```
1 """
 2 This file is a heavily modified version of https://github.com/PySimpleGUI
  /PySimpleGUI/blob/master/DemoPrograms/Demo Desktop Widget Timer.py
 4 The original code is licensed under the GNU Lesser General Public License v3.0
   (https://github.com/PySimpleGUI/PySimpleGUI/blob/master/license.txt).
 5 This means that we can use, copy, modify, merge, publish, distribute, sublicense,
  and/or sell copies of the original code, as long as we include the original License
  and copyright notice, Disclose source, State changes, and the project is licensed
  under the Same license.
 6 """
 7
 8 import thread
 9 | import asyncio
10 import split watcher as sw
11 import PySimpleGUI as sq
12 import time
13
14
15 user times = []
16 splitNumber = 0
17
18 def time as int():
       return int(round(time.time() * 100))
20 def format time():
       return window['-TIMER-TEXT-'].update('{:02d}:{:02d}.{:02d}'.format((current time
   // 100) // 60,
22
                                                              (current time // 100) % 60,
23
                                                              current time % 100))
24
25 def callOnSplit():
   user times.append(current time)
27
    currentF = open('current run.csv', 'a+')
       \texttt{currentF.writelines}(\texttt{str}(\texttt{splitNumber}) \ + \ \texttt{", " + str}(\texttt{user\_times}[-1]) \ + \ \texttt{"} \land \texttt{"})
28 #
29
    currentF.writelines(str(splitNumber) + ", " + str(current time) + "\n")
30
31
   currentF.close()
32
33 def endSplitWatch():
   print("endSplitWatch")
35 # splitWatch.exit program = True
36 #
       splitWatchThread.join()
    exit()
37
38
39 # ----- Create Form ------
40 sg.theme('Black')
41
42 | \text{layout} = [[\text{sq.Text('')}],
43
             [sg.Text('', size=(8, 2), font=('Helvetica', 20),
44
                    justification='center', key='-TIMER-TEXT-'),
45
              sg.Text('', size=(8, 2), font=('Helvetica', 20),
46
                    justification='center', key='-SPLIT-TEXT-')],
             [sg.Button('Pause', key='-RUN-PAUSE-', button color=('white', '#001480')),
47
48
              sg.Button('Reset', button color=('white', '#007339'), key='-RESET-'),
49
              sg.Exit(button color=('white', 'firebrick4'), key='Exit'),
```

```
sg.Button('Split', key='-SPLIT-TIMER-', button color=('white',
    '#ff0000'))]]
 51
 52 window = sg.Window('Running Timer', layout,
53
                       no titlebar=False,
54
                       auto size buttons=True,
55
                       keep on top=True,
56
                       grab anywhere=True,
57
                       element padding=(0, 0),
58
                       finalize=True,
 59
                       element justification='c',
 60
                       right click menu=sg.MENU RIGHT CLICK EDITME EXIT,
 61
                       size = (500, 500),
 62
                       resizable = True)
 63
 64 splitWatch = sw.splitWatcher(callOnSplit, endSplitWatch, window)
 66 def startSplitWatch():
     asyncio.run(splitWatch.start())
 68
 69 thread.start new thread(startSplitWatch, ())
70
 71 current time, paused time, paused = 0, 0, True
72 start time = time as int()
73
74 def format time():
       return window['-TIMER-TEXT-'].update('{:02d}:{:02d}.{:02d}'.format((current time
    // 100) // 60,
 76
                                                          (current time // 100) % 60,
77
                                                          current time % 100))
78
79 def doEventWindows (event):
80
       global paused time
 81
      global current time
82
       global paused
 83
      global start time
 84
       global splitNumber
85
86
       match event:
 87
            case sg.WIN CLOSED | 'Exit':
 88
               splitWatch.exit program = True
 89
                del splitWatch
 90
               print('Exit')
 91
                return True
 92
            case '-RESET-':
                paused time = start_time = time_as_int()
 93
 94
                current time = 0
95
                splitNumber = 0
                window['-SPLIT-TEXT-'].update('{:02d}:{:02d}.
 96
    {:02d}'.format((current time // 100) // 60,
 97
                                                                  (current time // 100) %
    60,
98
                                                                  current time % 100))
99
                format time()
100
                print('Reset')
101
                if not paused:
```

```
102
                    doEventWindows('-RUN-PAUSE-')
103
                return False
104
            case '-RUN-PAUSE-':
105
               paused = not paused
106
                if paused:
107
                    paused time = time as int()
108
                else:
109
                    start time = start time + time as int() - paused time
110
                print('Run or Pause')
111
                return False
            case '-SPLIT-TIMER-':
112
113
                if (splitNumber == 0 and paused):
114
                    doEventWindows('-RUN-PAUSE-')
115
                    return False
116
                elif (paused):
117
                    return False
118
                else:
119
                    callOnSplit()
120
                    splitNumber += 1
                    window['-SPLIT-TEXT-'].update('{:02d}:{:02d}.
121
    {:02d}'.format((current time // 100) // 60,
122
                                                                 (current time // 100) %
    60,
123
                                                                current time % 100))
124
                    # Change button's text
125
                    window['-RUN-PAUSE-'].update('Run' if paused else 'Pause')
126
                    print('Split')
127
                return False
128
129 def main():
130
    global paused time
131
    global current time
132
     global paused
133 global start time
134 global splitNumber
doEventWindows('-RESET-')
136
137
     while True:
     # ----- Read and update window -----
138
139
       if not paused:
140
           event, values = window.read(timeout=10)
141
            current time = time as int() - start time
142
            # print(event, values)
143
       else:
144
           event, values = window.read()
145
           print(event, values)
        # ----- Do Button Operations -----
146
147
148
       if doEventWindows(event):
149
           break
150
151
        format time()
152
153 if __name__ == "__main__":
154 main()
```