언제 할지 알려주시계

OOPT Stage 2050, 2060

Team 5

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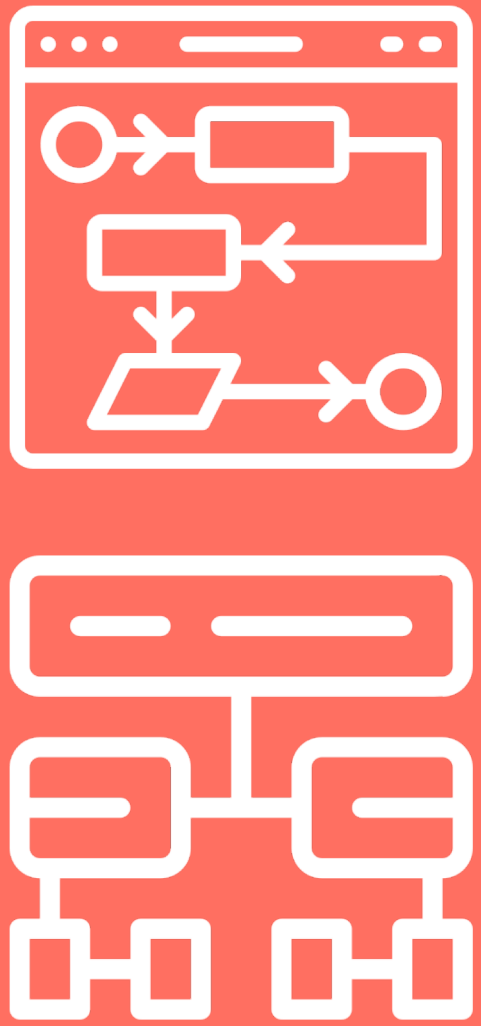
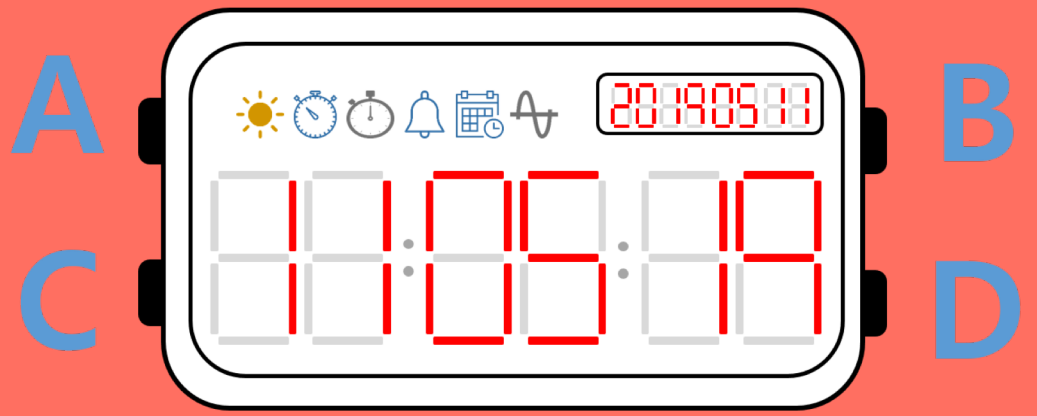
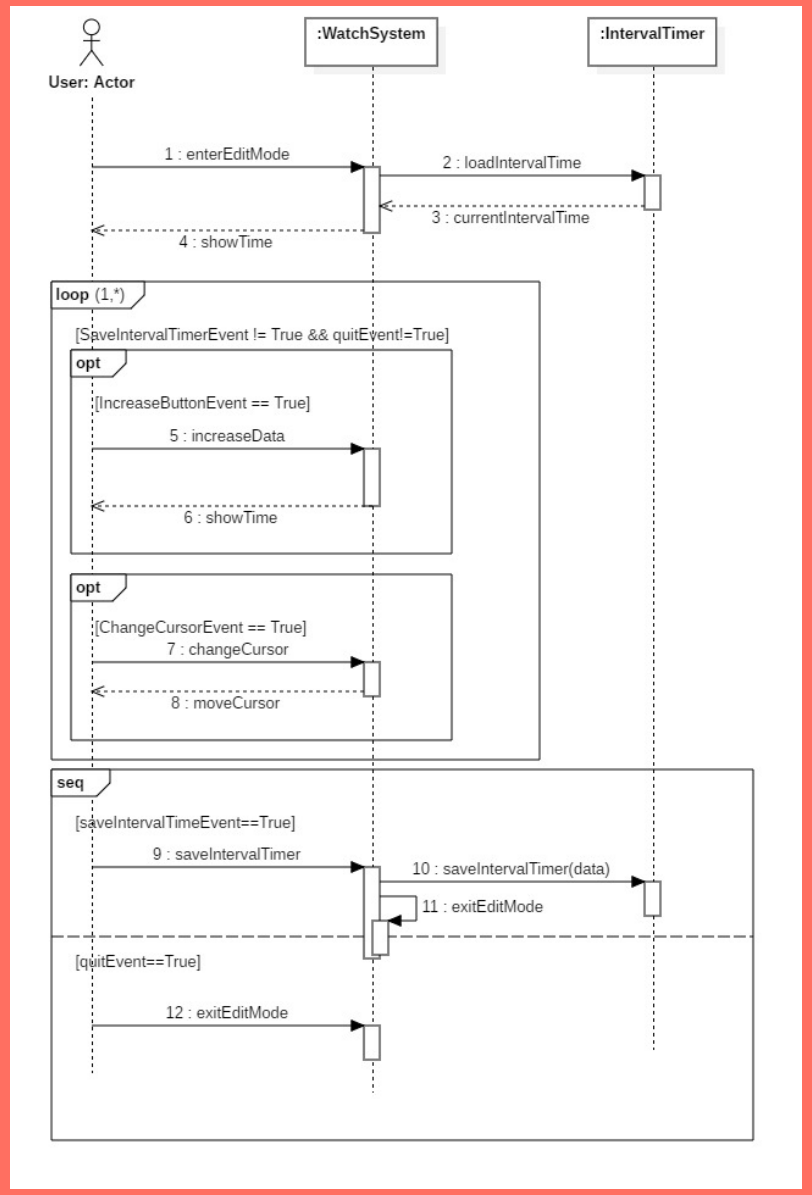
Design & Construct

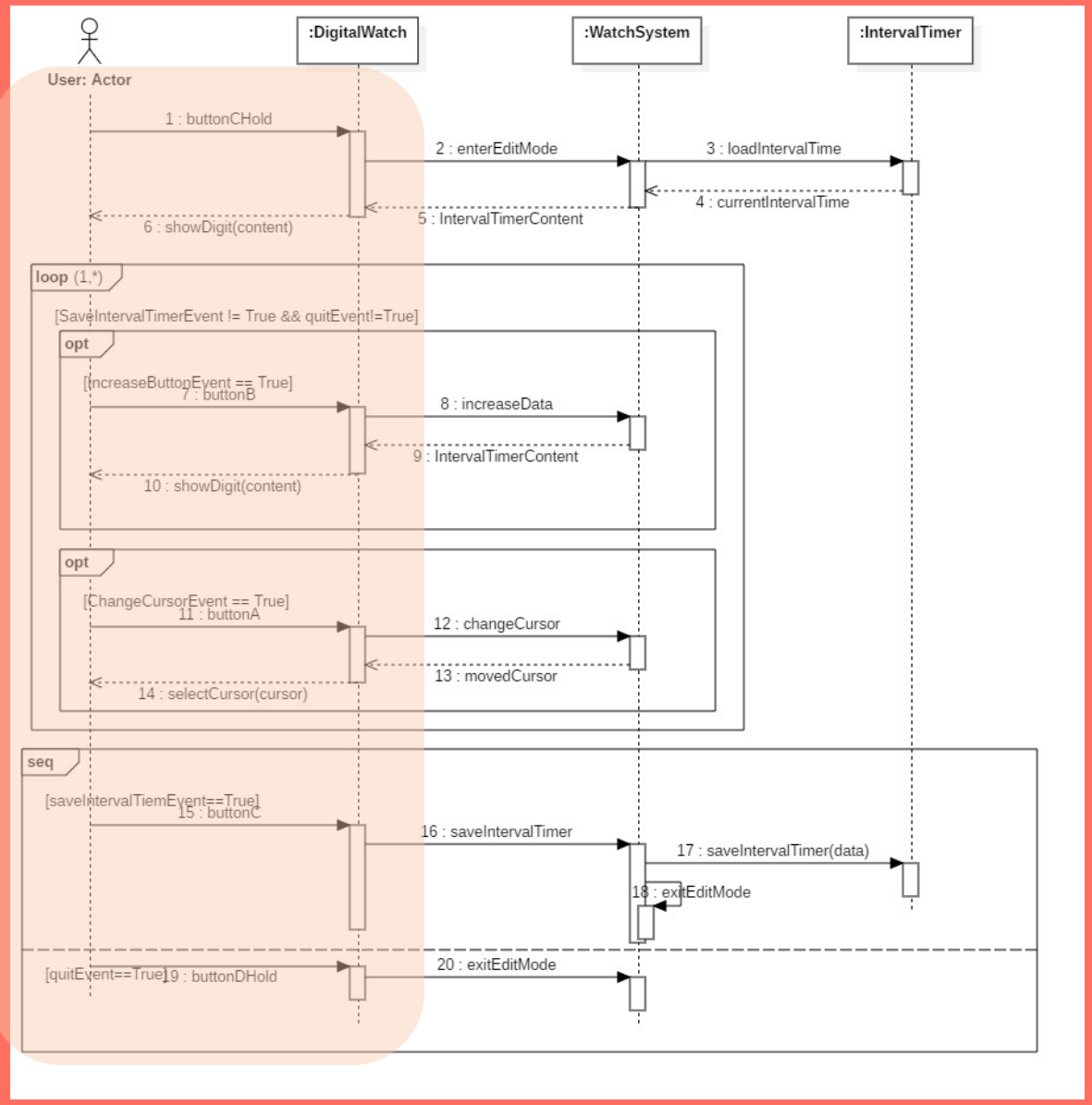




Implement Window

Use Case 23. Set Interval Timer





Implement Window

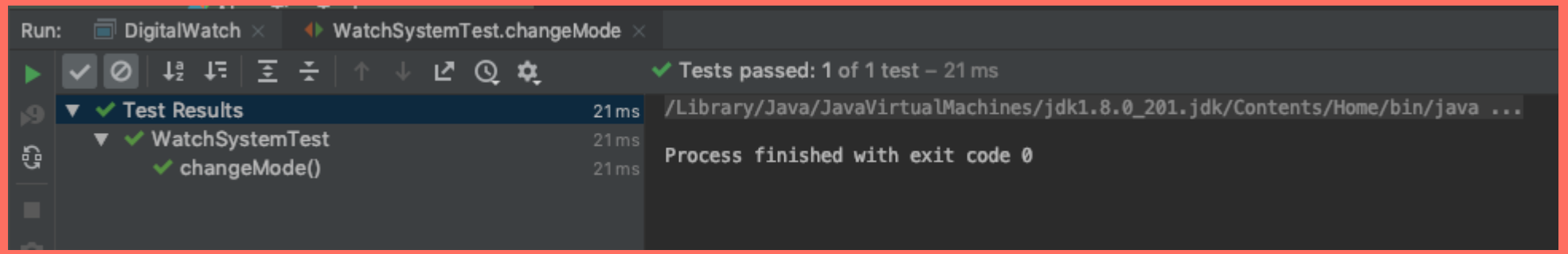
Name	buttonB
Responsibility	사용자가 시계의 B버튼을 누른다.
Type	GUI
Cross Reference	R 1.1, R 2.1, R 2.2, R 2.4, R 3.1, R 3.2, R 4.1, R 4.3, R 4.4, R 5.1, R 6.2, R 6.2, R 6.3, R 7.2, R 7.3
Notes	현재 모드가 editMode일 경우 현재 커서의 값을 증가시켜준다. 현재모드가 WatchTimer, Stopwatch일 경우 start/pause상태를 변화시켜준다. 현재모드가 Alarm, D-day, IntervalTimer 모드일 경우 enable/disable상태를 변화시켜준다. 현재모드가 setmode일 경우 모드 선택을 할 수 있다. 알림이 울리고 있을 경우 mute시켜준다.
Pre-Conditions	N/A
Post-Conditions	display모드의 경우 활성화 비활성화를 시켜줘야되고, Edit Mode 의 경우 증가된 값을 보여준다. SetMode의 경우 모드를 선택해준다.

Name	buttonCHold
Responsibility	사용자가 시계의 C버튼을 1초 이상 누른다.
Type	GUI
Cross Reference	R 1,1, R 2.2, R 4.1, R 4.2, R 5.1, R 6.3, R 6.4, R 7.3
Notes	현재 모드가 StopWatch를 제외한 displayMode일 경우 각 모드가 editMode로 변경된다. 알림이 울릴 경우 Mute시켜주고 해당 모드의 buttonCHold를 수행한다.
Pre-Conditions	N/A
Post-Conditions	N/A

Name	buttonDHold
Responsibility	사용자가 시계의 D버튼을 1초 이상 누른다.
Type	GUI
Cross Reference	R 1,1, R 2.2, R 4.1, R 4.2, R 5.1, R 5.2, R 6.3, R 6.4, R 7.2, R 7.3
Notes	각 모드의 edit Mode에서 수정된 값을 저장하지 않고 displayMode로 빠져나온다. 현재 모드가 setMode일 경우 수정된 모드들을 저장하지 않고 setMode를 진입한 모드로 빠져나온다. 알림이 울릴 경우 Mute시켜주고 해당 모드의 buttonDHold를 수행한다.
Pre-Conditions	N/A
Post-Conditions	N/A

Write Test Code & Unit Testing

```java
@Test
void changeMode() {
    Boolean[] tmpSetMode = {true, true, true, false, false};
    ws.setSetMode(tmpSetMode);
    ws.saveMode();
    Object nextMode = ws.getModeManager().getWatchTimer();
    ws.changeMode();
    assertEquals(ws.getCurrentMode(), nextMode);
    assertEquals(ws.getCurrentDdayPage(),  actual: 0);
    assertEquals(ws.getCurrentAlarmPage(),  actual: 0);
    assertFalse(ws.getEdited());
}
```



Testing Traceability analysis

Operation in sequence diagram	Operation in interaction diagram		Method	Class		SystemTest
enterEditMode	enterEditMode()		enterEditMode(): Time	WatchSystem		Set time test
	loadTime()		increaseData(): Time			Set time test
	loadTimer()		changeCursor(): int			Format change test
	loadAlarm(currentAlarmPage)		saveTime(): void			Activate timer test
	loadAlarmData()		changeHourFormat(): Time			Activate timer test
	loadStartDday()		activateTimer(): void			Set Timer test
	loadEndDday()		saveTimer(): void			Set Timer test
	loadIntervalTime()		pauseTimer(): void			Notify finish Timer test
increaseData	increaseData()		resetTimer(): void			Pause Timer test
changeCursor	chageCursor()		activateStopwatch(): void			Reset Timer test
saveTime	saveTime()		pauseStopwatch(): void			Reset Timer test
	saveTime(data)		resetStopwatch(): void			Activate Stopwatch test
	exitEditMode()		saveAlarm(): void			Pause Stopwatch test
changeHourFormat	changeHourFormat()		resetAlarm(): Time			Reset Stopwatch test
	setHourForamt()		enableAlarm(): void			Set alarm test
activateTimer	activateTimer()		disableAlarm(): void			Set alarm test
	activate()		changeAlarmPage(): AlarmTime			Reset alarm test
	ring()		changePage() Time			Reset alarm test
saveTimer	saveTimer()		saveDday(): void			Enable alarm test
	saveTimer(data)		resetDday(): Time			Disable alarm test
	exitEditMode()		changeDdayFormat(): int			Notify alarm test
pauseTimer	pauseTimer()		enableIntervalTimer(): void			Change alarm page
	pause()		disableIntervalTimer(): void			Set D-day test
resetTimer	resetTimer()		saveIntervalTimer(): void			Set D-day test
	reset()		resetIntervalTimer() void			Reset D-day test
activateStopwatch	activateStopwatch()		changeMode(): int			Notify D-day test
	activae()		enterSetMode(): int			Set D-day Format test
pauseStopwatch	pauseStopwatch()		chooseModes(): void			Set D-day Format test
	pause()		saveMode(): void			Enable Interval Timer test
resetStopwatch	resetStopwatch()		muteBeep(): void			Disable Interval Timer test
	reset()		exitEditMode(): void			Set Interval Timer test
saveAlarm	saveAlarm()		loadTime(): Time	Time Keeping		Set Interval Timer test
	saveAlarm(currentAlarmPage, data)		saveTime(data): void			Reset Interval Timer test
	saveAlarmData()		SetHourFormat():void			Reset Interval Timer test
	exitEditMode()		activate(): void	Timer		Notify Finish Interval Timer
resetAlarm	resetAlarm()		loadTimer(): Time			Change Mode test
enableAlarm	enableAlarm()		saveTimer(data): void			Set Mode test
	enableAlarm(currentAlarmPage)		pause(): void			Set Mode test
	enable()		reset(): void			Set Mode test
	getCurrentTime()		ring():void			Mute Beep test
	ring()		activate(): void	StopWatch		
disableAlarm	disableAlarm()		pause(): void			
	disableAlarm(currentAlarmPage)		reset(): void			
	disable()		loadAlarm(currentAlarmPage): Time	Alarm		
changeAlarmPage	changeAlarmPage()		saveAlarm(currentAlarmPage, data): void			
	loadAlarm(currentAlarmPage)		enableAlarm(currentAlarmPage): void			
	loadAlarmData()		disableAlarm(currentAlarmPage): void			
changePage	chagePage()		loadAlarmData(): Time	AlarmTime		
saveDday	saveDday()		saveAlarmData(): void			
	saveDday(data1, data2)		enable(): void			
	ring()		disable(): void			
	exitEditMode()		ring()			
resetDday	resetDday()		loadStartDday(): Time	Dday		
	reset()		loadEndDday(): Time			
	getCurrentTime()		saveDday(data1, data2): void			
changeDdayFormat	changeDdayFormat()		reset(): Time			
	changeFormat()		changeFormat(): int			
enableIntervalTimer	enableIntervalTimer()		ring()			
	enable()		enable(): void	IntervalTimer		
	ring()		disable(): void			
disableIntervalTimer	disableIntervalTimer()		loadIntervalTimer(): Time			
	disbale()		saveIntervalTimer(data): void			
saveIntervalTimer	saveIntervalTimer()		ring()			
	saveIntervalTimer(data)		getNextMode(): int	ModeManager		
	exitEditMode()		loadSetMode(): int			
resetIntervalTimer	resetIntervalTimer()		toggleMode(): int			
changeMode	changeMode()		createTimer(): Timer			
	getNextMode()		createStopwatch(): Stopwatch			
enterSetMode	enterSetMode()		createAlarm(): Alarm			
	loadSetMode()		createDday(): Dday			
chooseModes	chooseModes()		createIntervalTimer(): IntervalTimer			
saveMode	saveMode()					
	createTimer()					
	createStopwatch()					
	createAlarm()					
	createDday()					
	createIntervalTimer()					
	exitSetMode()					
muteBeep	muteBeep()					
exitEditMode	exitEditMode()					
exitSetMode	exitSetMode()					

시 연

D-Day

Interval Timer

Q&A