import simplegui

import random

width = 800

height = 100

turns = 0

pairs = 8

def new\_game():

global number\_list, card, turns, pairs

turns = 0

label.set\_text("Turns = "+str(turns))

pairs = 8

label\_p.set\_text("Remaining "+str(pairs)+" pairs.")

card = [0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0]

number\_list = [0, 1, 2, 3, 4, 5, 6, 7, 0, 1, 2, 3, 4, 5, 6, 7]

random.shuffle(number\_list)

def mouseclick(pos):

global number\_list, card, turns, pairs

card\_width = width/len(number\_list)/2

same = [100, 100]

if pairs == 0 :

new\_game()

for j in range(len(card)):

if card[j] == 3:

card[j] = 0

for i in range(len(number\_list)):

if (i+0.05)\*card\_width\*2 <= pos[0] <= (i+1)\*card\_width\*2 and card[i] == 0:

card[i] = 1

same = [i for i in range(len(card)) if card[i] == 1]

if len(same) == 2:

if number\_list[same[0]] == number\_list[same[1]]:

card[same[0]] = 2

card[same[1]] = 2

same = []

turns = turns + 1

pairs = pairs - 1

label.set\_text("Turns = "+str(turns))

label\_p.set\_text("Remaining "+str(pairs)+" pairs.")

else:

card[same[0]] = 3

card[same[1]] = 3

turns = turns + 1

same = []

label.set\_text("Turns = "+str(turns))

else:

same = []

def draw(canvas):

card\_width = width/len(number\_list)/2

for i in range(len(number\_list)):

canvas.draw\_text(str(number\_list[i]), (card\_width/2+i\*card\_width\*2, 2\*height/3), 50, 'white')

if card[i] == 0:

canvas.draw\_polygon([[(i+1)\*card\_width\*2 , 0], [(i+1)\*card\_width\*2 , height],

[(i+0.05)\*card\_width\*2, height], [(i+0.05)\*card\_width\*2, 0]],

1, "green","green")

frame = simplegui.create\_frame("Memory", width, height)

frame.add\_button("Reset", new\_game)

label = frame.add\_label("Turns = 0")

label\_p = frame.add\_label("Remaining "+str(pairs)+" pairs.")

frame.set\_mouseclick\_handler(mouseclick)

frame.set\_draw\_handler(draw)

new\_game()

frame.start()