

201511288 이현우 201811241 김유진 201811249 류수진 201811265 서푸름

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- Digital Watch Design
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D

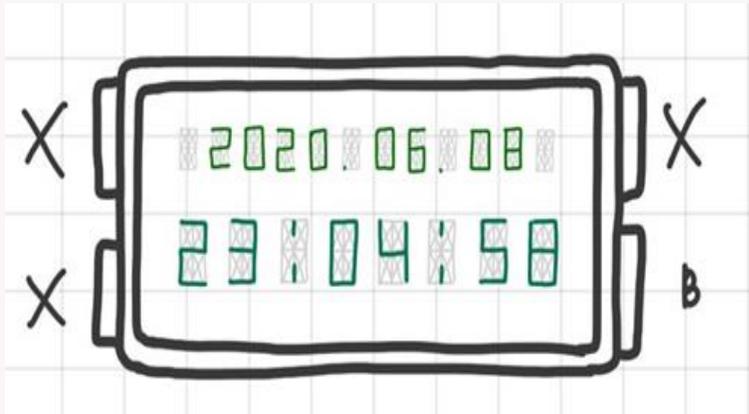
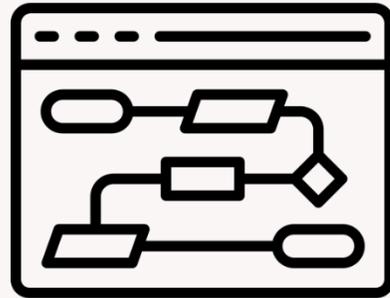
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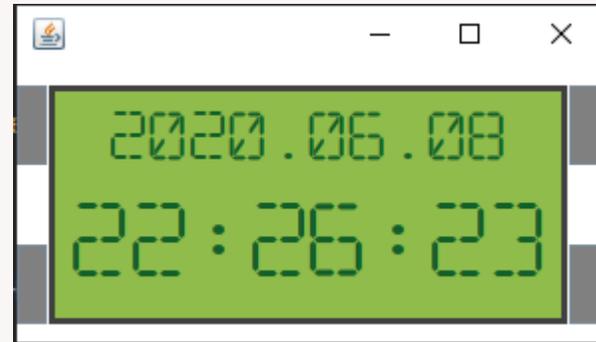
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# I M P L E M E N T

Name	Press A Button
Responsibilities	사용자가 A 버튼을 누른다.
Type	GUI
Cross Reference	R7.6, R7.7, R7.3.1, R6.2, R1.4, R5.1, R8.2, R9.2
Notes	<ul style="list-style-type: none"> <li>-메인화면                             <ul style="list-style-type: none"> <li>- 이전 모드 전환</li> </ul> </li> <li>-ModeConfig                             <ul style="list-style-type: none"> <li>- change</li> </ul> </li> <li>-현재시간                             <ul style="list-style-type: none"> <li>- 비활성화</li> </ul> </li> <li>-알람                             <ul style="list-style-type: none"> <li>- 활성화/비활성화</li> <li>- 알람 추가</li> <li>- 1시간 추가</li> </ul> </li> <li>-타이머                             <ul style="list-style-type: none"> <li>- 분 추가</li> <li>- 비활성화 / 실행중</li> <li>- 비활성화 / pause 중</li> </ul> </li> <li>-스톱워치                             <ul style="list-style-type: none"> <li>- 시작</li> <li>- 비활성화</li> </ul> </li> <li>-세계시간                             <ul style="list-style-type: none"> <li>- 이전 시간</li> <li>- 비활성화 / hold 상태</li> </ul> </li> <li>-테마                             <ul style="list-style-type: none"> <li>- 이전 테마</li> </ul> </li> </ul>
Pre-Conditions	N/A
Post-Conditions	현재 모드에서, A버튼에 매핑 된 기능이 호출된다.

Name	Press D Button
Responsibilities	사용자가 D 버튼을 누른다.
Type	GUI
Cross Reference	R1.6, R1.2
Notes	<ul style="list-style-type: none"> <li>- 메인화면                             <ul style="list-style-type: none"> <li>- ModeConfig</li> </ul> </li> <li>- 메인화면 제외 모두                             <ul style="list-style-type: none"> <li>- BackToMainScreen</li> </ul> </li> </ul>
Pre-Conditions	N/A
Post-Conditions	현재 모드에서, D버튼에 매핑 된 기능이 호출된다.



# JUNIT TEST

```
@Test
public void startTimer() throws InterruptedException {
    for(int i = 0; i < 3; i++) {
        timerMode.increaseTimerSeconds();
    }
    timerMode.startTimer();
    assertTrue(timerMode.is_timer_running);
    assertTrue(timerMode.is_timer_started);
    Thread.sleep(1000);
    assertEquals("expected: 2, timerMode.total_seconds");
}
```

✓ TimerModeTest	1 s 3 ms	"C:\Program Files\JetBrains\IntelliJ IDEA 2019.3.4\jbr\bin\java.exe" -
✓ startTimer	1 s 3 ms	Process finished with exit code 0

# JUNIT TEST

```
@Test
public void maxIncreaseMinute() {
    for(int i = 0; i < 59; i++) {
        timerMode.increaseTimerMinute();
    }
    assertEquals( expected: 59, timerMode.setted_time.getMinute());
    timerMode.increaseTimerMinute();
    assertEquals( expected: 0, timerMode.setted_time.getMinute());
}
```

▼ ✓ TimerModeTest	2 ms	"C:\Program Files\JetBrains\IntelliJ IDEA 2019.3.4\jbr\bin\java.exe" -ea
✓ maxIncreaseMinute	2 ms	Process finished with exit code 0

# J U N I T L I S T

✓ SystemTest	46 s 47 ms
✓ backToMainTest	40 ms
✓ indexIncreaseTest	1 ms
✓ buzzerMultifulRingTest	46 s 3 ms
✓ modeConfigTest	2 ms
✓ indexDecreaseTest	0 ms
✓ useCurrentModeTest	0 ms
✓ segmentLowerTest	0 ms
✓ initWatchTest	1 ms
✓ segmentUpperTest	0 ms

✓ WorldTimeModeTest	
✓ decreaseWorldTimeIndex	
✓ increaseWorldTimeIndex	
✓ holdCurrentWorldTime	
✓ releaseCurrentWorldTimeRock	
✓ initWorldTimeMode	

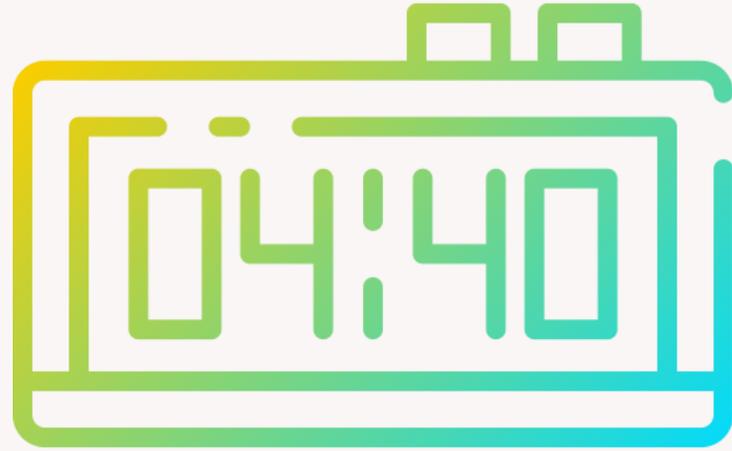
▼ ✓ AlarmModeTest	40 ms
✓ increaseOneH	16 ms
✓ checkRingAlar	21 ms
✓ increasefiveMir	0 ms
✓ enableAlarm	1 ms
✓ deleteAlarm	0 ms
✓ disableAlarm	1 ms
✓ increasealarm_	0 ms
✓ decideAlarm	1 ms
✓ alarmInitTime	0 ms
✓ initAlarmMode	0 ms
✓ nextAlarm	0 ms

✓ TimerModeTest	1 s 12 ms
✓ continueTimer	8 ms
✓ startTimer	1 s 1 ms
✓ cancelTimer	3 ms
✓ maxIncreaseMinut	0 ms
✓ increaseTimerMinu	0 ms
✓ pauseTimer	0 ms
✓ maxIncreaseSeco	0 ms
✓ increaseTimerSeco	0 ms
✓ checkZeroNotStar	0 ms

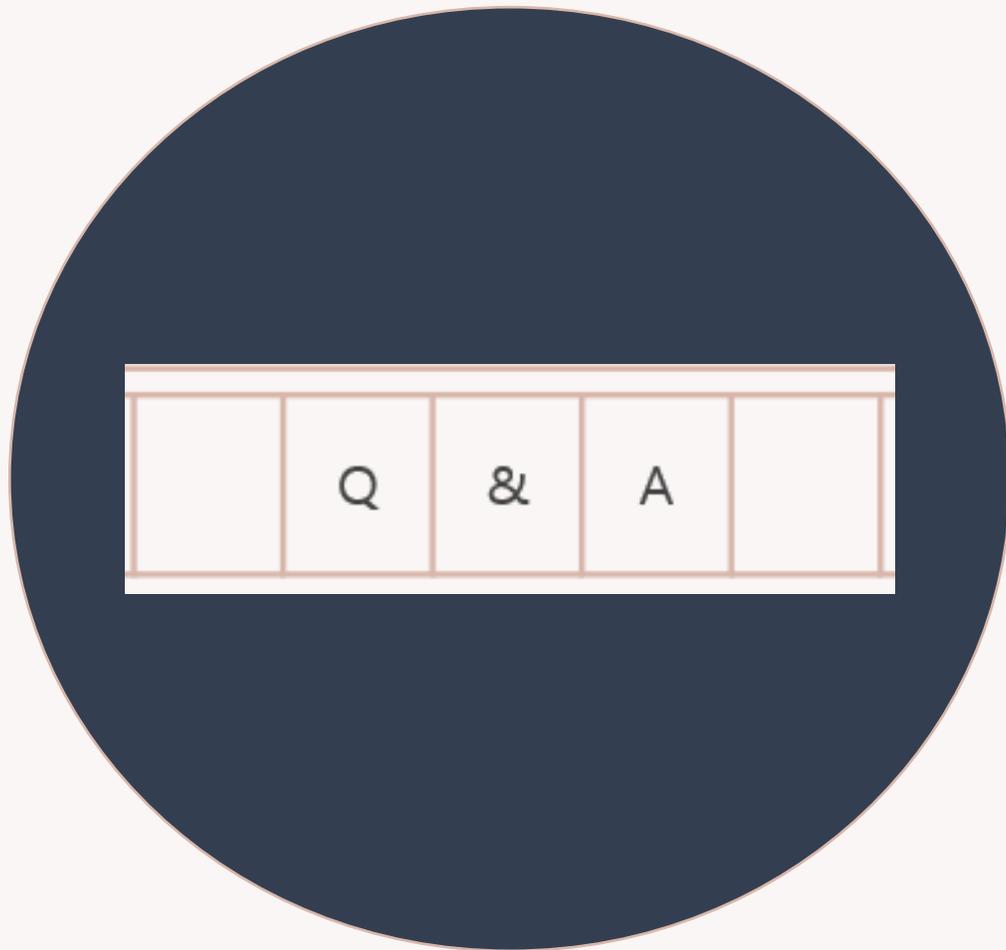
✓ StopwatchMo	2 s 154 ms
✓ resetTimer	130 ms
✓ isResetRun	1 ms
✓ pauseStopWatch	0 ms
✓ maxStopWa	1 s 12 ms
✓ startStopWa	1 s 11 ms
✓ continueStopWa	0 ms



시 연



오전



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