

Sprint 1

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GEOFENCING CODE:

Basic Example Code:

```
import time

def stopwatch(seconds,d,lspoint):

    start = time.time()

    time.clock()

    elapsed = 0

    flag = False

    num = 0

    while elapsed < seconds:

        elapsed = time.time() - start

        print "%02d" % elapsed

        if elapsed > d[num] and elapsed < d[num+1] and flag == False:

            x = lspoint[num][0]

            y = lspoint[num][1]

            createpoint(x,y)

            flag = True

            print "Shot Taken"

            print point_in_poly(x,y,polygon)

        if elapsed > d[num+1]:

            print "Shot Taken"

            flag == False

            num = num+1

            x = lspoint[num][0]

            y = lspoint[num][1]

            createpoint(x,y)

            print point_in_poly(x,y,polygon)

        time.sleep(1)

def createpoint(x,y):
```



```
#### define the polygon
```

```
polygon =  
[(512882.78819722467,120811.83924772343),(512960.84437170526,120809.7007223952),(512960.  
84437170526,120809.7007223952),(512959.77510904113,120754.09906386107),(512882.78819722  
467,120756.2375891893)]
```

```
#### set how long the script will run (70 seconds will get you in and out of geofence)
```

```
time_seconds = 70
```

```
#### first coordinate
```

```
x = 512915
```

```
y = 120728
```

```
#### time intervals, 10 seconds between shots / or points
```

```
intervals = int(time_seconds / 10)
```

```
lspoint = []
```

```
#### build the list of coordinates to be plotted
```

```
for i in range(0,intervals+1):
```

```
    y1 = y + (i*12.5)
```

```
    lspoint.append([x,y1])
```

```
#### to build the blocks of time in intervals, so we know the number of intervals (default is 7),
```

```
#### we need a list of time intervals [0,10,20,30 etc] to check against the clock this list is d, f is the  
gap ie 10 seconds, a is starting point (0)
```

```
### b is the number of intervals + 1 because the code will check the the next in the list
```

```
f = 10
```

```
a = 0
```

```
b = intervals+1
```

```
d = [x * f for x in range(a, b)]
```

```
### Run the stopwatch, or start the program!
```

```
stopwatch(time_seconds,d,lspoint)
```