

SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

Clock in Another Language

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```
1 import time
2
3 # Get user input
4 def get_initial_time():
5     while True:
6         choice = input('Start from "00:00:00"? Please type "yes" or "no: ')
7
8         if choice.lower() == 'yes':
9             return (0, 0, 0)
10        elif choice.lower() == 'no':
11            error = 'Invalid time format. Please try again.'
12            custom_time = input('Type your preferred time to start in "hh:mm:ss"
13                               ↪ format: ')
14            try:
15                hh, mm, ss = map(int, custom_time.split(':'))
16                if 0 <= hh < 24 and 0 <= mm < 60 and 0 <= ss < 60:
17                    return (hh, mm, ss)
18            except:
19                print(error)
20        else:
21            print('Invalid choice. Please type "yes" or "no".')
22
23
24 # Display digital clock function
25 def display_clock():
26     hh, mm, ss = get_initial_time()
27
28     while True:
29         # Format timer as "hh : mm : ss"
30         time_display = f"{hh:02d} : {mm:02d} : {ss:02d}"
31
32         # Time display
33         print(f"Time Display: {time_display}", end="\r")
34
35         # Wait 1 second
36         time.sleep(1)
37
38         # Time update
39         ss += 1
40         if ss == 60:
41             ss = 0
42             mm += 1
43             if mm == 60:
44                 mm = 0
45                 hh += 1
46                 if hh == 24:
47                     hh = 0
48
49     display_clock()
```

```
/usr/local/bin/python3 /Users/khoale/11.1P.py
(base) khoale@192-168-20-11 ~ % /usr/local/bin/python3 /Users/khoale/11.1P.py
Start from "00:00:00"? Please type "yes" or "no: no
Type your preferred time to start in "hh:mm:ss" format: 14:10:05
Time Display: 14 : 10 : 28
```

```
(base) khoale@192-168-20-11 ~ % /usr/local/bin/python3 /Users/khoale/11.1P.py
Start from "00:00:00"? Please type "yes" or "no: yes
Time Display: 00 : 00 : 25
```