

그만자시계

OOPT Stage 2040

Project Team 4

Date

2020-05-25

Team Information

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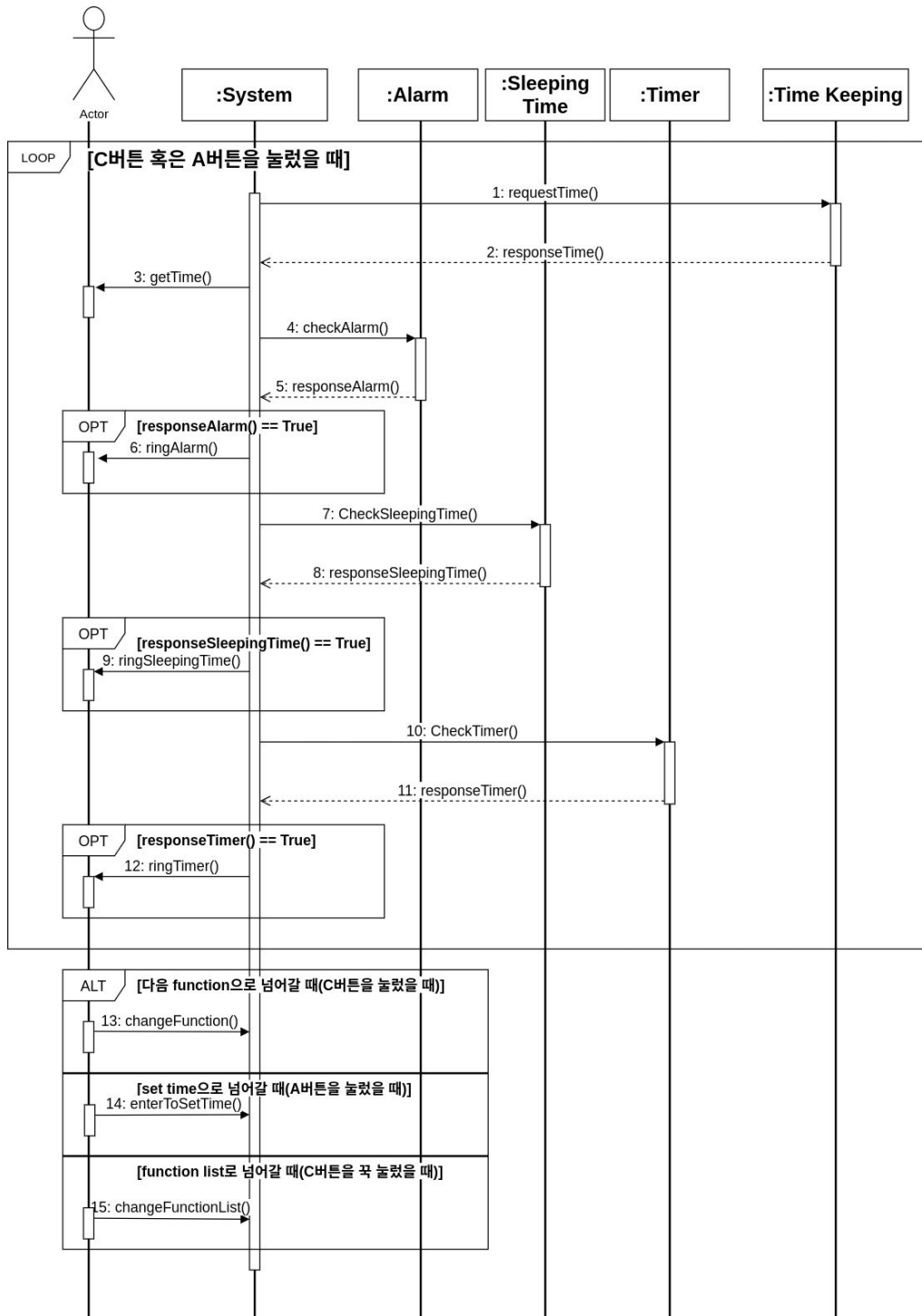
201711408 이관석

Index

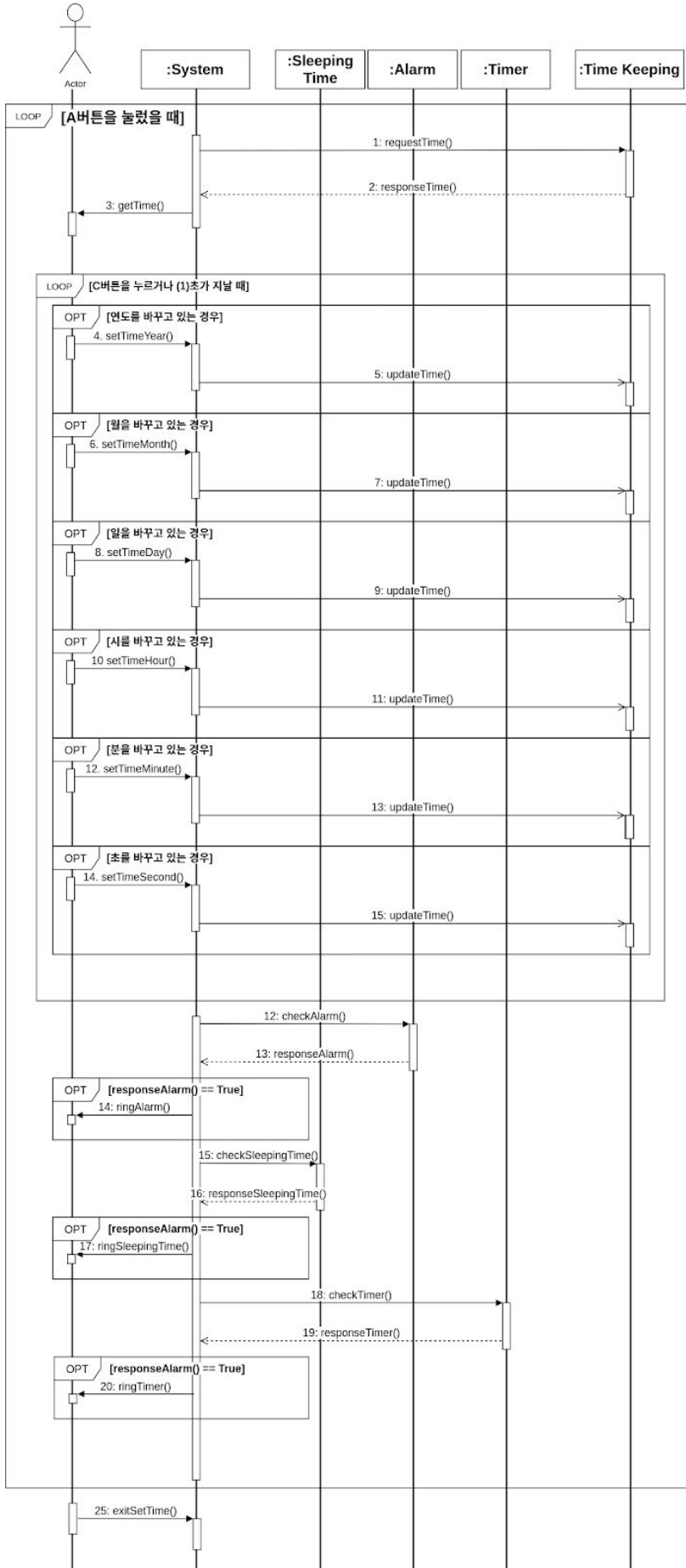
- 1 Activity 2044. Define Interaction Diagrams
- 2 Activity 2045. Define Design Class Diagrams
- 3 Activity 2046. Design Traceability Analysis

1 . Activity 2044. Define Interaction Diagrams

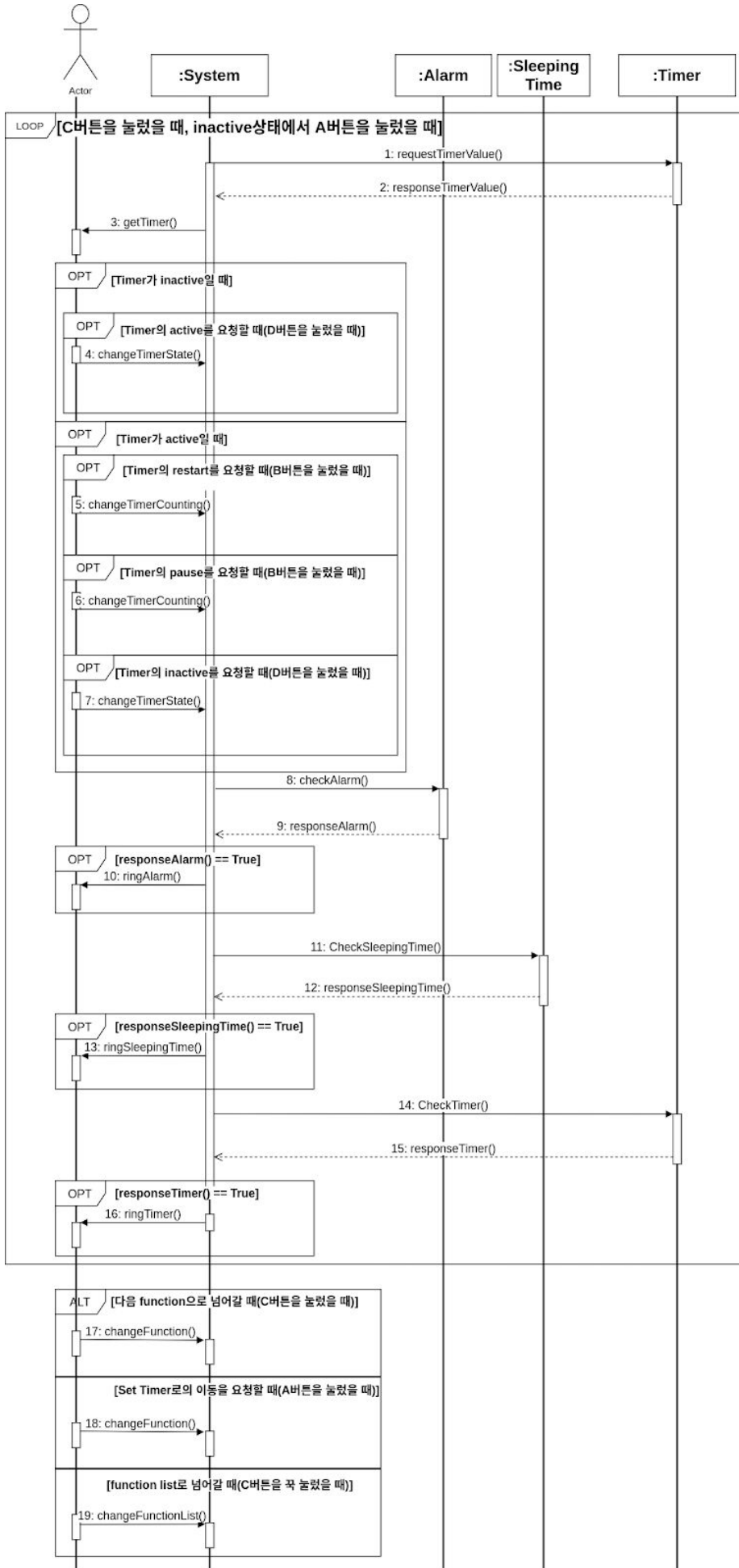
1.1 Let display time



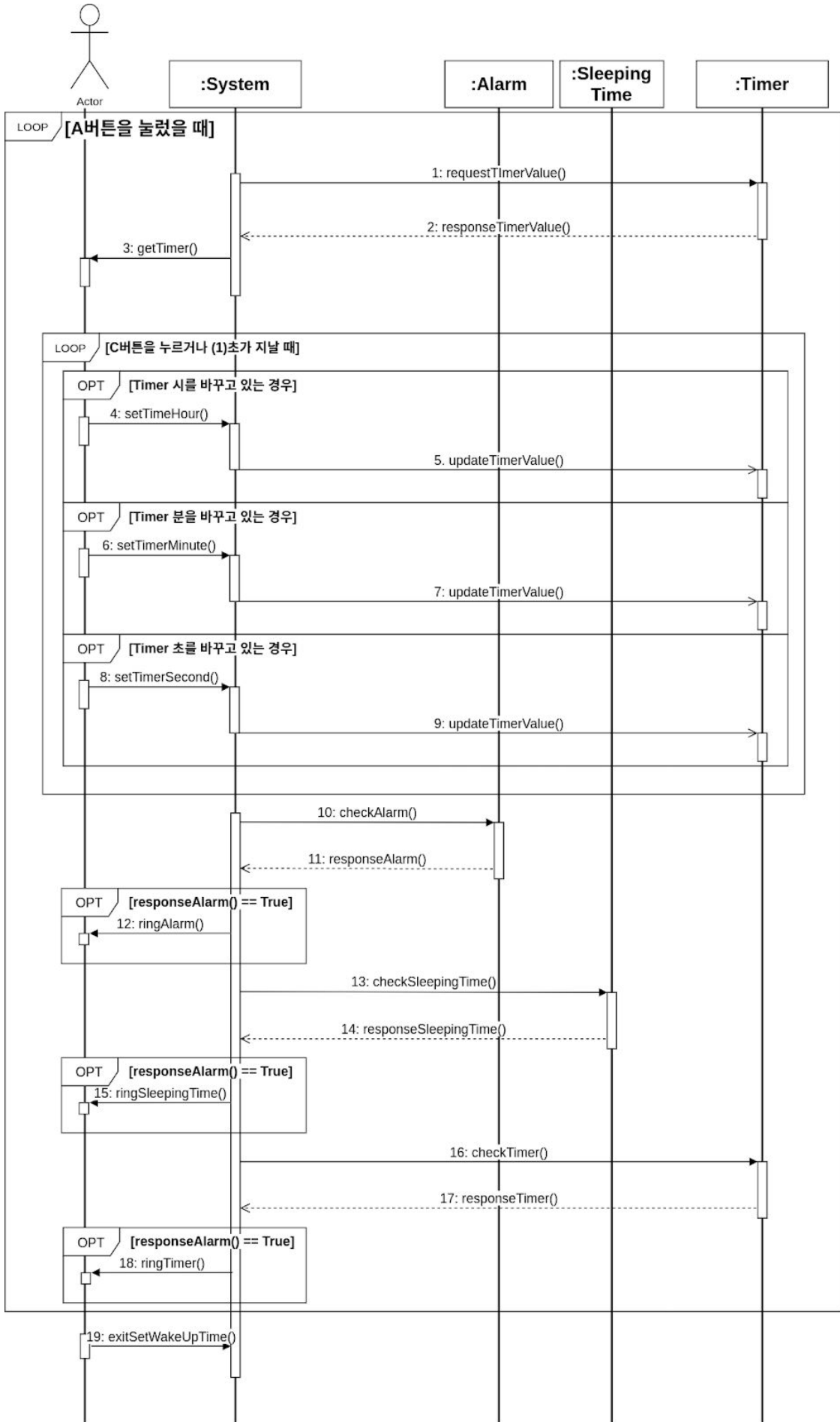
1.2 Set time



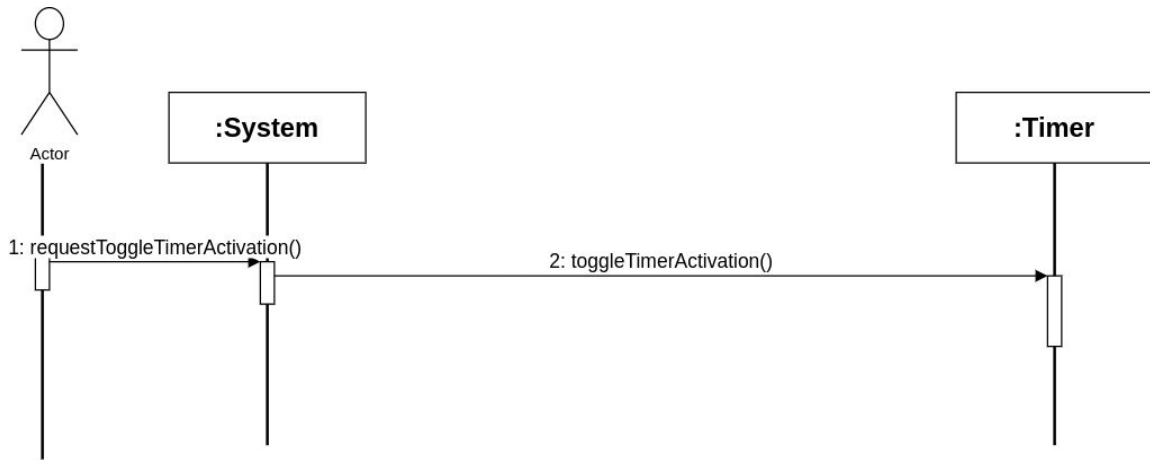
1.3 Let display timer



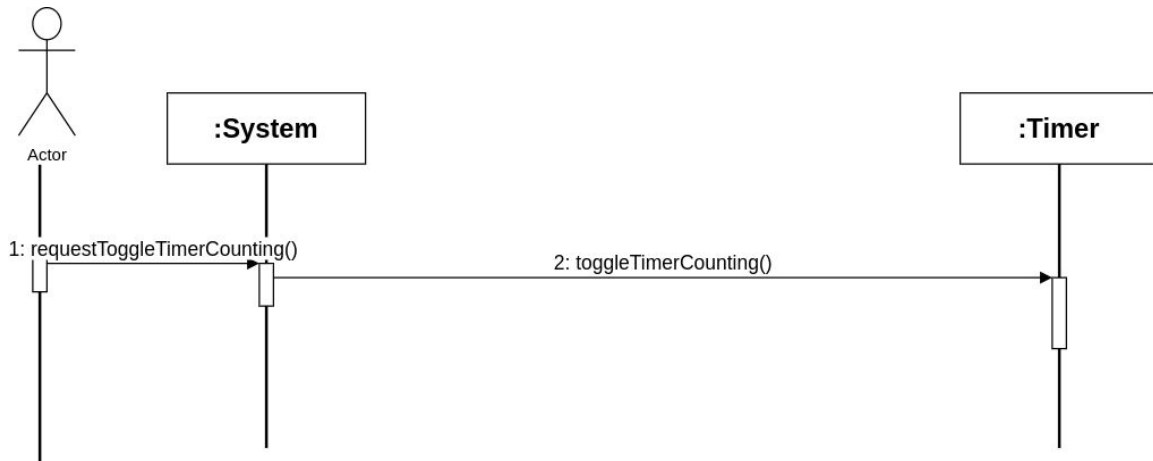
1.4 Set timer



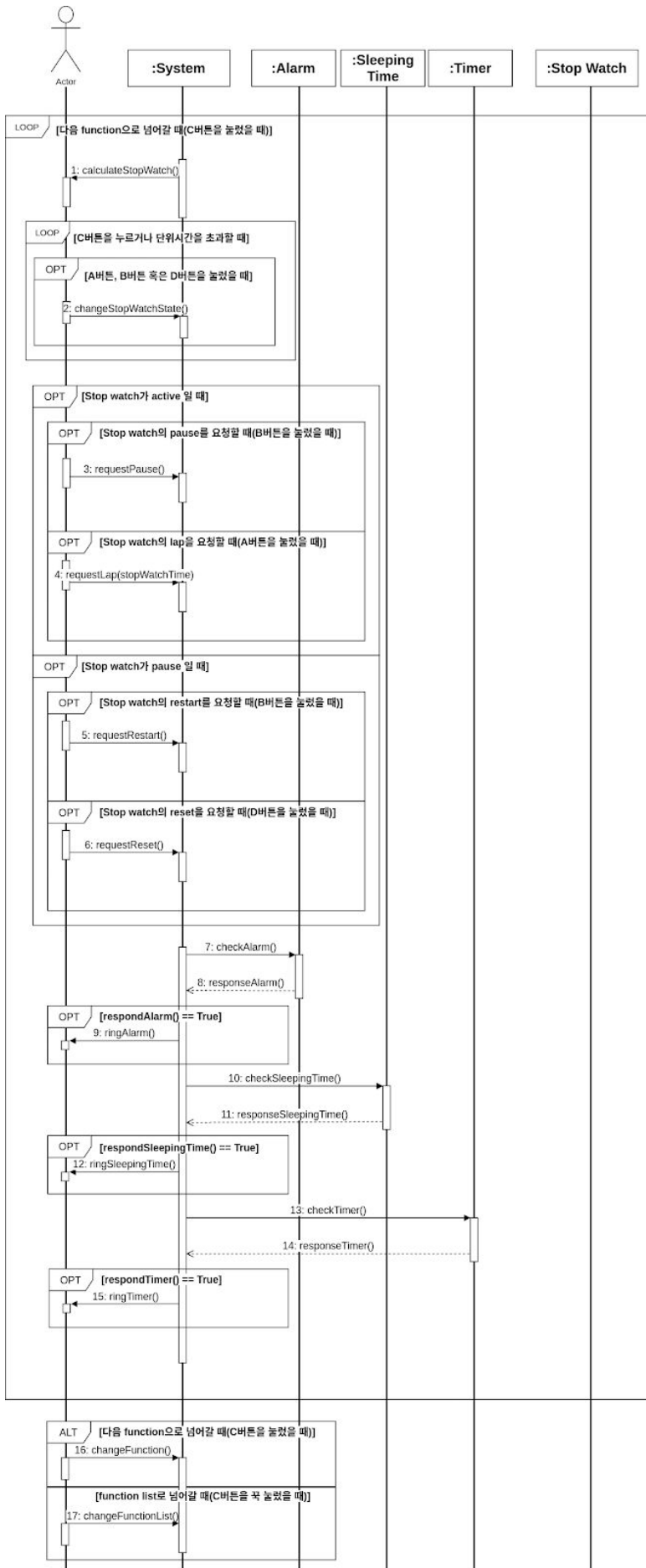
1.5 Change timer state



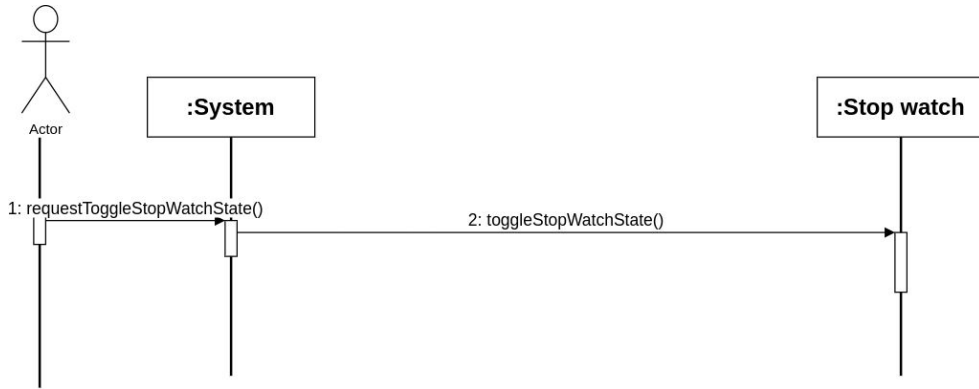
1.6 Change timer counting



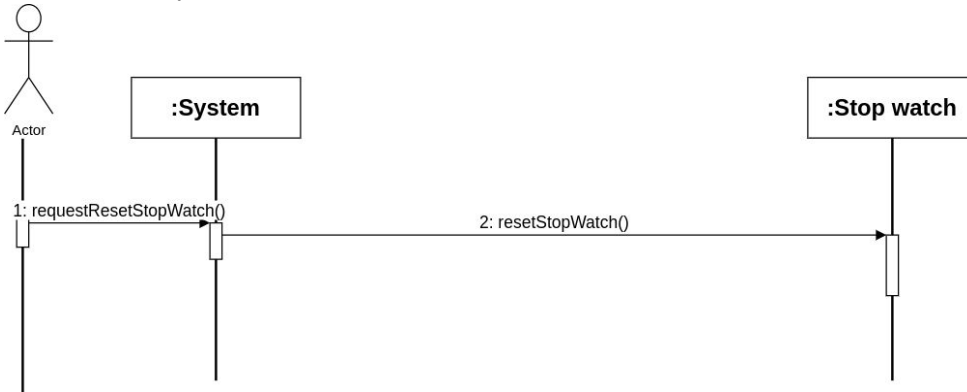
1.8 Let display stop watch



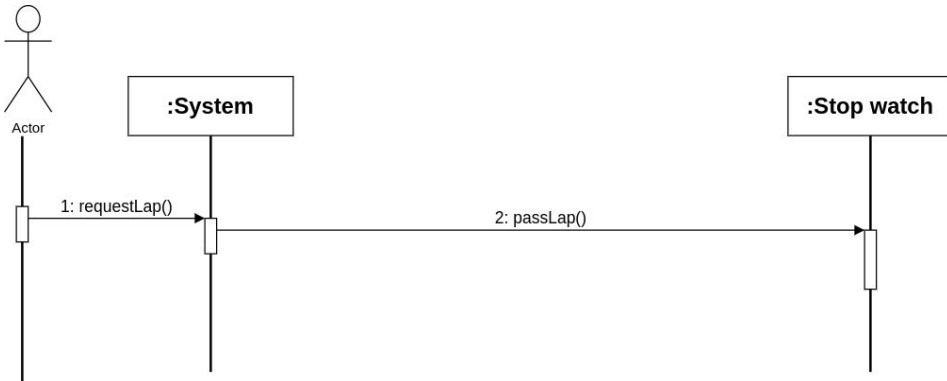
1.9 Change stop watch state



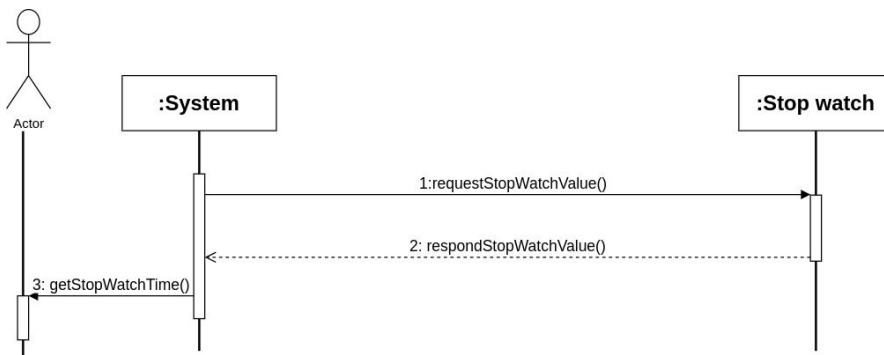
1.10 Reset stop watch



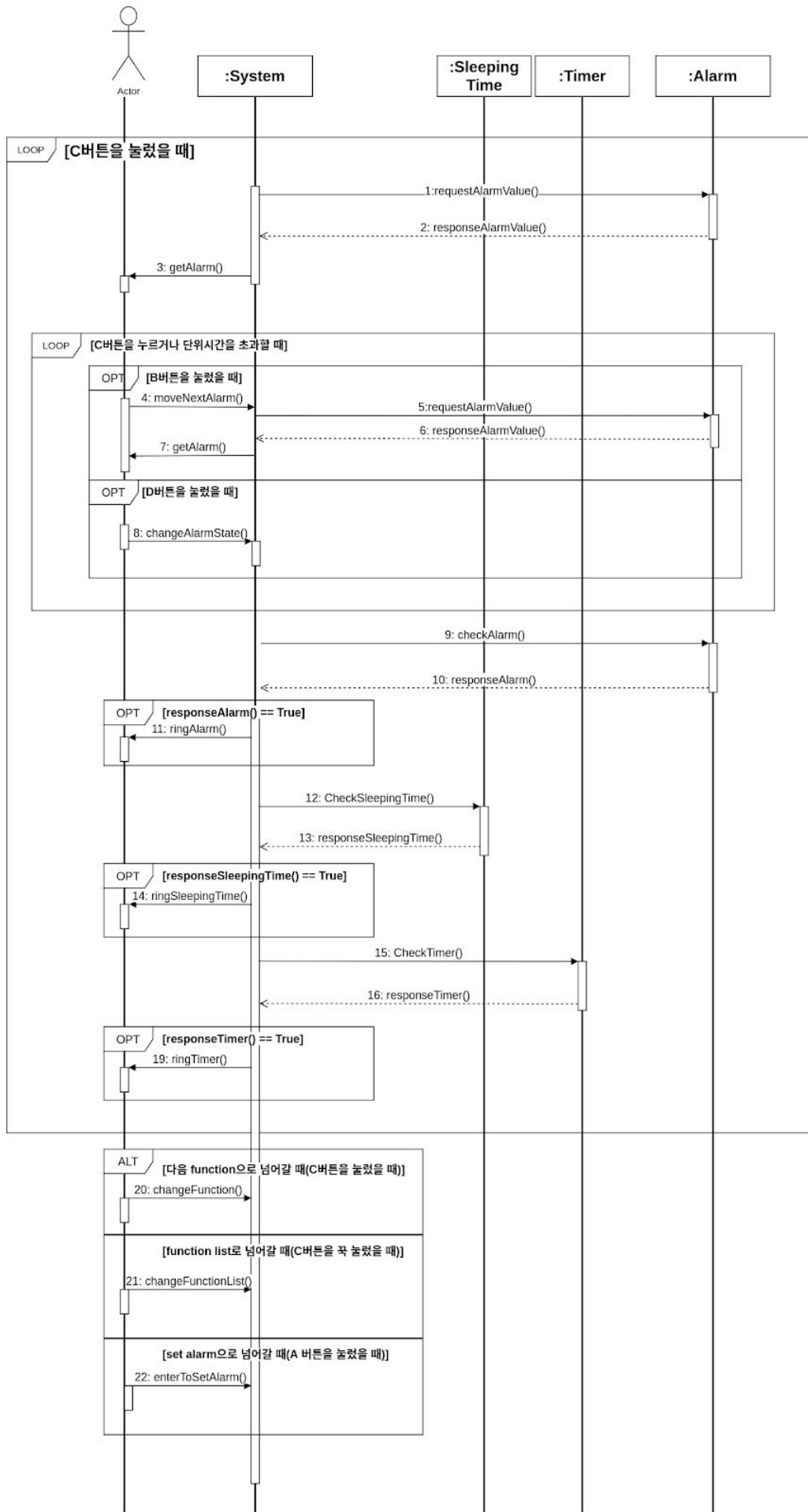
1.11 Lap stop watch



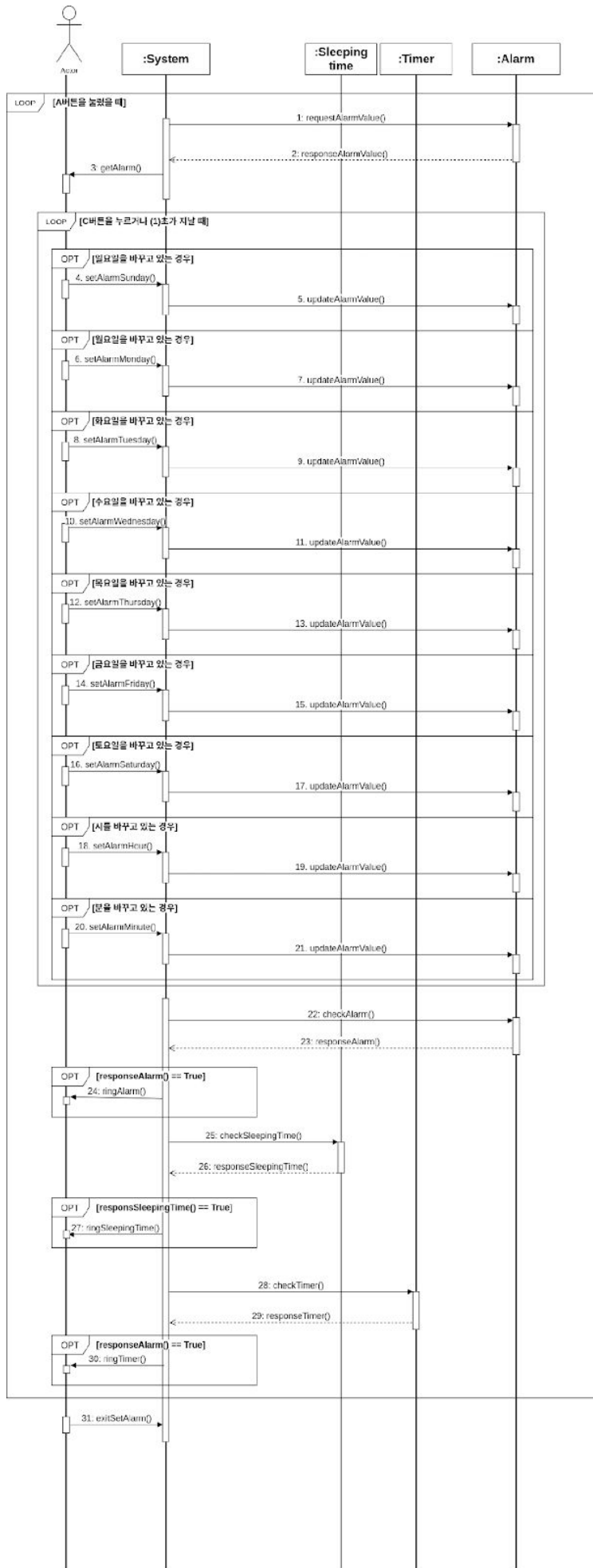
1.12 Calculate stop watch time



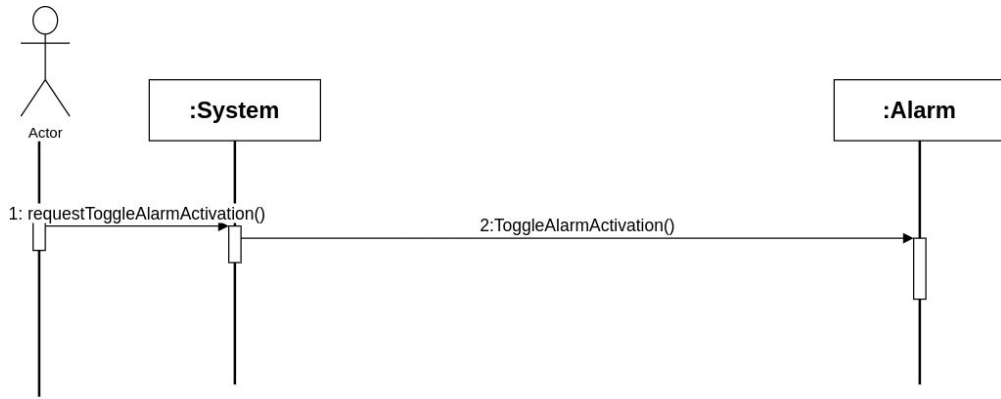
1.13 Let display alarm



1.14 Set alarm



1.15 Change active alarm



1.17 Show alarming



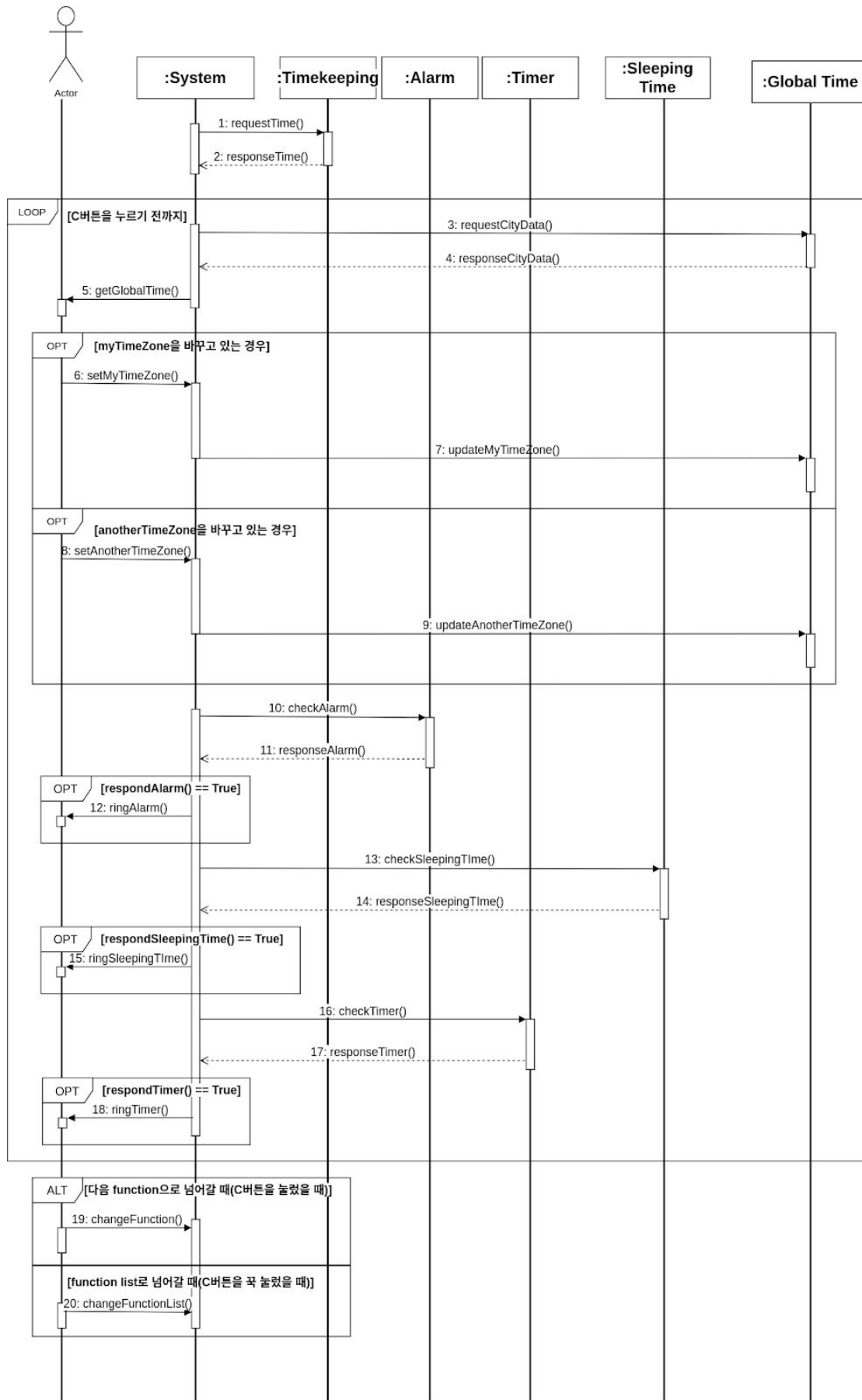
1.18 Turn off alarm manually



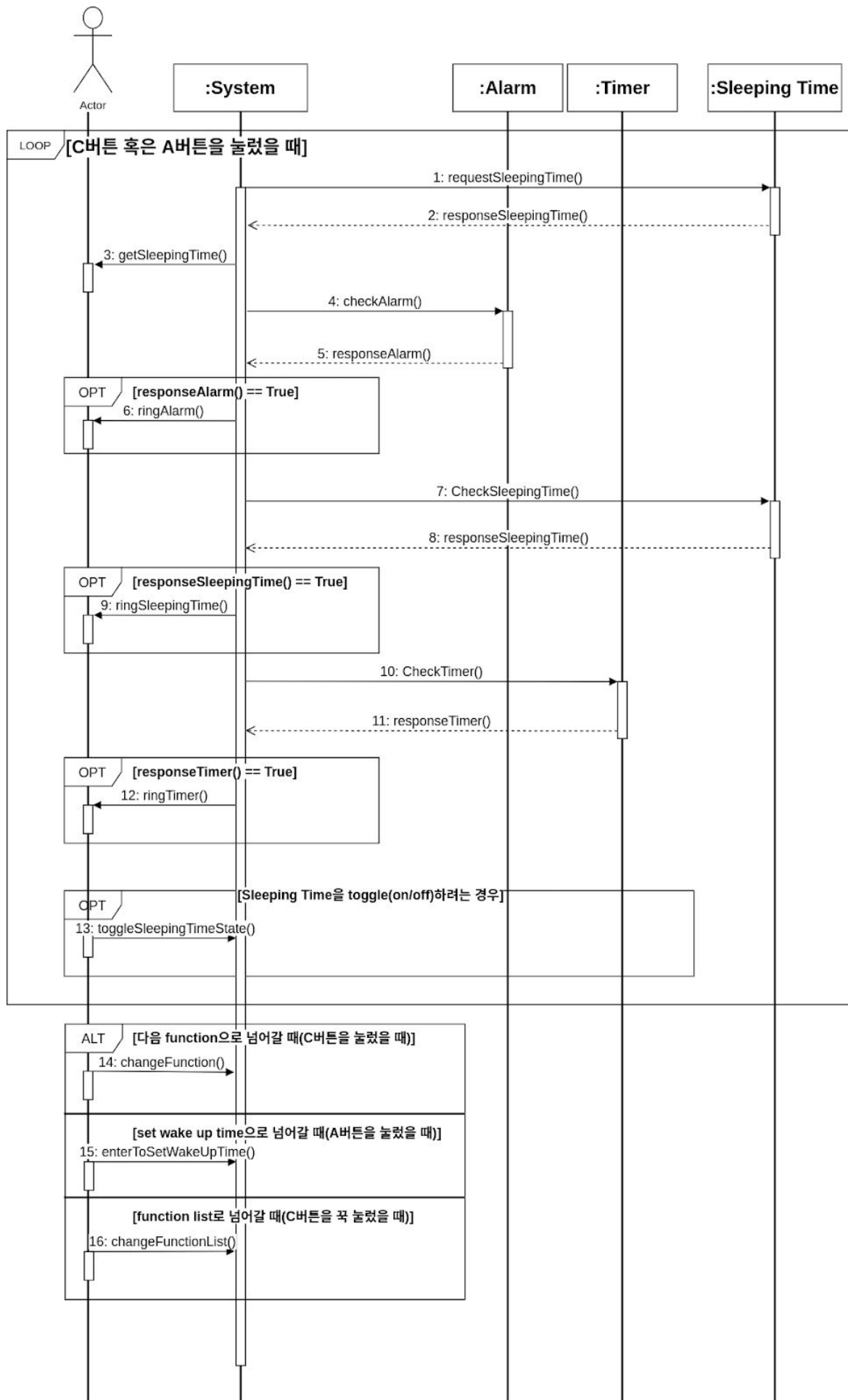
1.19 Turn off alarm automatically



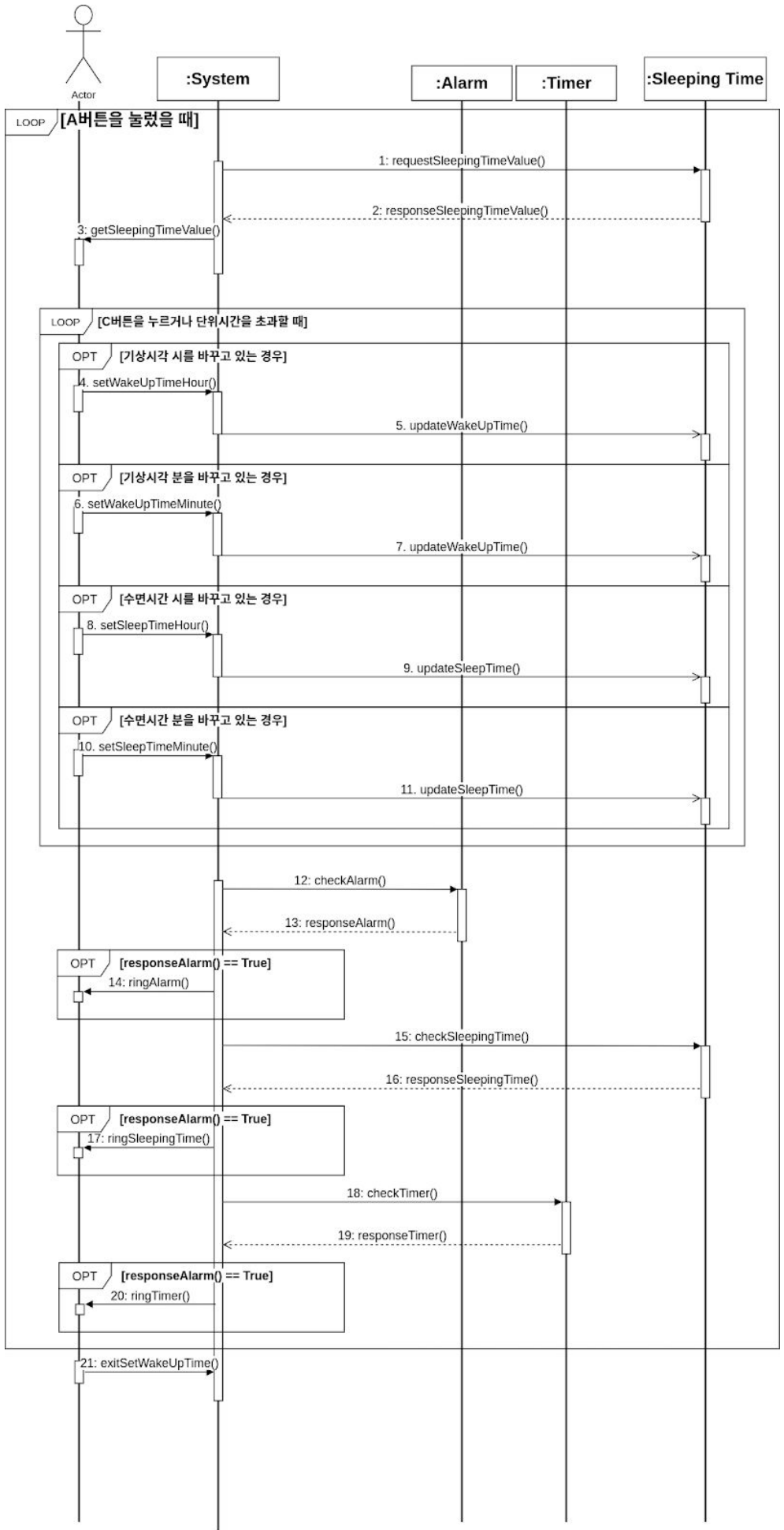
1.20 Let global time



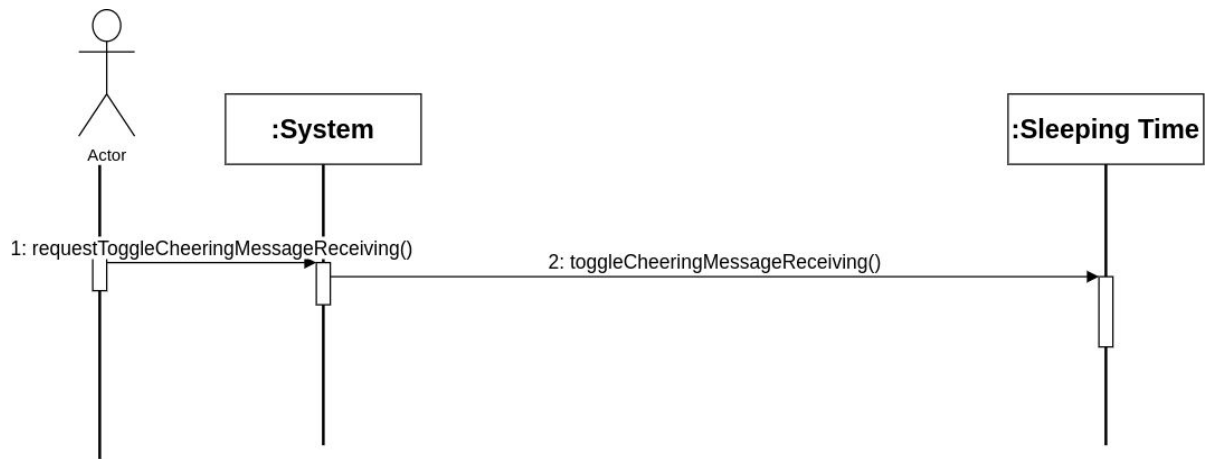
1.21 Let display sleeping time



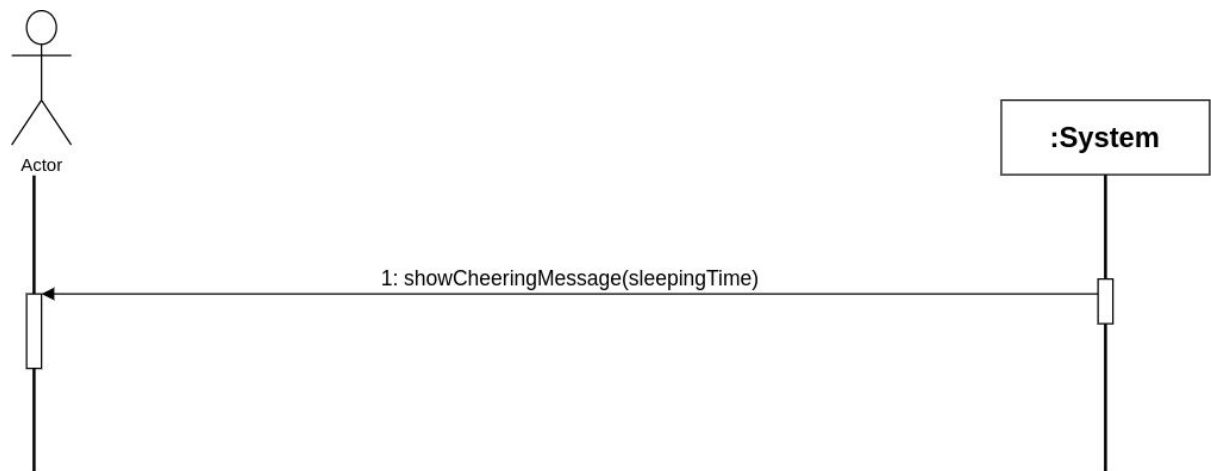
1.22 Set wake up time



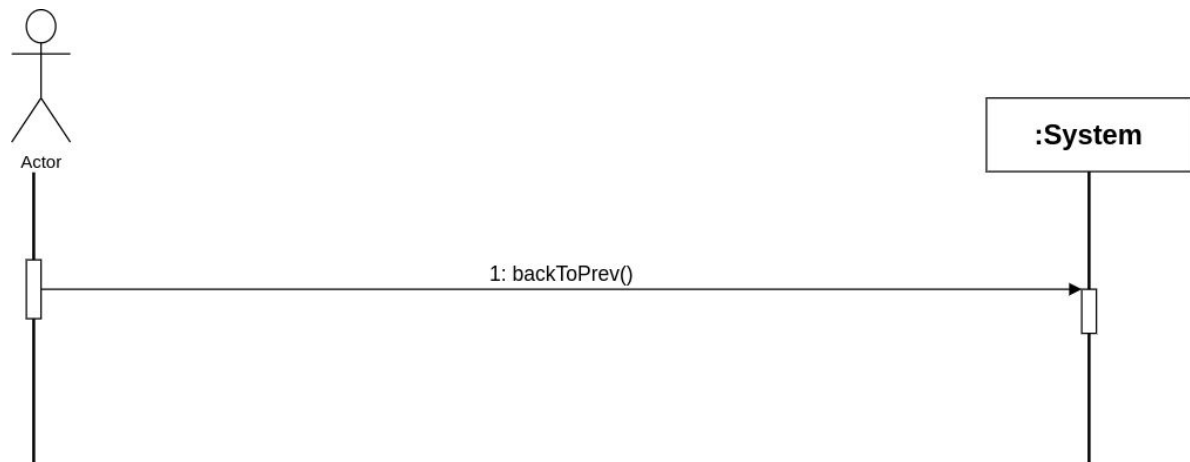
1.23 Change cheering message receiving



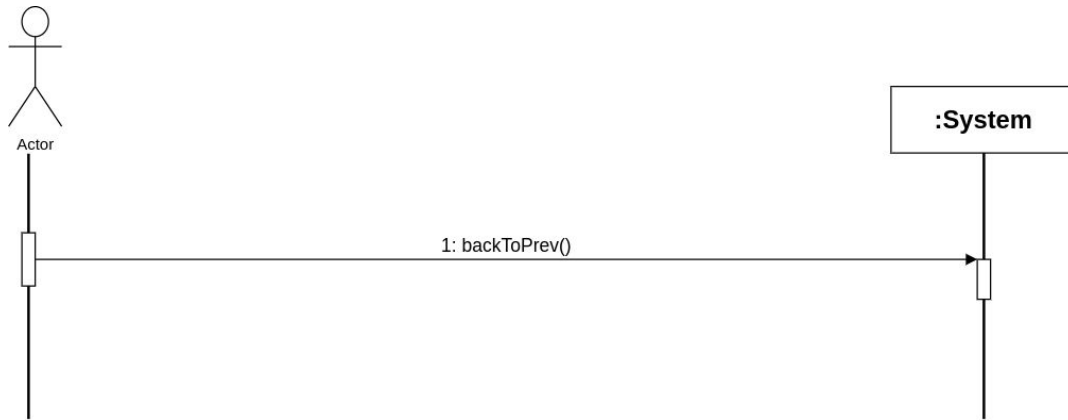
1.25 Show cheering message



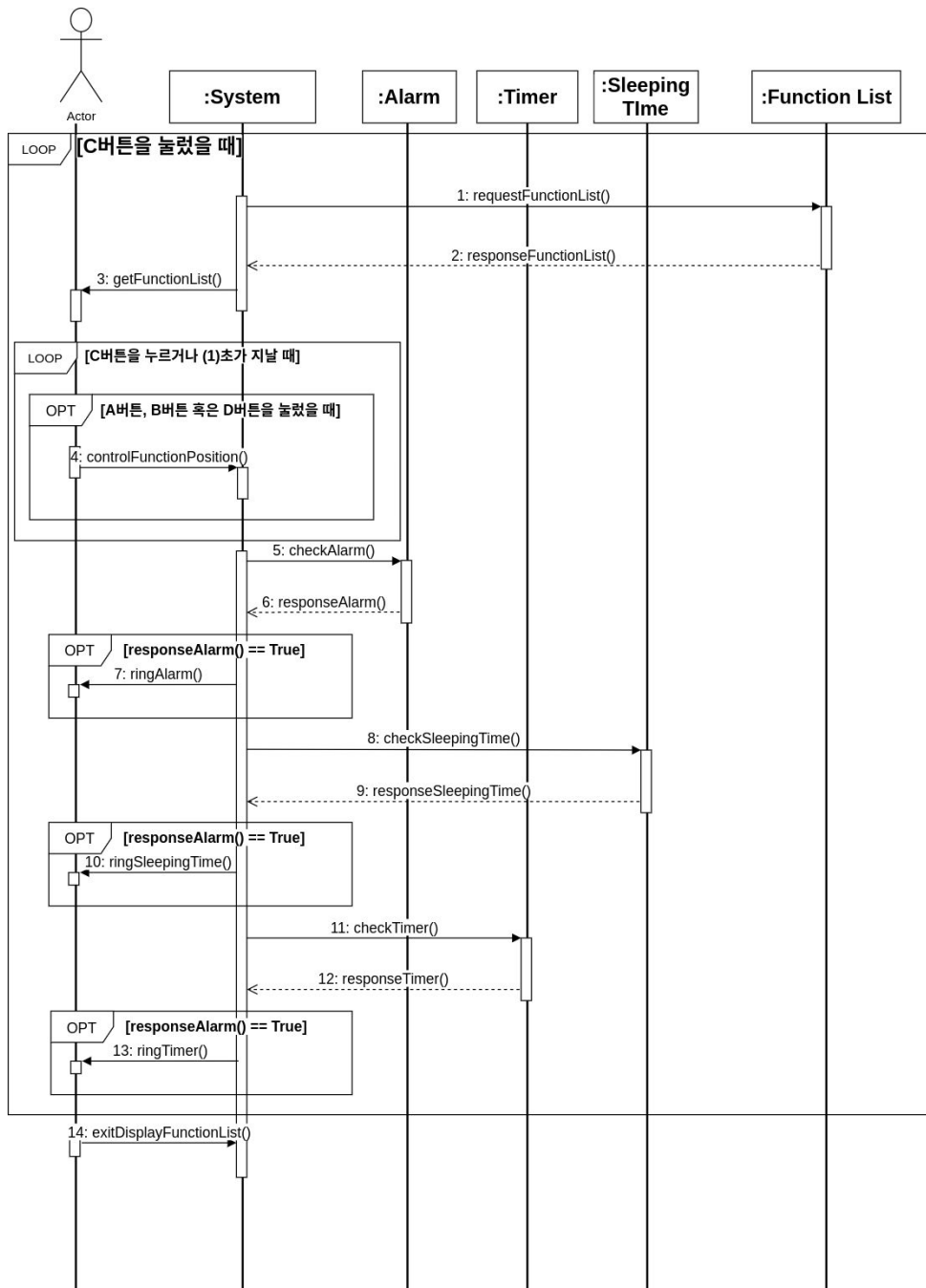
1.26 Turn off cheering message manually



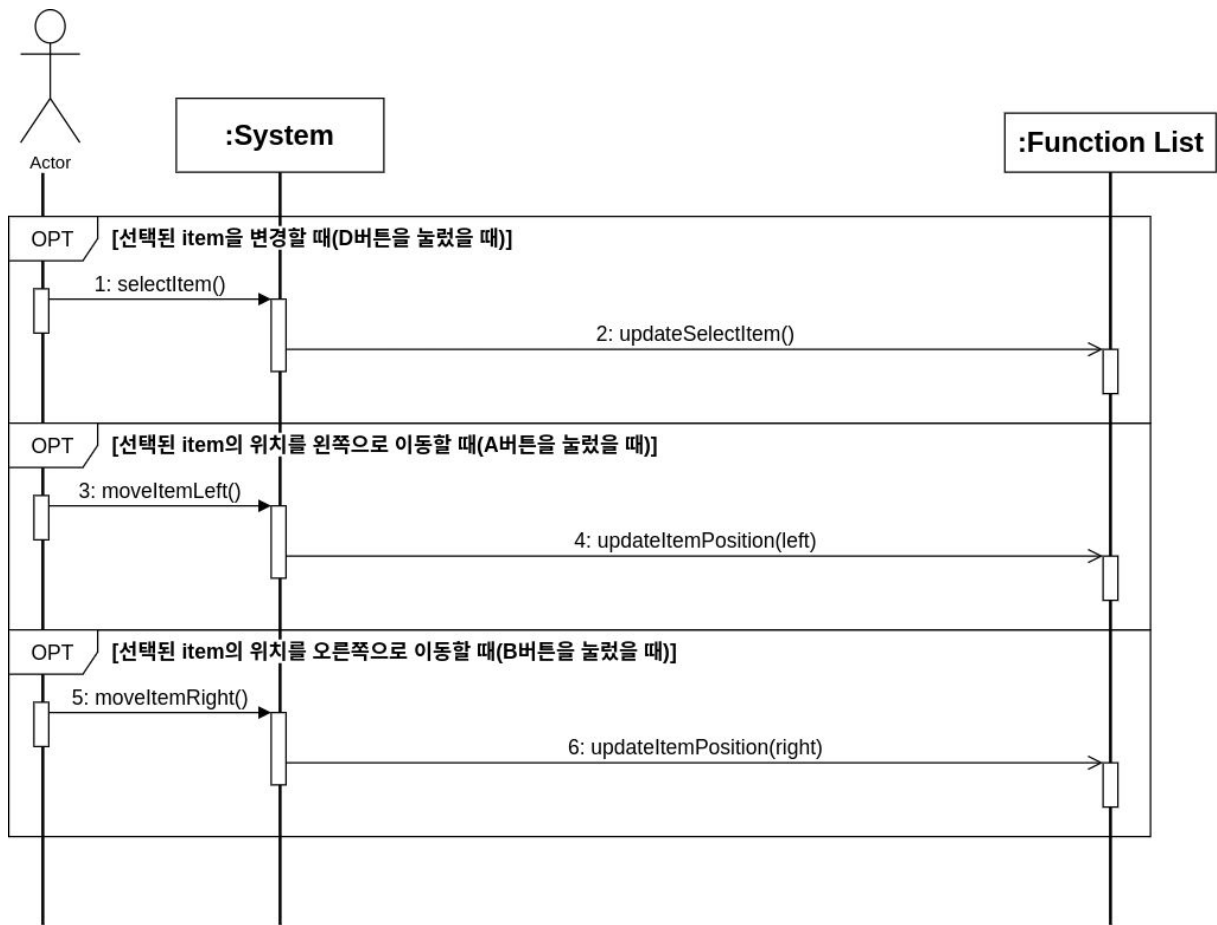
1.27 Turn off cheering message automatically



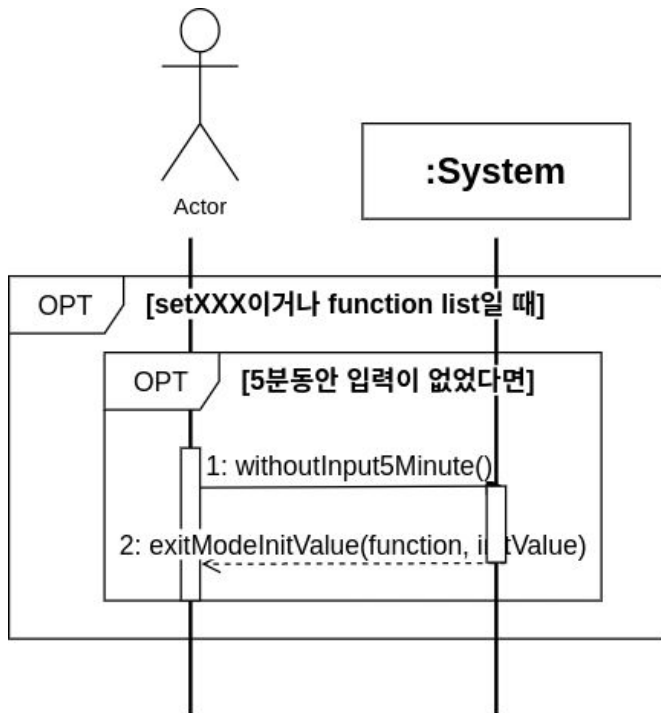
1.28 Let display function list



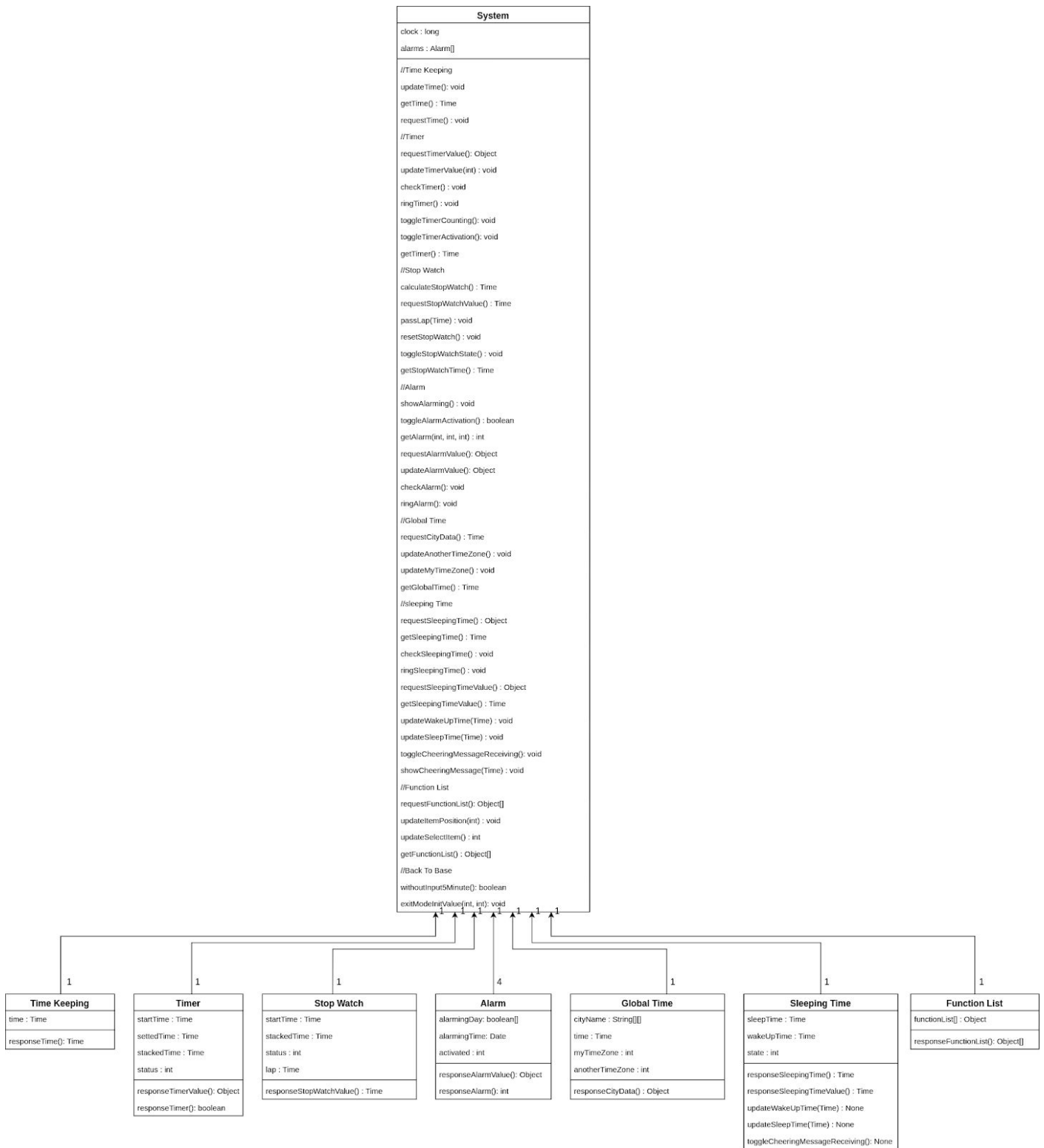
1.29 Change function position



1.30 Back to base



2. Activity 2045. Define Design Class Diagrams



3. Activity 2046. Design Traceability Analysis

Essential Use case	Numbering	Operation in sequence diagram	Using	No.	Method	Class
1.1 Let display time	1.1	1. Let display time	1, 2, 3, 6, 7, 22, 23, 30, 31, 44, 46, 49, 51	1	updateTime()	System
1.2 Set time	1.2	2. Set time	1, 2, 3, 6, 7, 22, 23, 30, 31, 44, 46, 49, 51	2	getTime()	
2.1 Let display timer	2.1	3. Let display timer	4, 5, 6, 10, 22, 31, 45, 46, 49, 51,	3	requestTime()	
2.2 Set timer	2.2	4. Set timer	4, 5, 6, 7, 10, 22, 23, 30, 31, 45, 46, 49, 51	4	requestTimerValue()	
2.3 Change timer state	2.3	5. Change timer state	9	5	updateTimerValue(int)	
2.4 Change timer counting	2.4	6. Change timer counting	8	6	checkTimer()	
2.5 Buzz Timer	3.1	8. Let display stop watch	6, 7, 11, 22, 23, 30, 31, 46, 49, 51	7	ringTimer()	
3.1 Display stop watch	3.2	9. Change stop watch state	15	8	toggleTimerCounting()	
3.2 Change stop watch state	3.3	10. Reset stop watch	14	9	toggleTimerActivation()	
3.3 Reset stop watch	3.4	11. Lap stop watch	13	10	getTime()	
3.4 Lap stop watch	3.5	12. Calculate stop watch	12, 47	11	calculateStopWatch()	
3.5 Calculate stop watch	4.1	13. Let display alarm	6, 7, 19, 20, 22, 23, 30, 31, 46, 49, 51	12	requestStopWatchValue()	
4.1 Display alarm	4.2	14. Set alarm	6, 7, 19, 20, 21, 22, 23, 30, 31, 46, 49, 48, 51	13	passLap(Time)	
4.2 Set alarm	4.3	15. Change active alarm	18	14	resetStopWatch()	
4.3 Change active alarm	4.5	17. Show alarming	17	15	toggleStopWatchState()	
4.4 Buzz alarm	4.6.1	18. Turn off alarm manually		16	getStopWatchState()	
4.5 Show alarming	4.6.2	19. Turn off alarm automatically		17	showAlarming()	
4.6.1 Turn off alarm manually	5.1	20. Let global time	3, 6, 7, 22, 24, 23, 25, 26, 30, 31, 44, 46, 49, 50, 51	18	toggleAlarmActivation()	
4.6.2 Turn off alarm automatically	6.1	21. Let display sleeping time	6, 7, 22, 23, 28, 30, 31, 33, 46, 49, 51	19	getAlarm(int, int, int)	
				20	requestAlarmValue()	
				21	updateAlarmValue()	
				22	checkAlarm()	
				23	ringAlarm()	
				24	requestCityData()	
				25	updateAnotherTimeZone()	
				26	updateMyTimeZone()	
				27	getGlobalTime()	
				28	requestSleepingTime()	

Essential Use case	Numbering	Operation in sequence diagram	Using	No.	Method	Class	
5.1 Global time	6.2	22. Set wake up time	6, 7, 22, 23, 30, 31, 32, 34, 35, 46, 49, 51, 52	29	getSleepingTime()	System	
6.1 Display sleeping time	6.3	23. Change cheering message receiving	36	30	ringSleepingTime()		
6.2 Set wake up time	6.5	25. Show cheering message	37	31	checkSleepingTime()		
6.3 Change cheering message receiving	6.6.1	26. Turn off cheering message manually		32	requestSleepingTimeValue()		
6.4 Buzz cheering message	6.6.2	27. Turn off cheering message automatically		33	getSleepingTimeValue()		
6.5 Show cheering message	7.1	28. Let display function list	36, 39, 54	34	updateWakeUpTime(Time)		
6.6.1 Turn off cheering message manually	7.2	29. Control function position	37, 38	35	updateSleepTime(Time)		
6.6.2 Turn off cheering message autolatically	8.1	30. Back to base	42, 43	36	toggleCheeringMessageReceiving()		
7.1 Display function list				37	showCheeringMessage(Time)		
7.2 Control function position				38	requestFunctionList()		
8.1 Back to base				39	updateItemPosition(int)		
				40	updateSelectedItem()		
				41	getFunctionList()		
				42	withoutInput5Minute()		
				43	exitModeInitValue(int, int)		
				44	responseTime()		Time Keeping
				45	responseTimerValue()		Timer
				46	responseTimer()		
				47	responseStopWatchValue()		Stop Watch
				48	responseAlarmValue()		Alarm
				49	responseAlarm()		
				50	responseCityData()		Global Time
				51	responseSleepingTime()		Sleeping Time
				52	responseSleepingTimeValue()		
				53	updateWakeUpTime(Time)		
				54	updateSleepingTime(Time)		
				55	toggleCheeringMessageReceiving()		
				56	responseFunctionList()		Function List