Detecting Mouse Clicks in Python

<https://stackoverflow.com/questions/165495/detecting-mouse-clicks-in-windows-using-python>

Option 1:

The only way to detect mouse events outside your program is to install a Windows hook using [SetWindowsHookEx](http://msdn.microsoft.com/en-us/library/ms644990(VS.85).aspx). The [pyHook](http://www.cs.unc.edu/Research/assist/developer.shtml) module encapsulates the nitty-gritty details. Here's a sample that will print the location of every mouse click:

import pyHook

import pythoncom

def onclick(event):

print event.Position

return True

hm = pyHook.HookManager()

hm.SubscribeMouseAllButtonsDown(onclick)

hm.HookMouse()

pythoncom.PumpMessages()

hm.UnhookMouse()

Option 2:

# Code to check if left or right mouse buttons were pressed

import win32api

import time

state\_left = win32api.GetKeyState(0x01) # Left button down = 0 or 1. Button up = -127 or -128

state\_right = win32api.GetKeyState(0x02) # Right button down = 0 or 1. Button up = -127 or -128

while True:

a = win32api.GetKeyState(0x01)

b = win32api.GetKeyState(0x02)

if a != state\_left: # Button state changed

state\_left = a

print(a)

if a < 0:

print('Left Button Pressed')

else:

print('Left Button Released')

if b != state\_right: # Button state changed

state\_right = b

print(b)

if b < 0:

print('Right Button Pressed')

else:

print('Right Button Released')

time.sleep(0.001)

Random hit generator

<https://stackoverflow.com/questions/39578807/python-battleship-random-number-generator>

import random

hitlist=[]; #a global variable

class Battleship(object):

""" Ship object container. A game where the user tries to destroy the enemy's ships User tries to guess computer's position x and y """

def \_\_init\_\_(self, size, numberships,position\_x,position\_y):

self.position\_x=position\_x

self.position\_y=position\_y

self.numberships=numberships

self.size = size

def plotships(self,r):

"""input is integer coordinates for ships and output is an array of arrays with battleship locations CREATES THE HITLIST DONT REPEAT"""

print('plotships function running')

for i in range(self.numberships):

hitlist.append(r) #random number from function randomness

print(hitlist)

return hitlist

def randomness(self):

rand\_x=random.choice(range(self.size))

rand\_y=random.choice(range(self.size))

randcoord=[rand\_x,rand\_y]

return randcoord

#Game Interface

size=int(input('Gameboard size'))

numberships=int(input('Waiting for Number of enemy ships'))

b=Battleship(size,numberships,0,0)

random=b.randomness() #create a random x y coordinate

b.plotships(random) #create a hitlist