       = name
   79:         selectedActorOrigPos    = selectedActor.pos
   80:
   81:   print("=" * 25)
   82:
   83: ###################### on mouse move ######################
   84:
   85: def on_mouse_move(rel):
   86:   print(".", end=''); sys.stdout.flush() # print "." as update, with no newline --
 and update
   87:
   88:   if selectedActor != None: #make sure *something* is selected
   89:     origX, origY = selectedActor.pos
   90:     dx,       dy = rel #relative position; thanks to pg0 magic, we cannot rename t
hat
   91:     newX,   newY = origX+dx, origY+dy
   92:     selectedActor.pos = (newX, newY)
   93:
   94:     #print("on_mouse_mov:", selectedActorName, originalMousePos, pos, dx, dy)
   95:
   96: ###################### on mouse up ######################
   97:
   98: def on_mouse_up(): #on_press_up
   99:   global selectedActor, selectedActorName, selectedActorOrigPos
  100:   lastSelectedActor = selectedActor
  101:   selectedActor     = selectedActorName = selectedActorOrigPos = None
  102:
  103: ###################### on key down ######################
  104:
  105: numTimesSpaceHit = 0
  106:
  107: def on_key_down(key):
  108:   global numTimesSpaceHit, lastSelectedActor
  109:
  110:   if key == keys.SPACE:  # keys.RIGHT, keys.H, keys.C, etc.
  111:     print("space pressed")
  112:
  113:     #match numTimesSpaceHit:
  114:     #  case 0:
  115:
  116:     if numTimesSpaceHit == 0:
  117:       animate(a1, pos=(400, 500), tween='accel_decel', duration=.75)
  118:     else:
  119:       animate(a2, pos=(500, 500), tween='accel_decel', duration=.75)
  120:
  121:     numTimesSpaceHit += 1
  122:
  123:   if key == keys.RIGHT: lastSelectedActor.angle += 45
  124:   if key == keys.LEFT:  lastSelectedActor.angle -= 45
  125:
  126: ### end ###
  127:
```