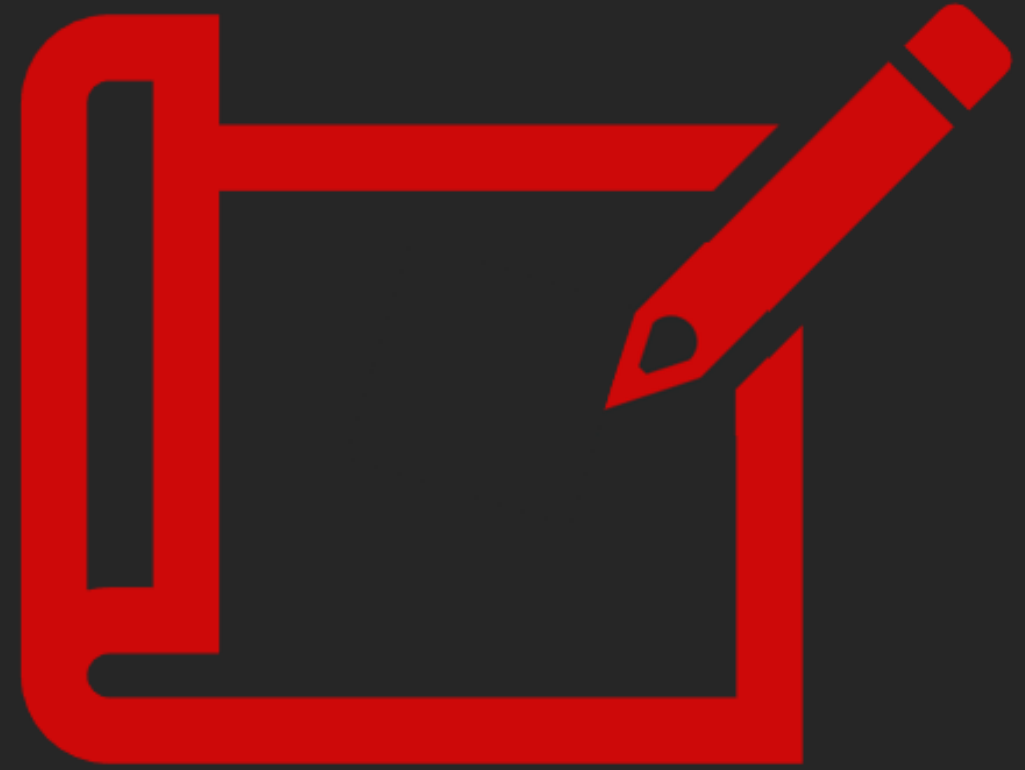


OOPT : Design

Stage 2040

4팀 - 잘챙기시계



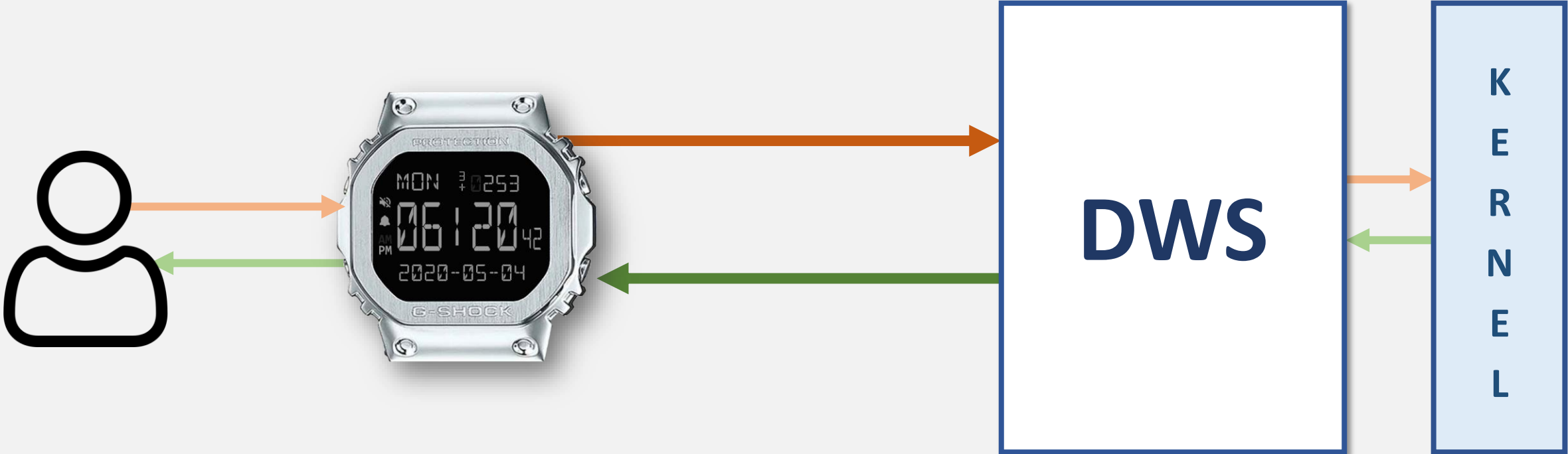
목차



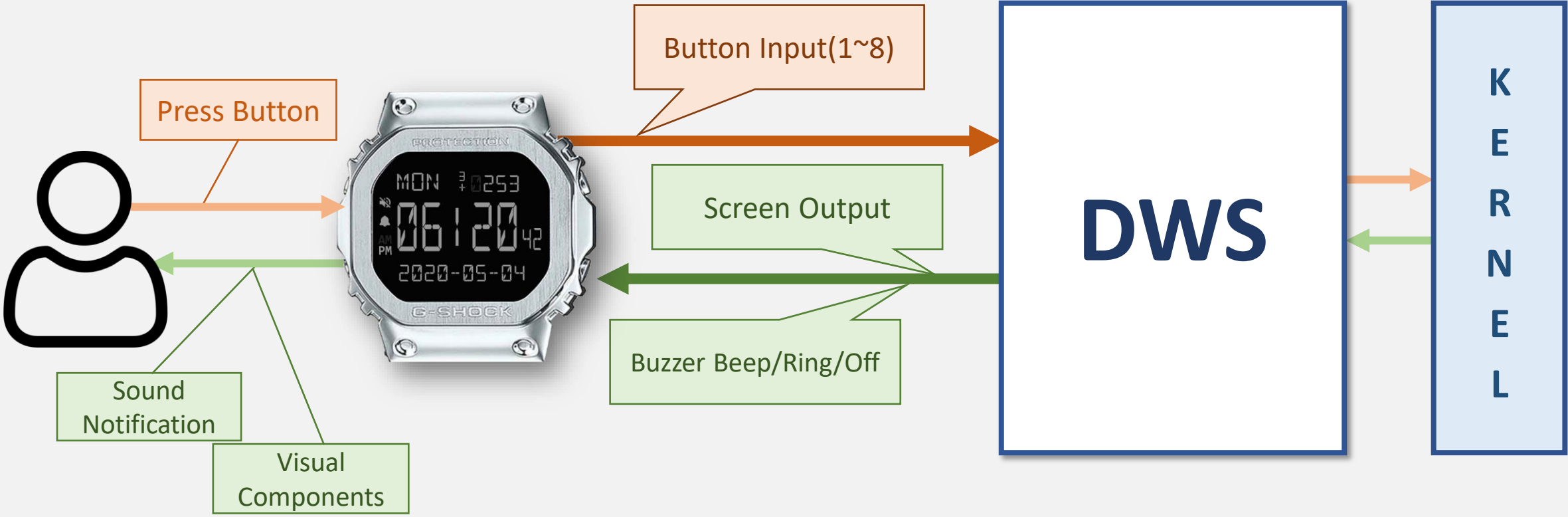
- 01 Layered Architecture
- 02 Define Interaction Diagrams
- 03 Define Design Class Diagrams
- 04 Design Traceability Analysis



Layered Architecture



Layered Architecture

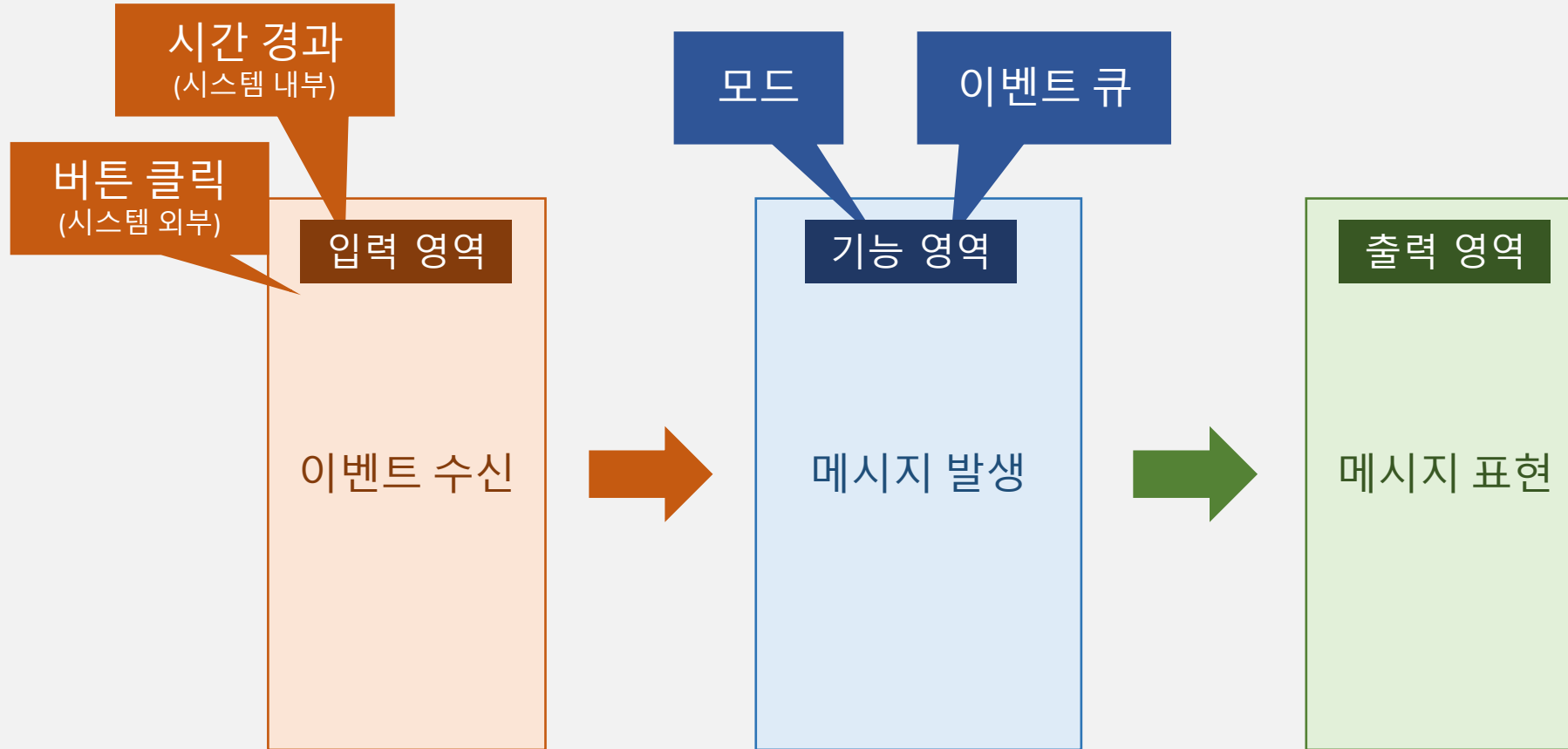


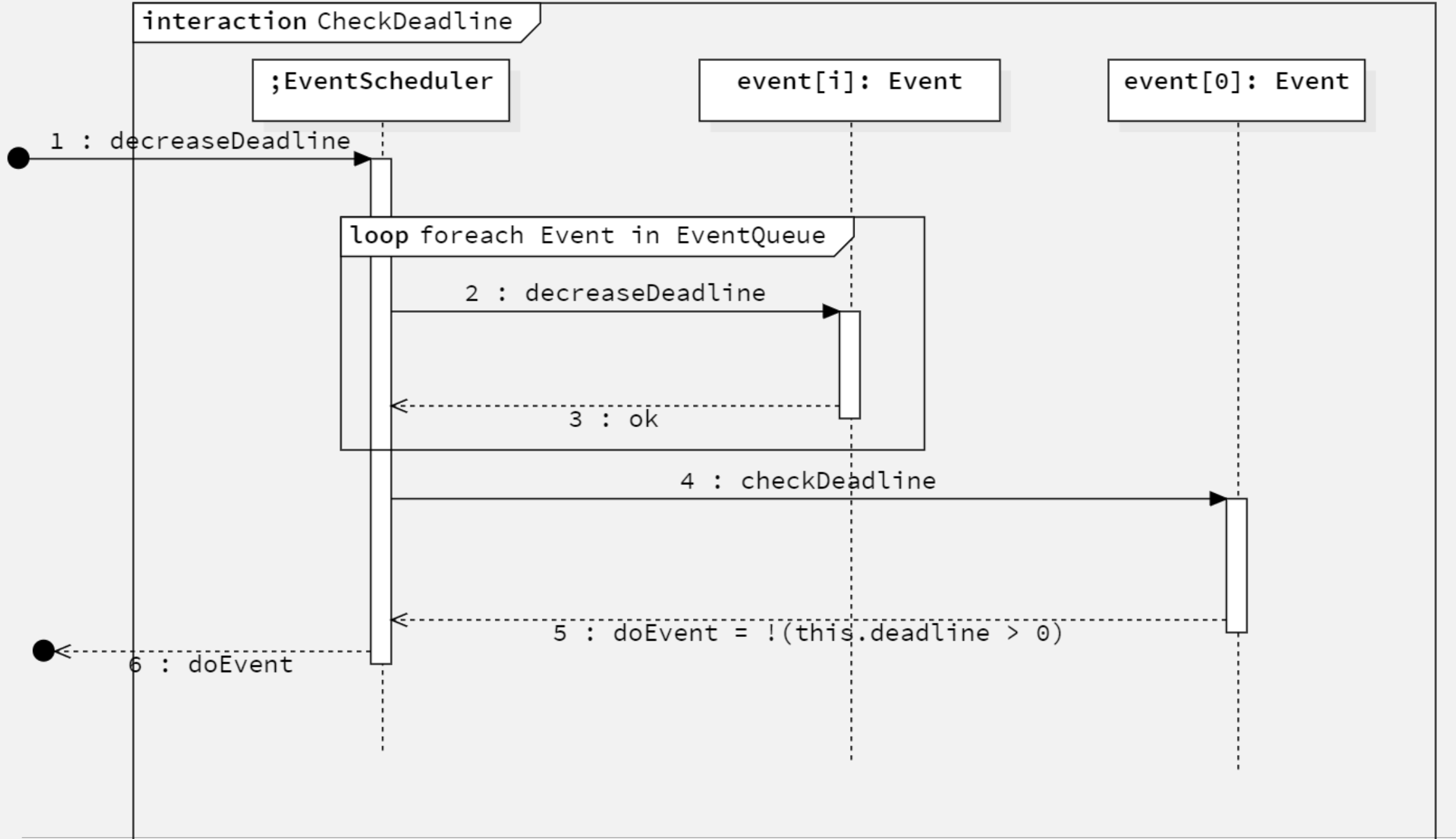
Activity 2044

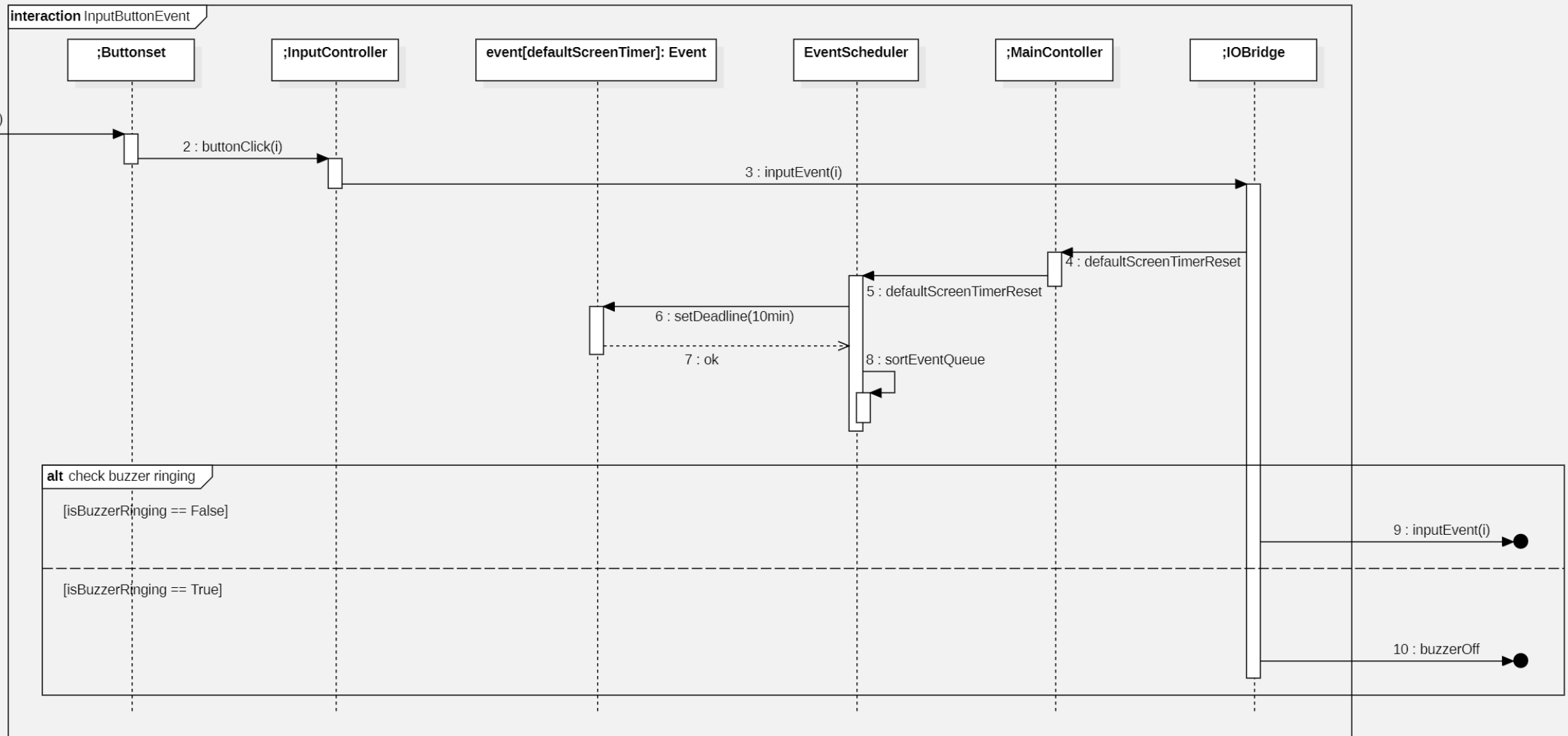
Define Interaction Diagrams

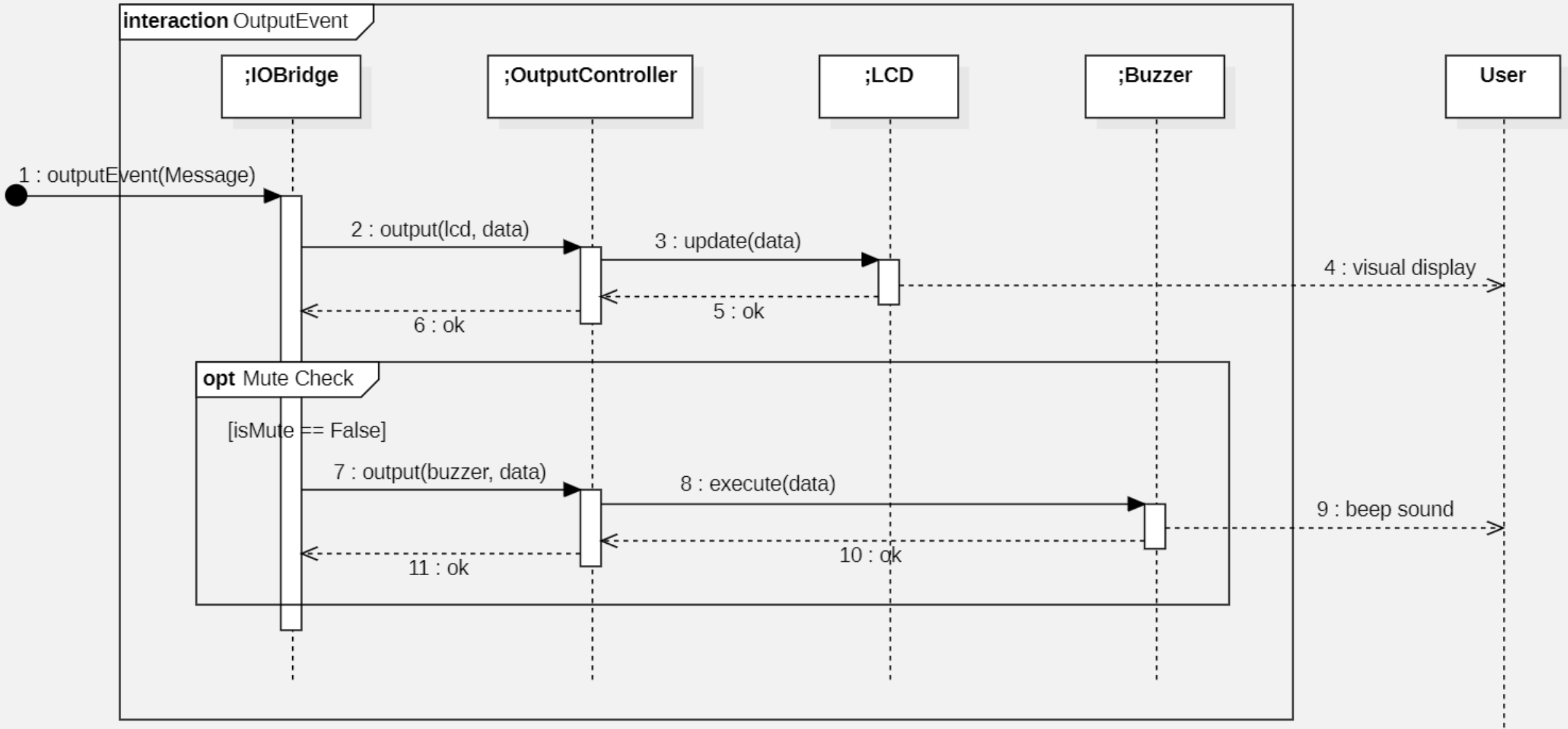


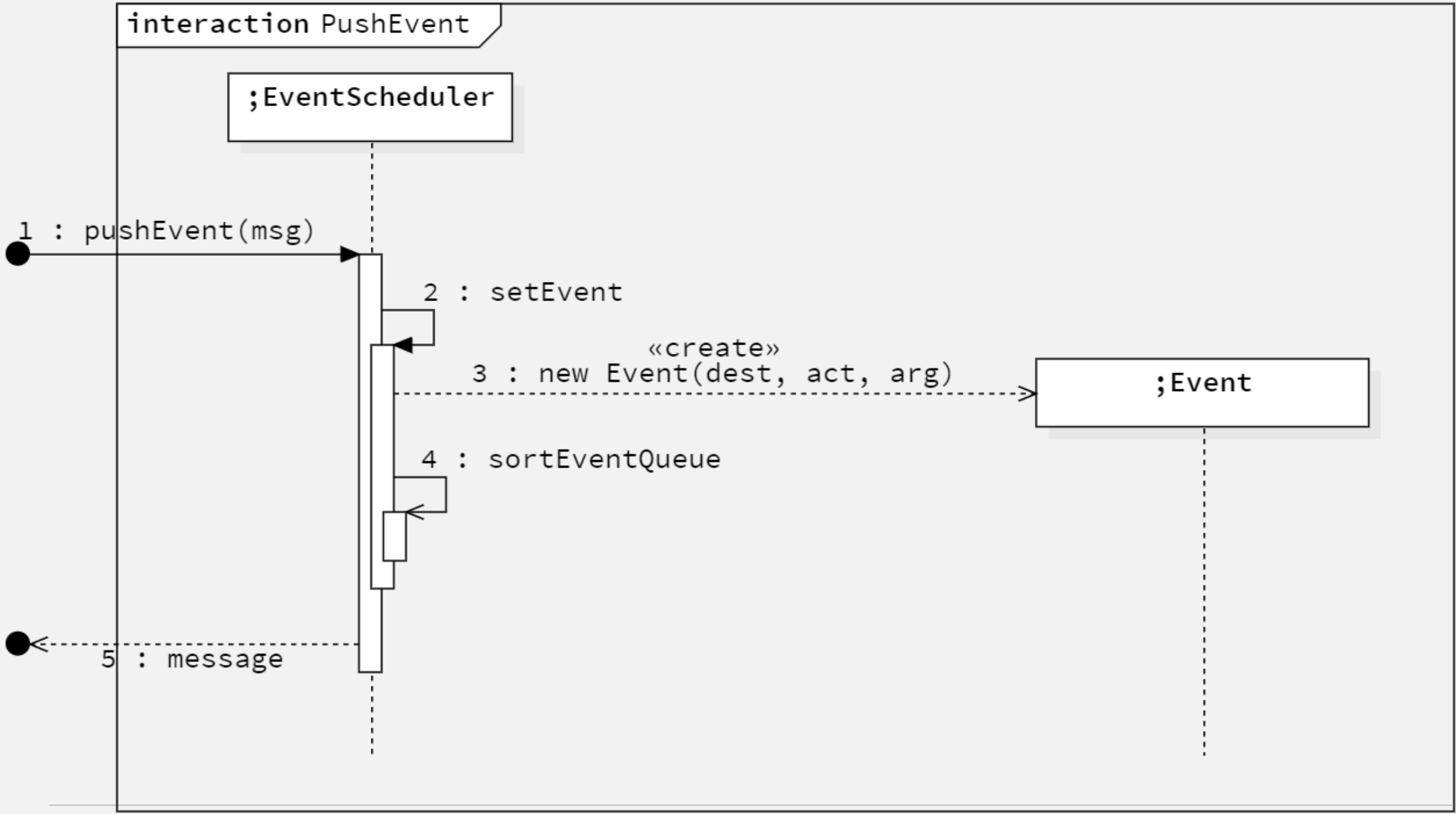
기본적인 동작 순서

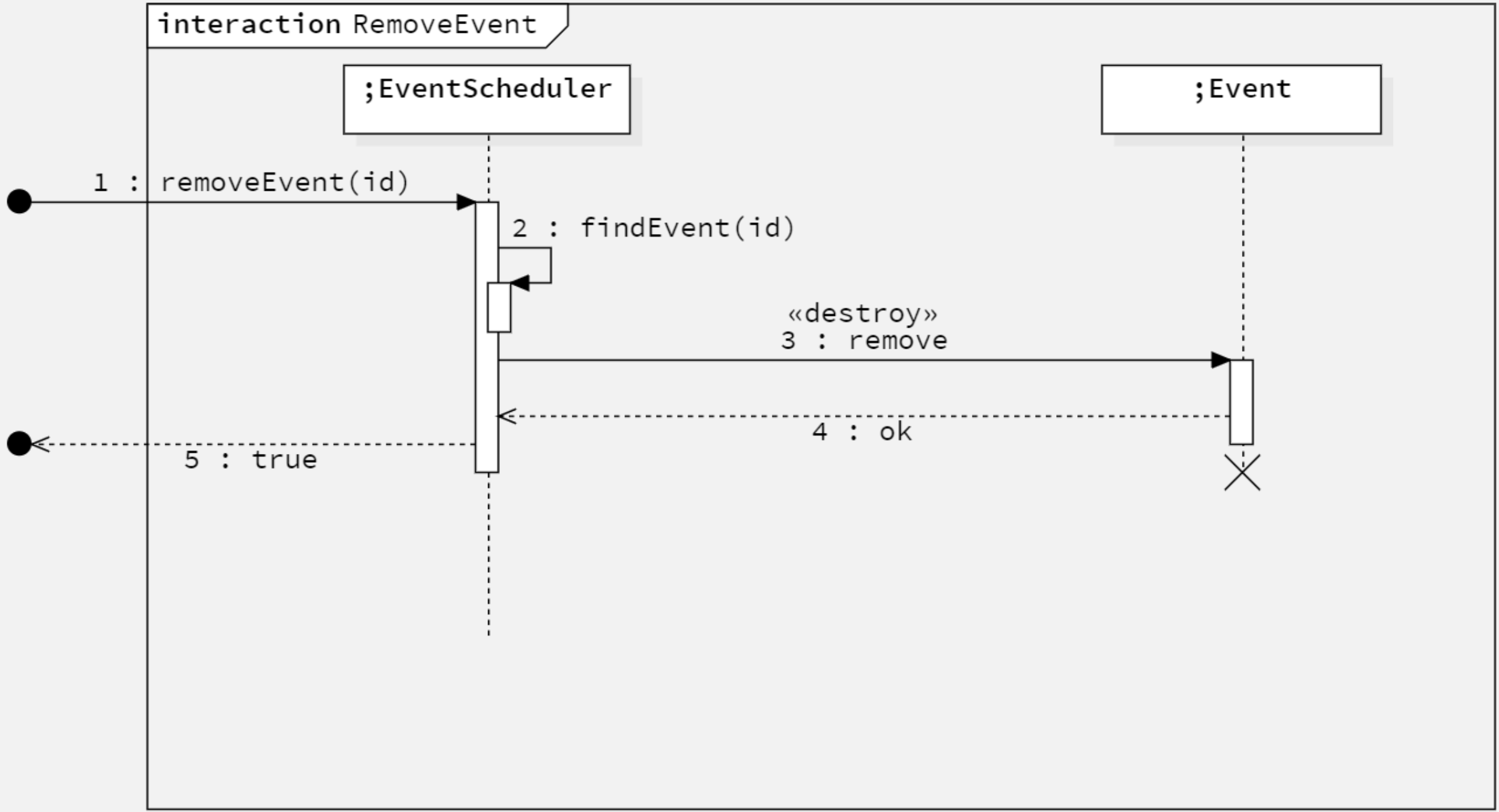


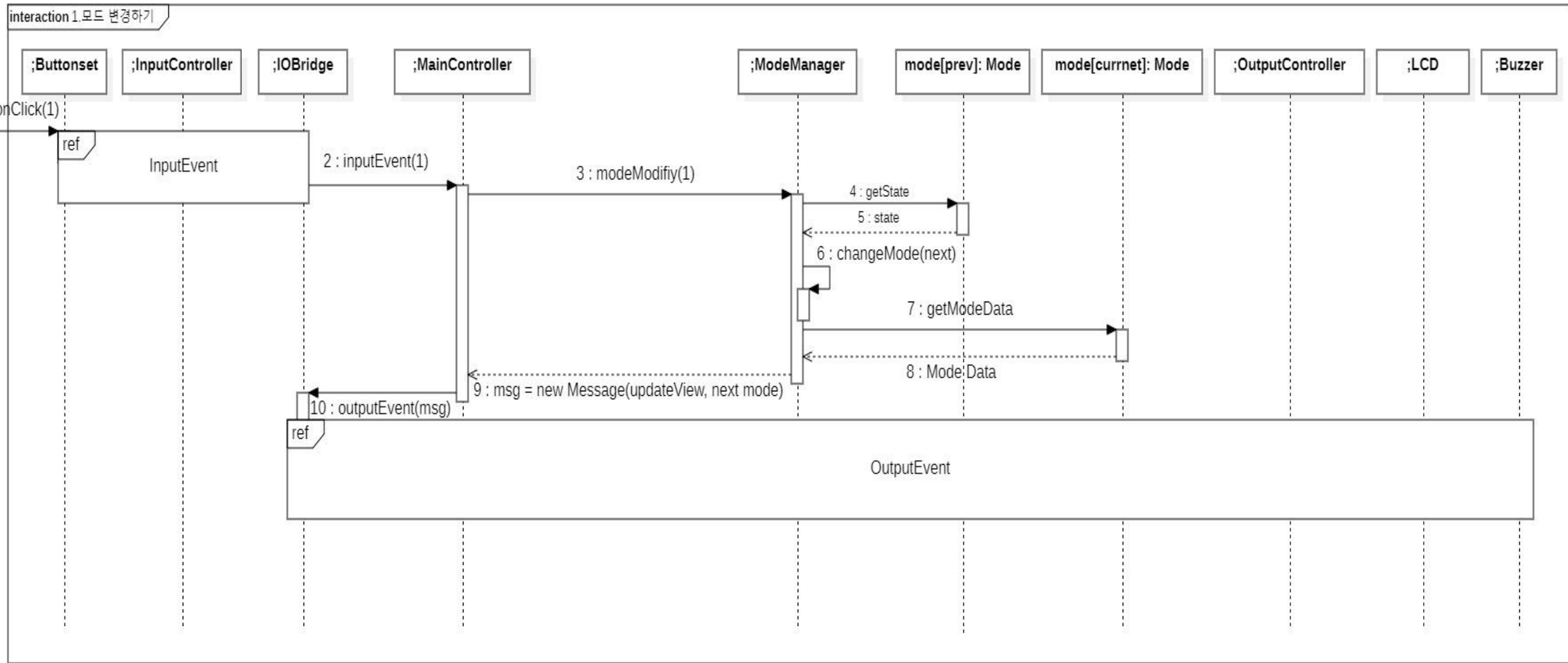


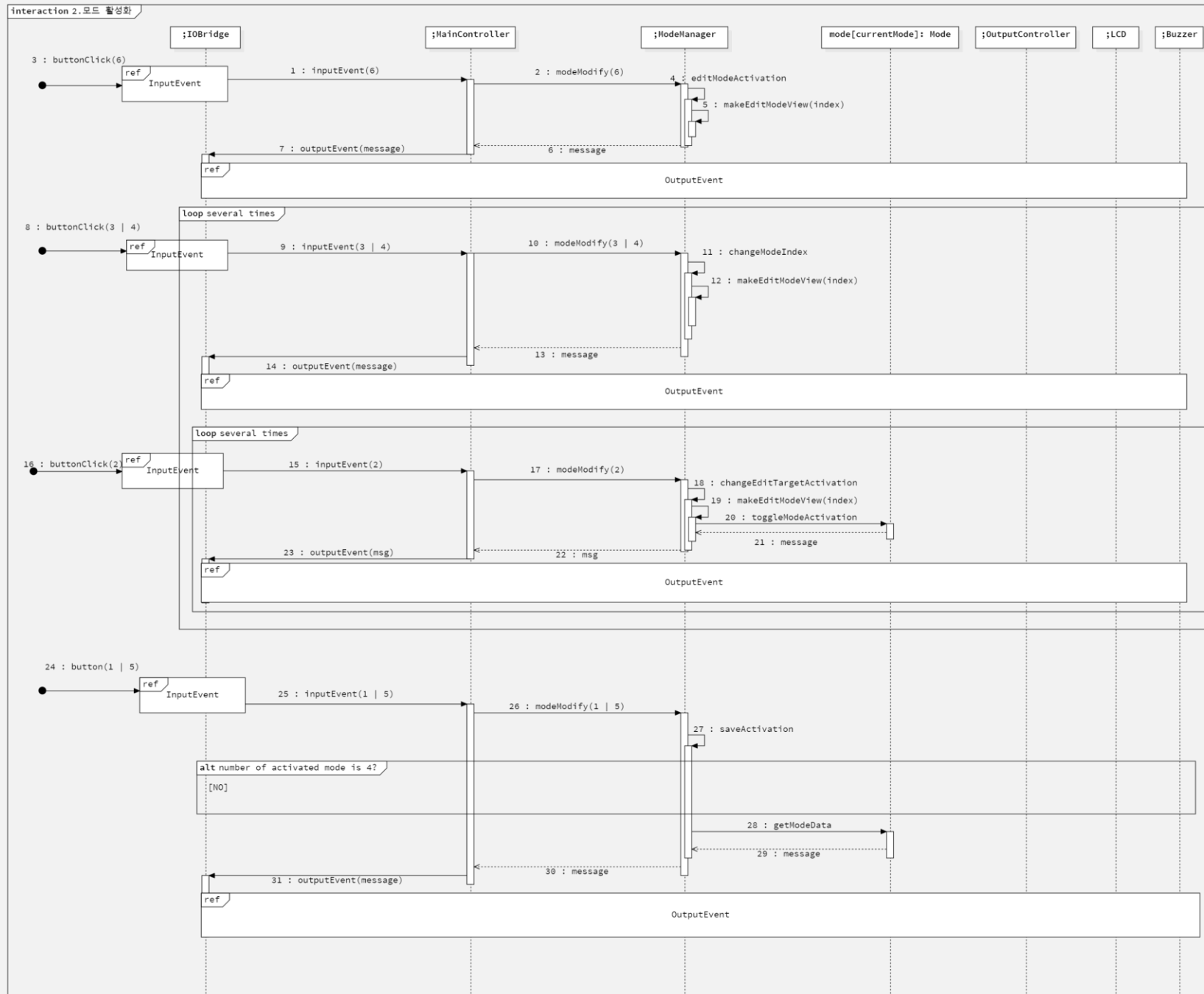


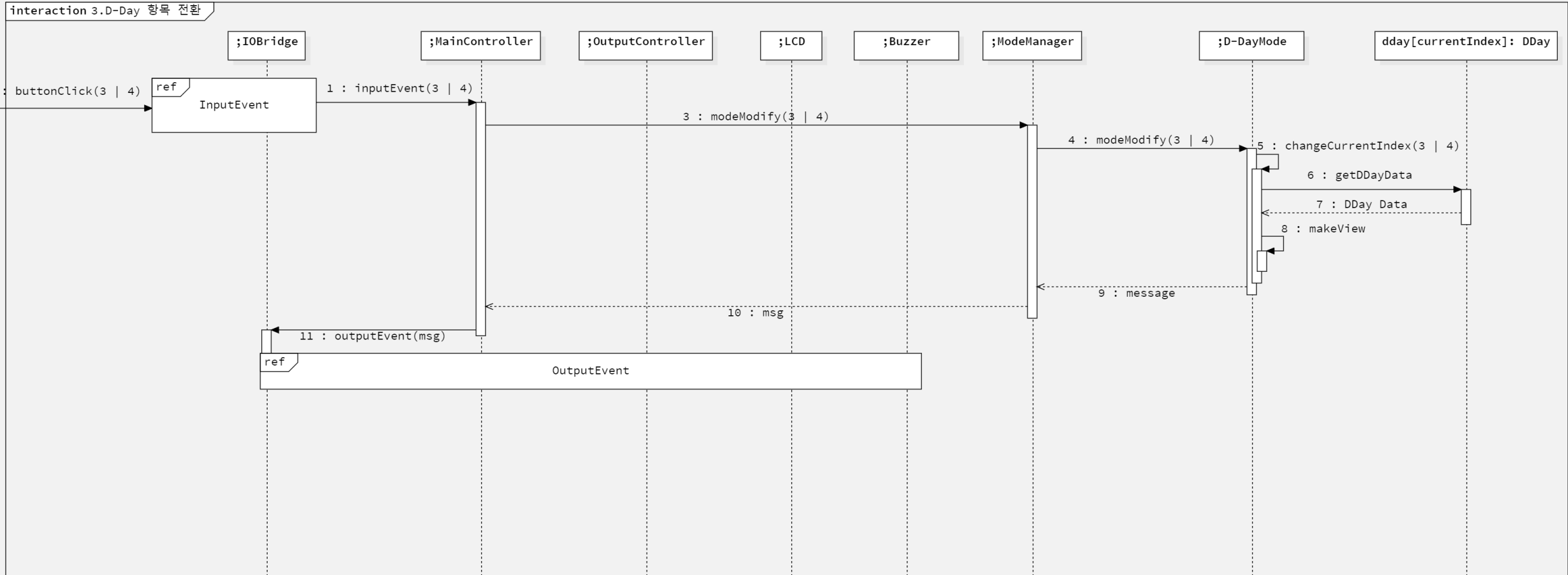


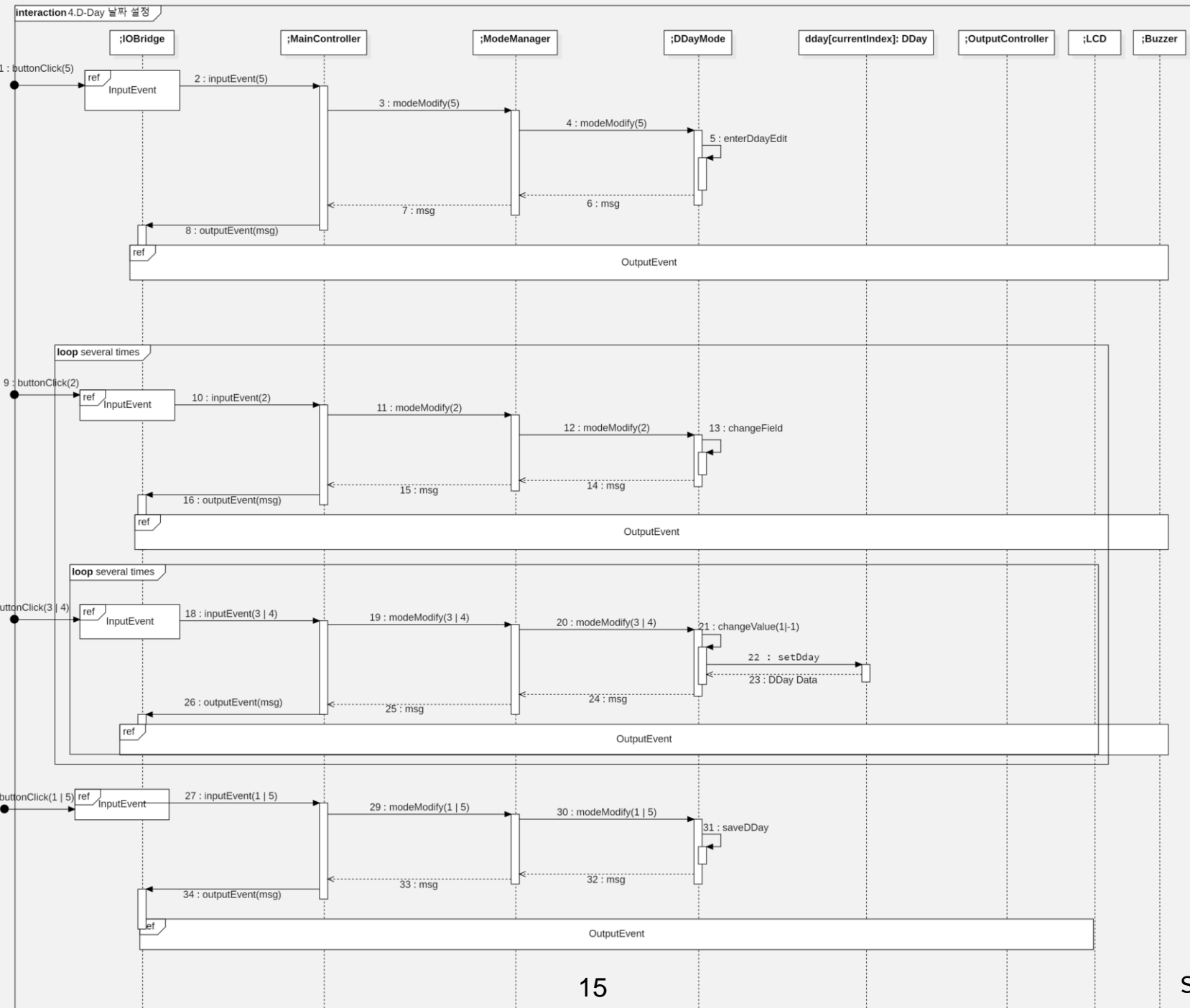


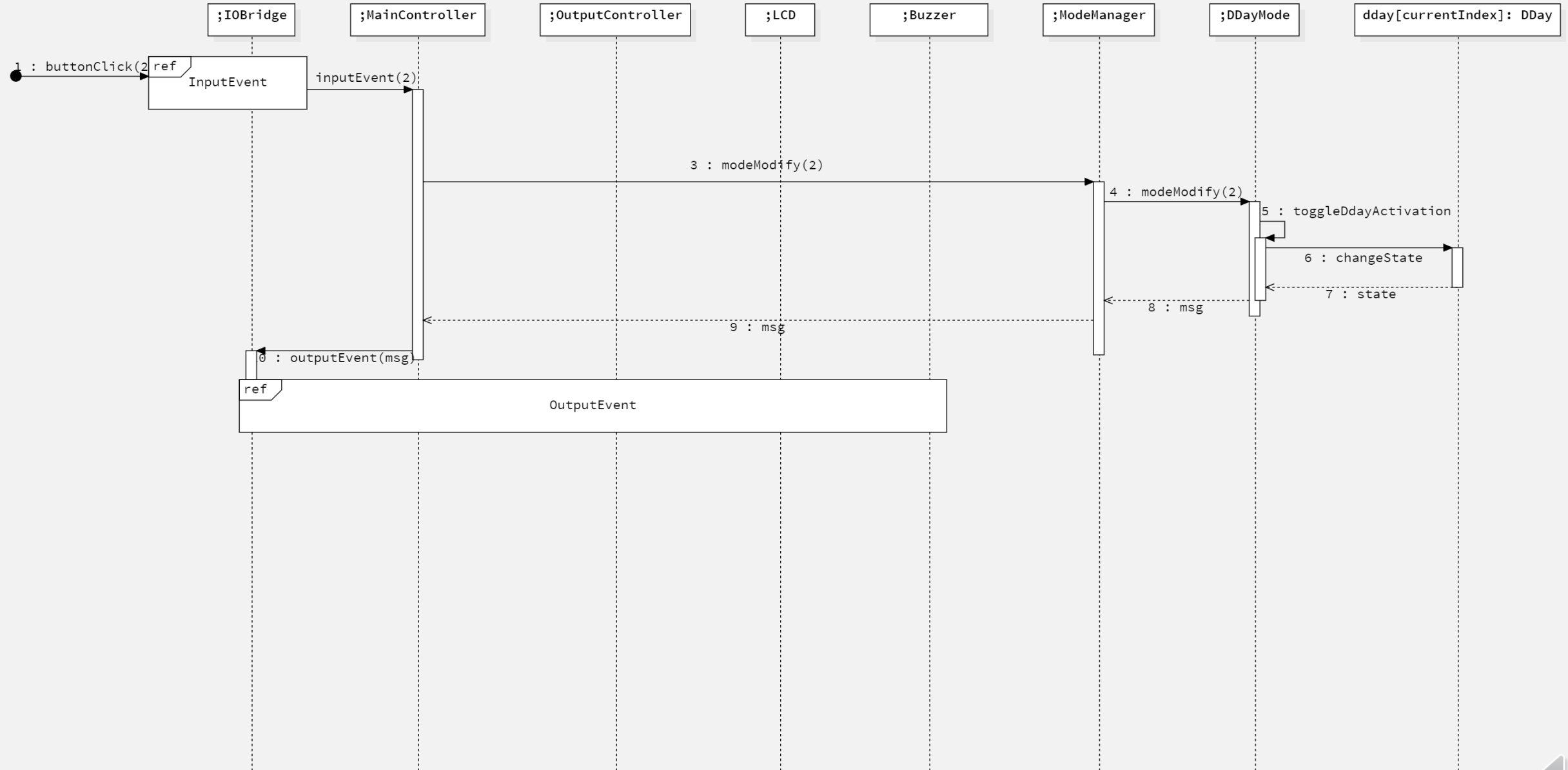


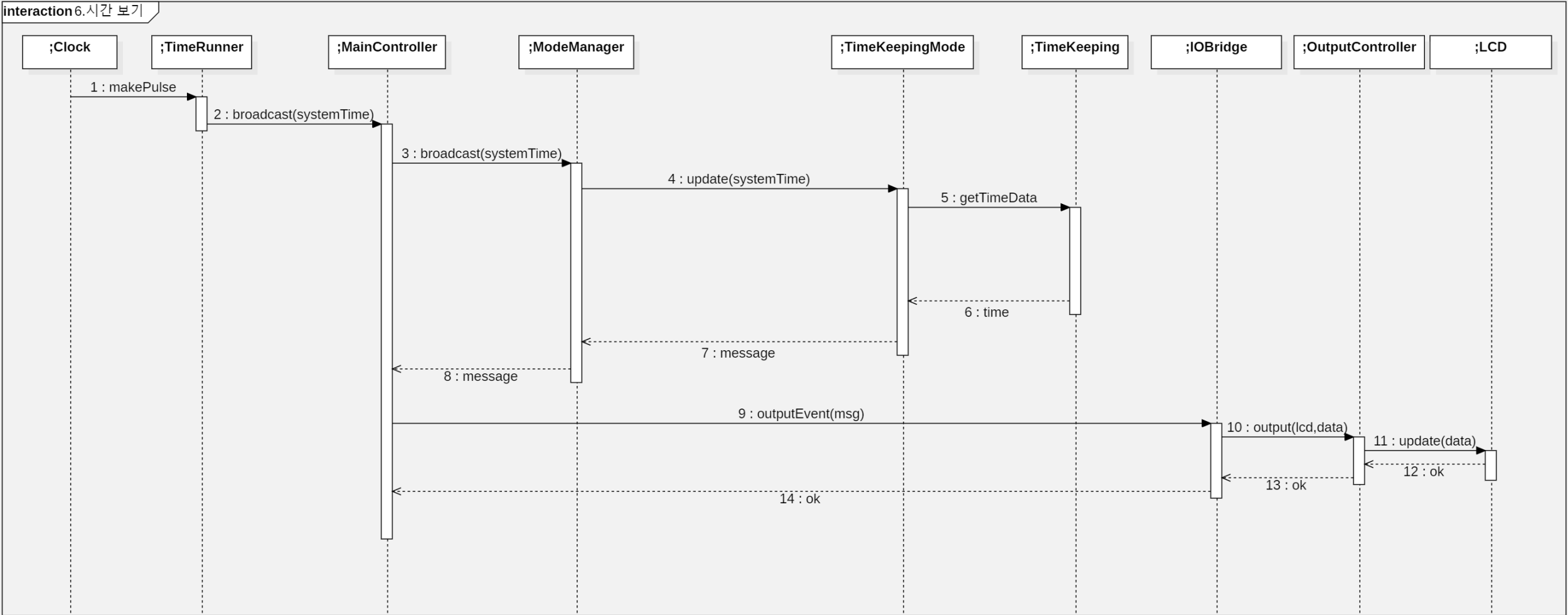




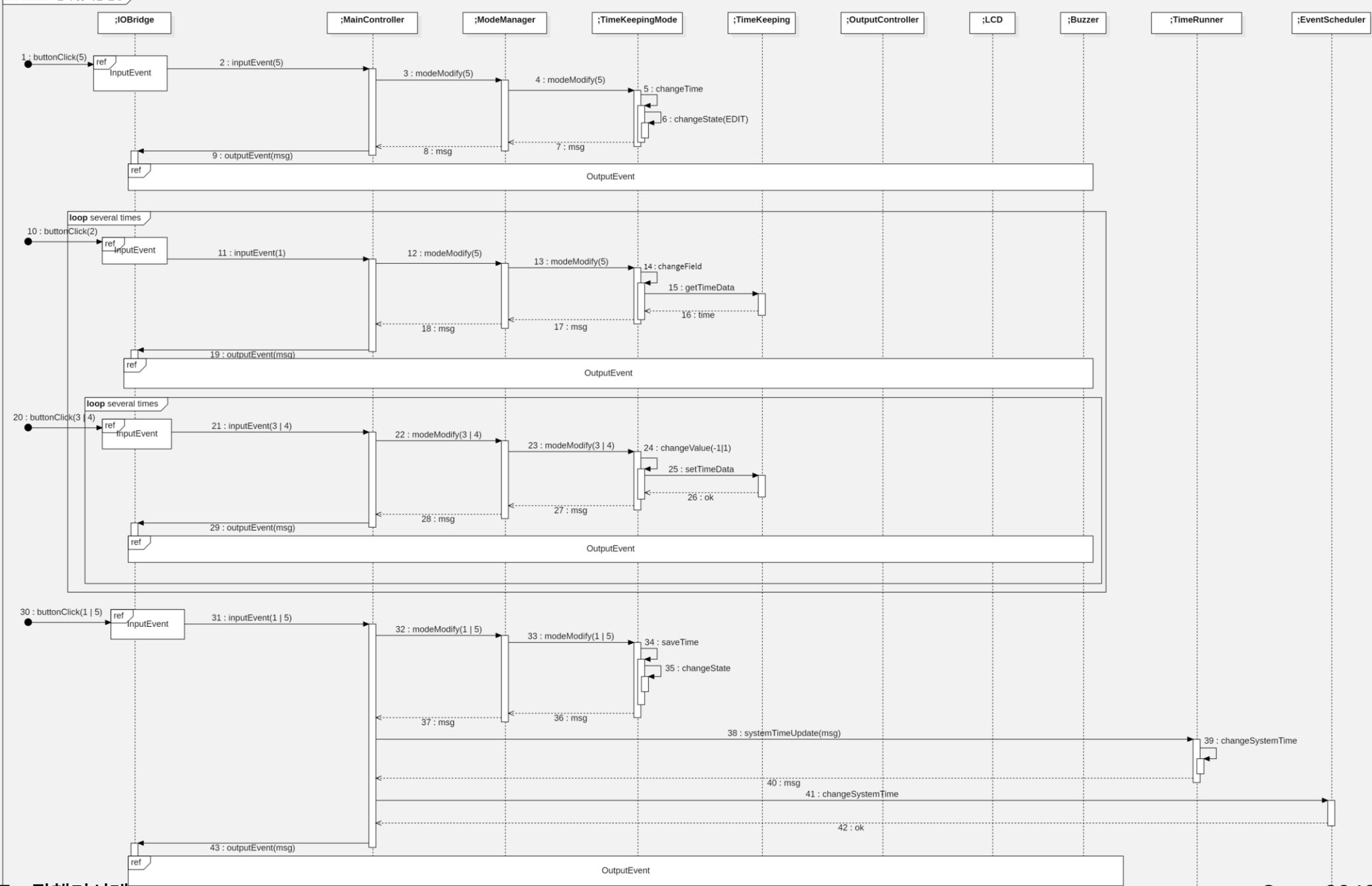


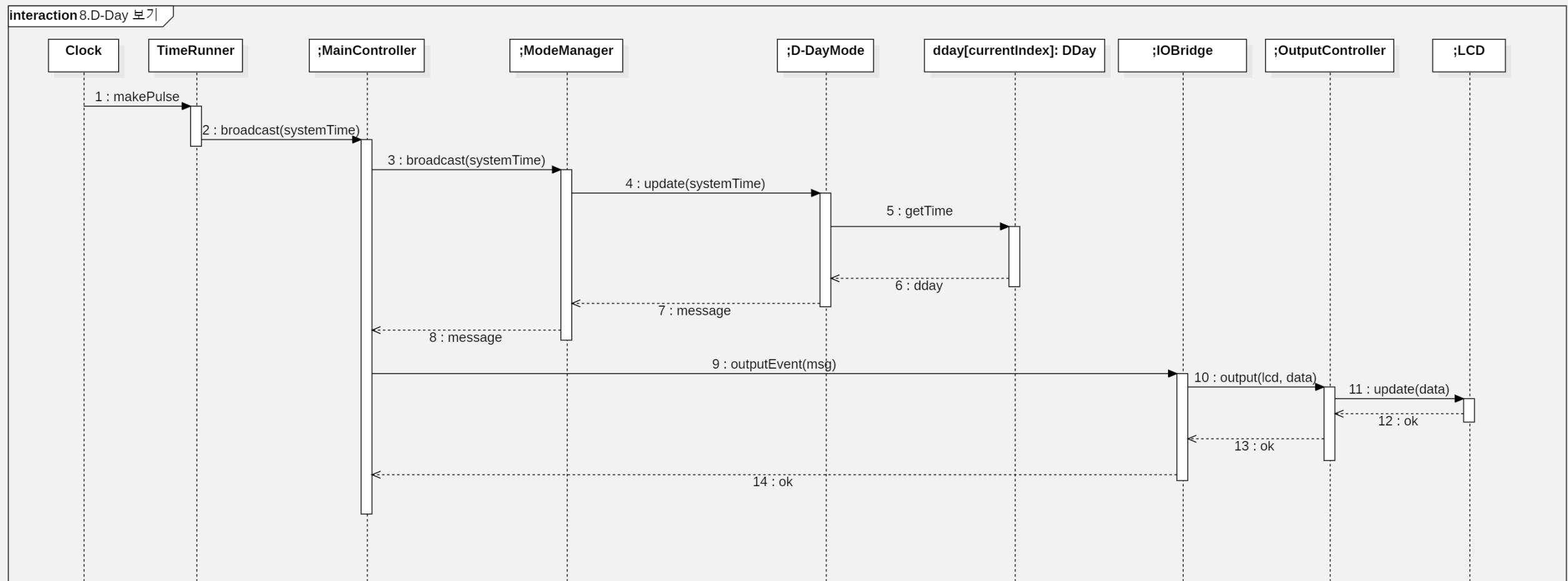


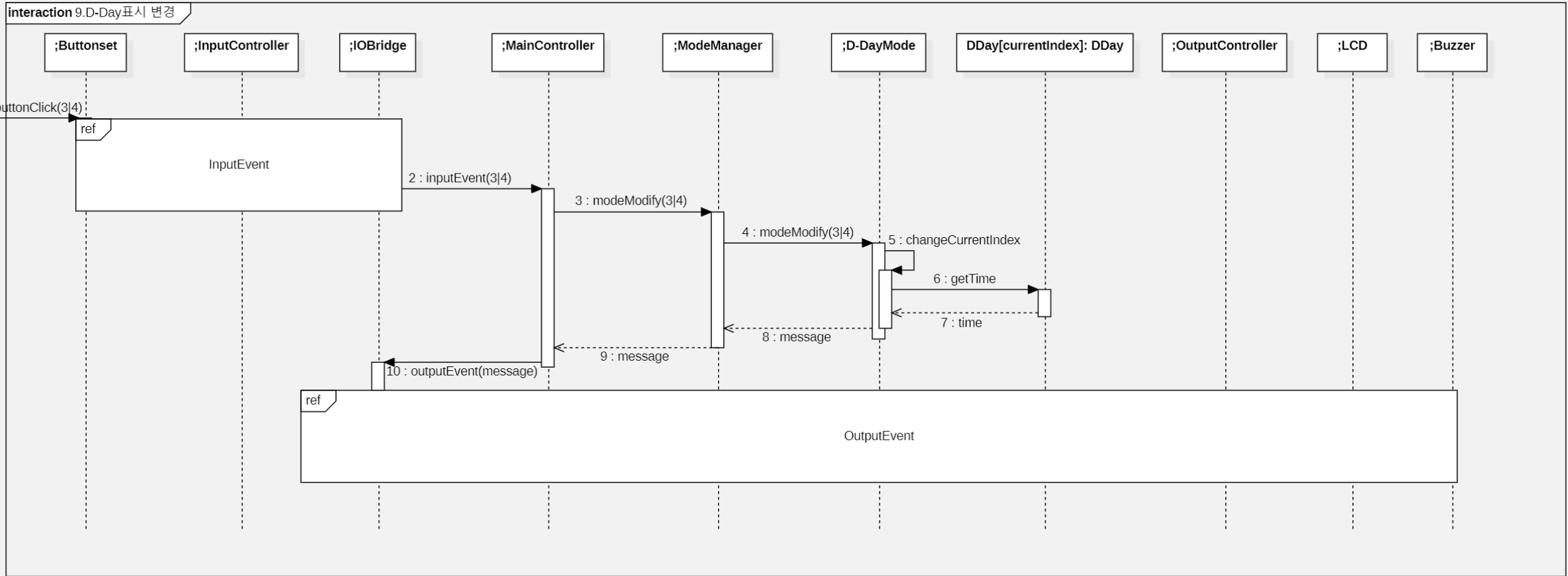


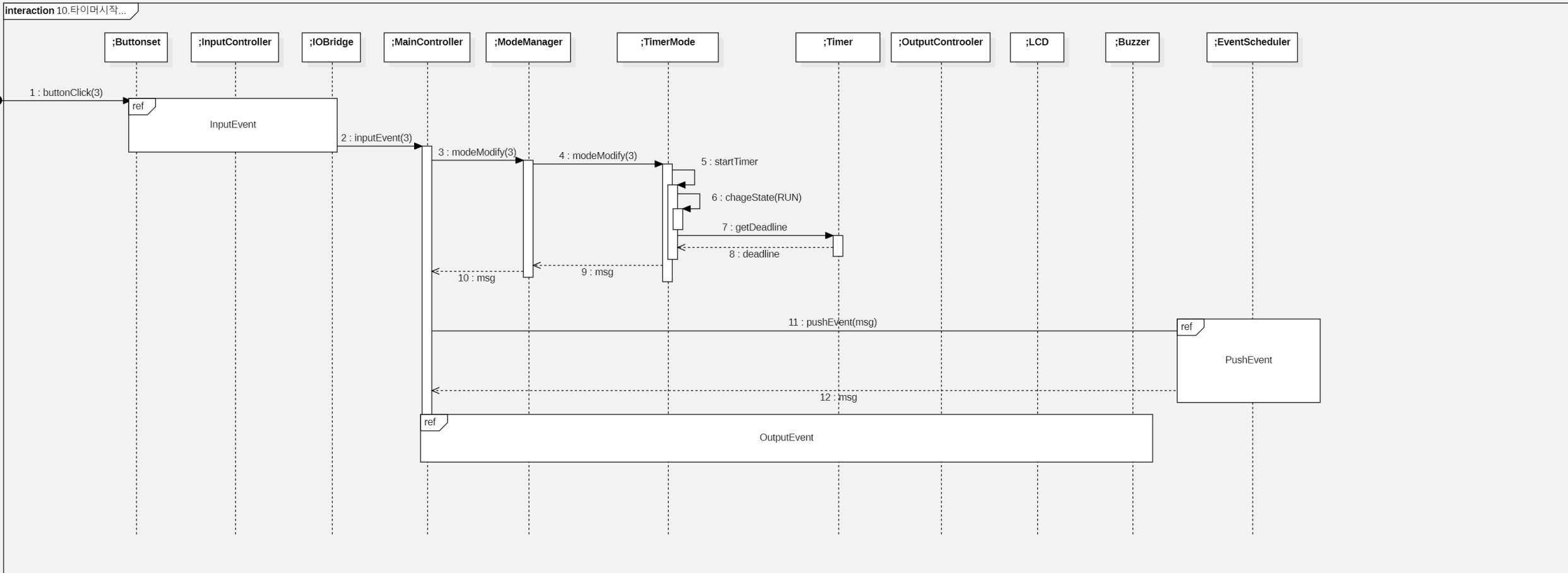


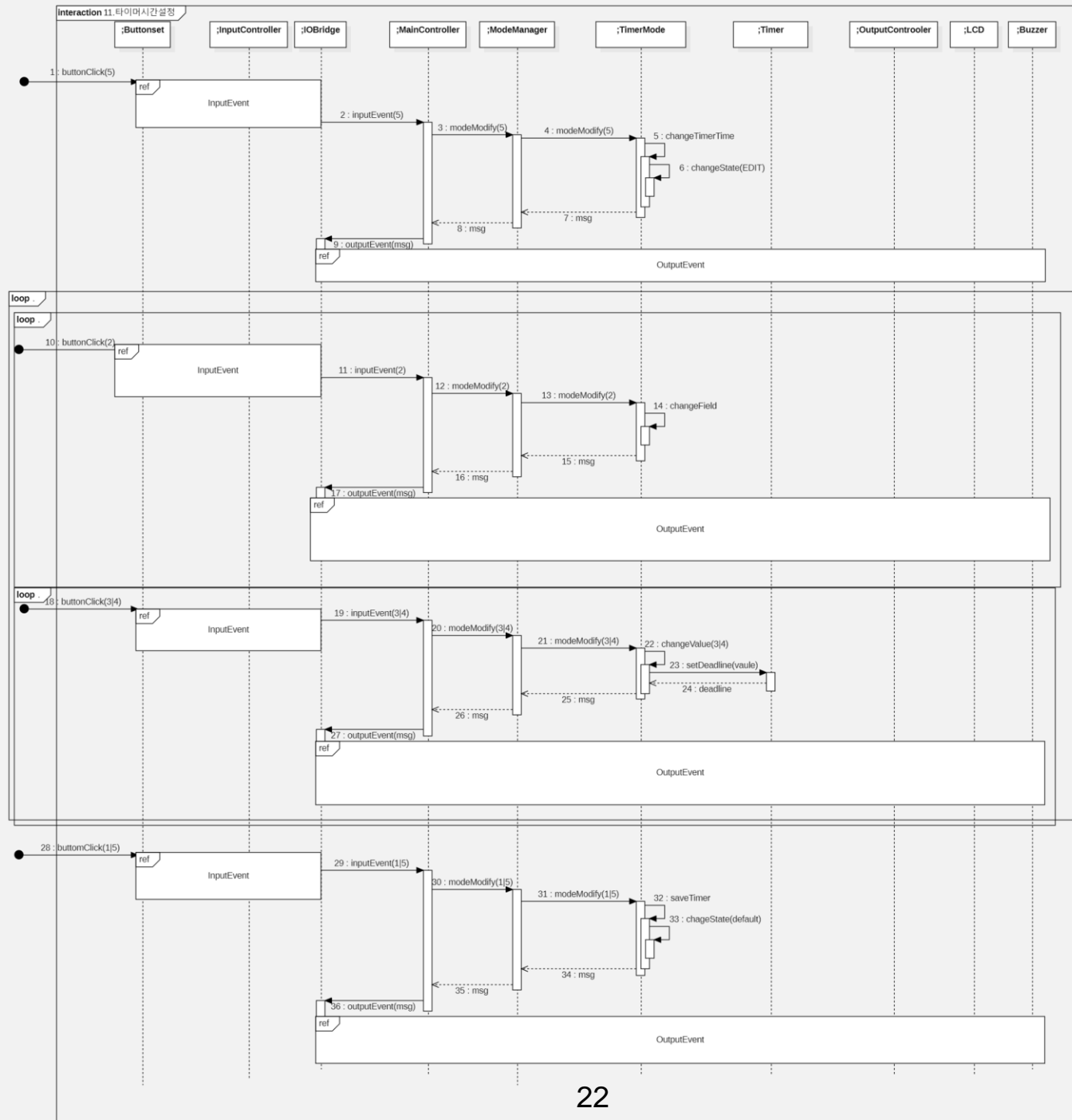
interaction 7. 날짜 및 시간 변경

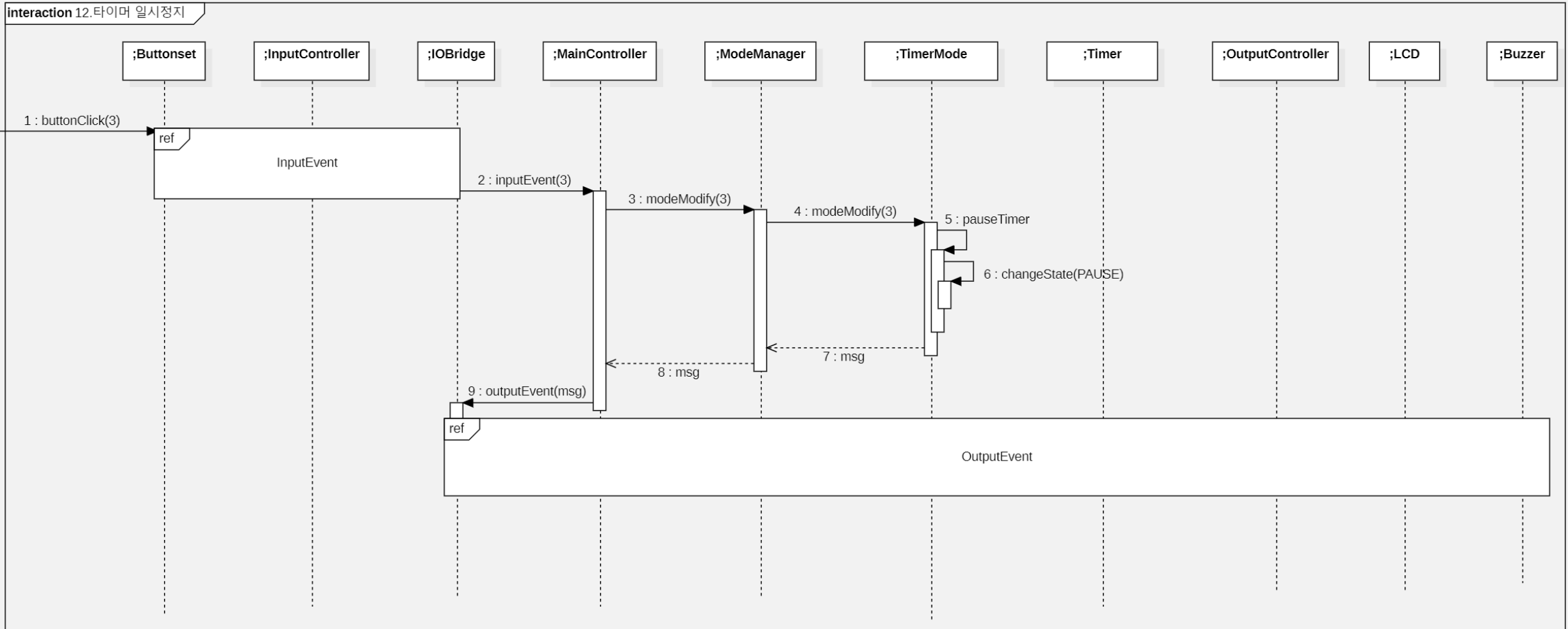




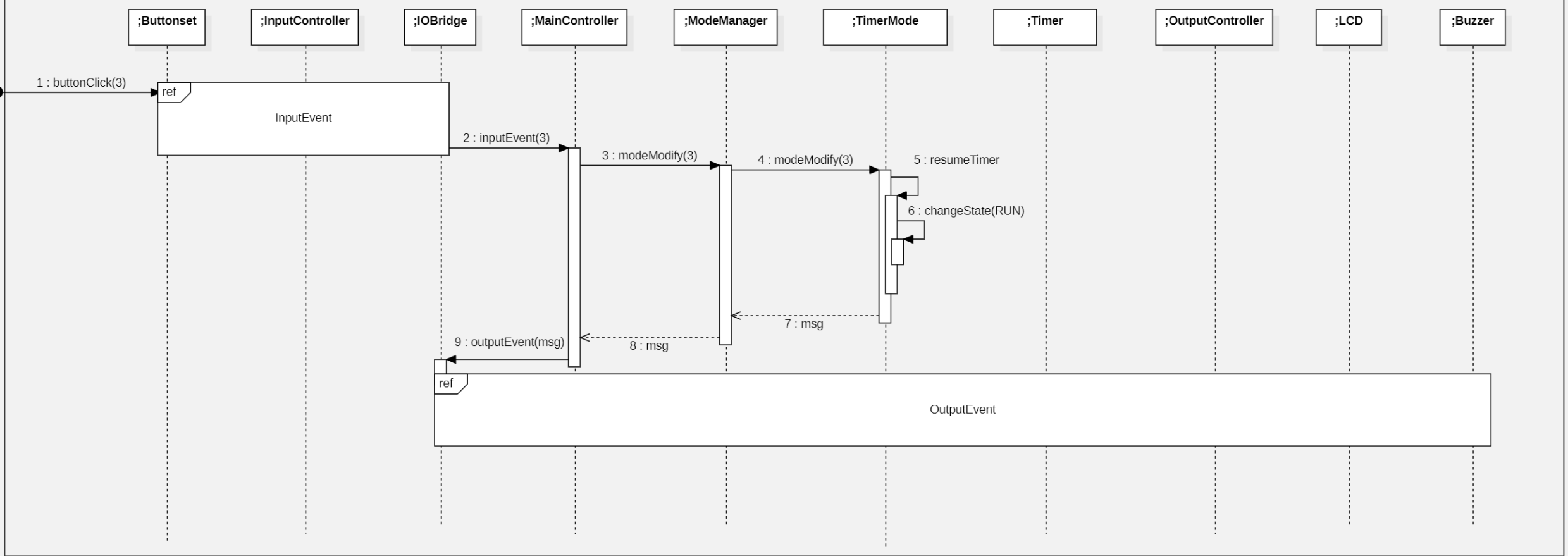




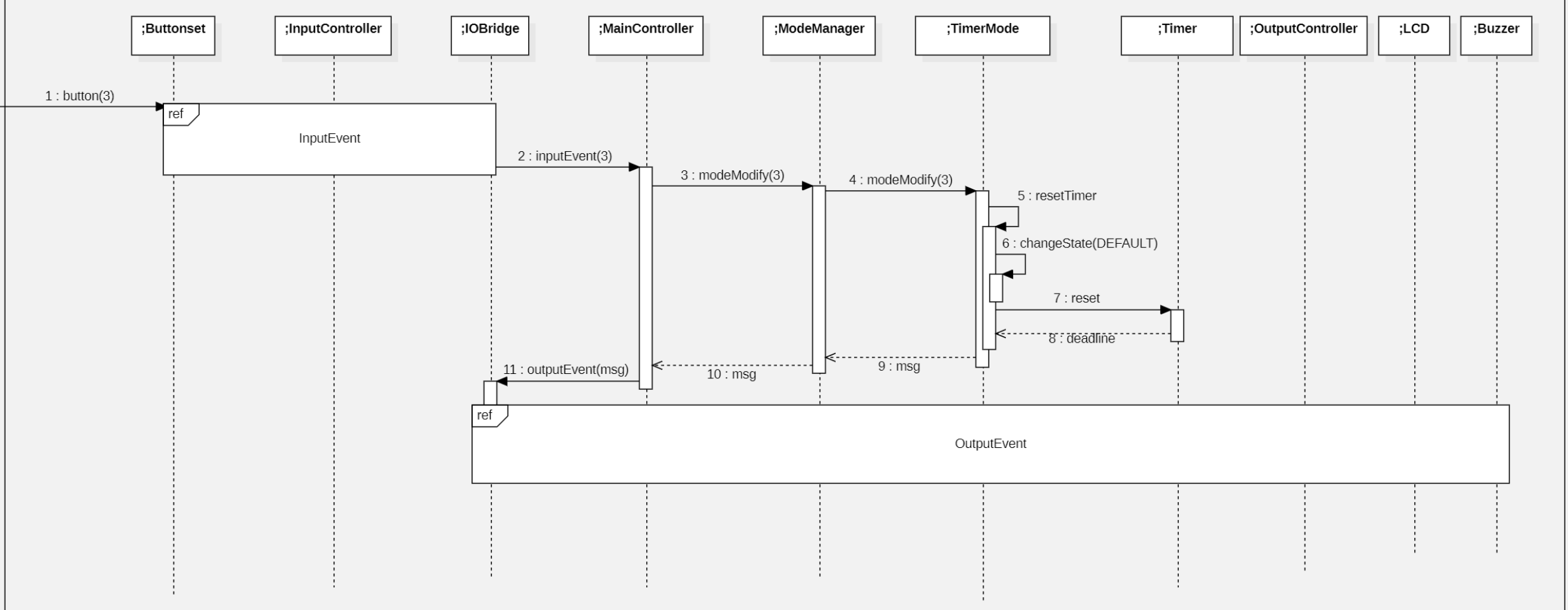




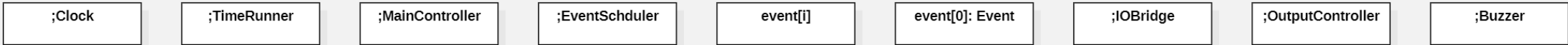
interaction 13.타이머 다시시작



interaction 14.타이머 초기화



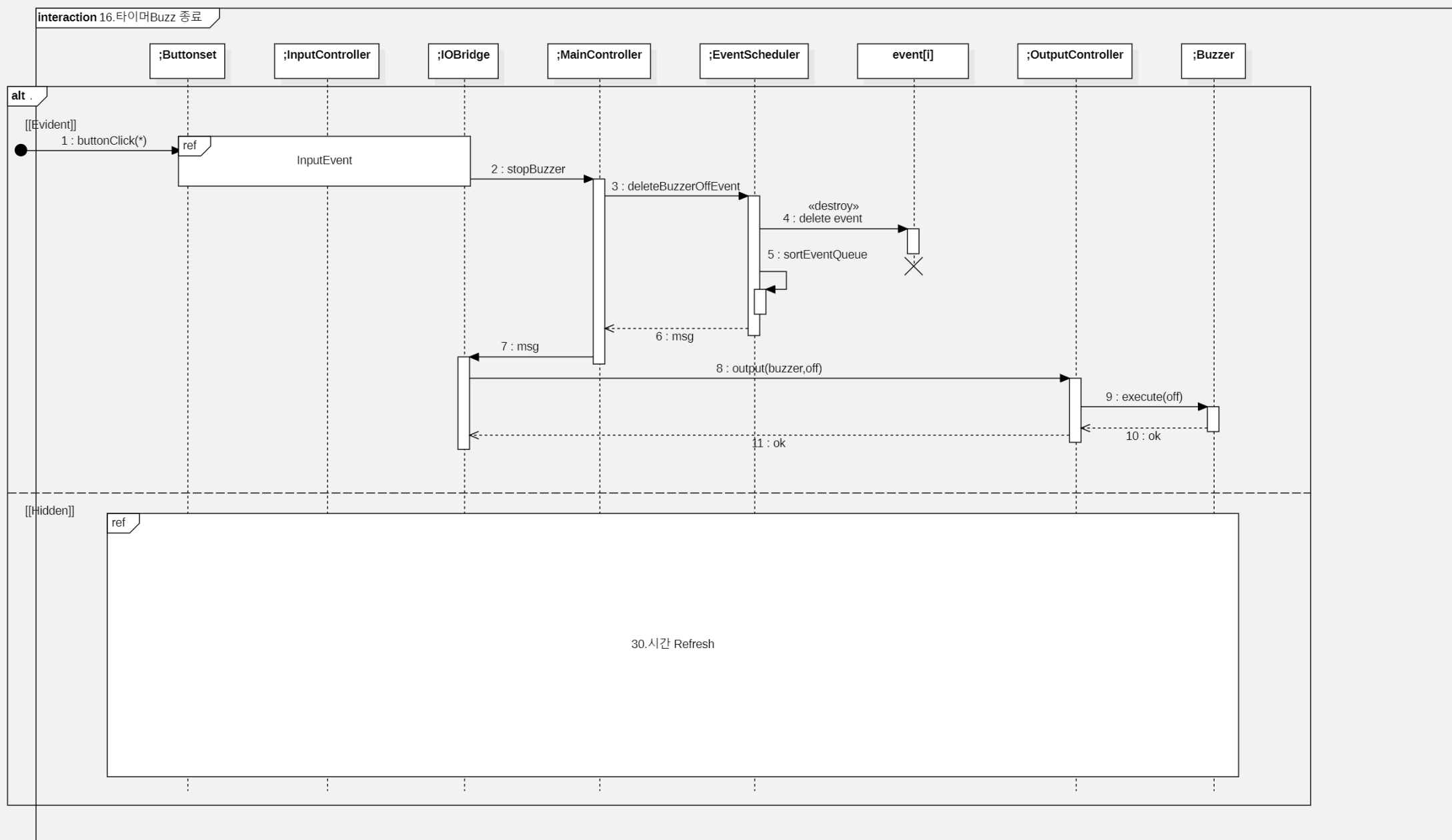
interaction 15. 타이머Buzz

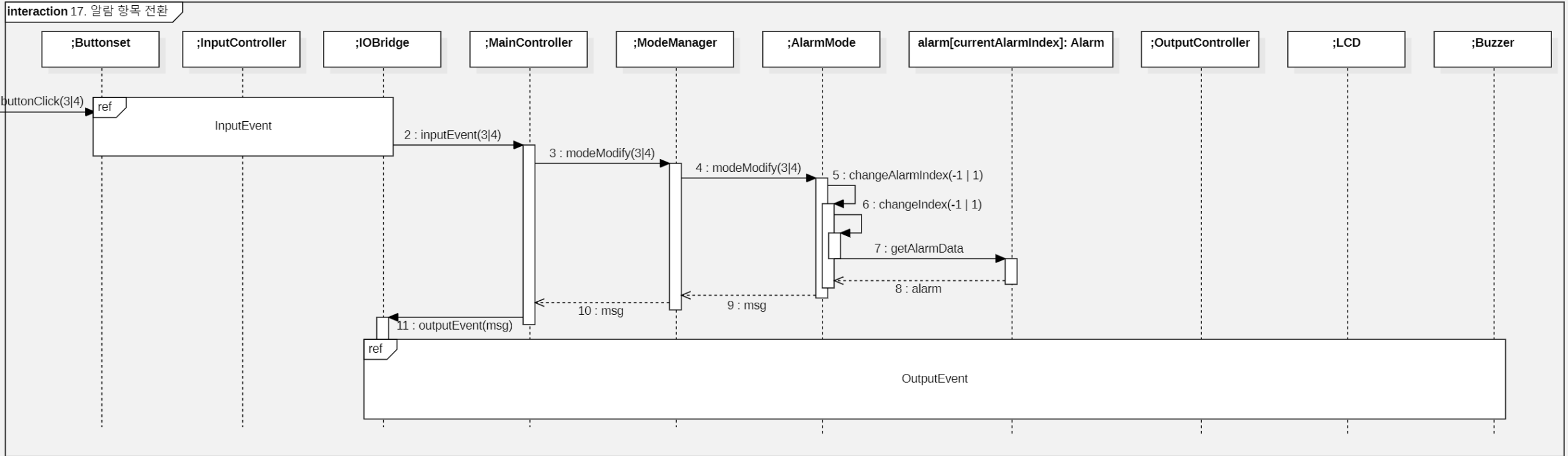


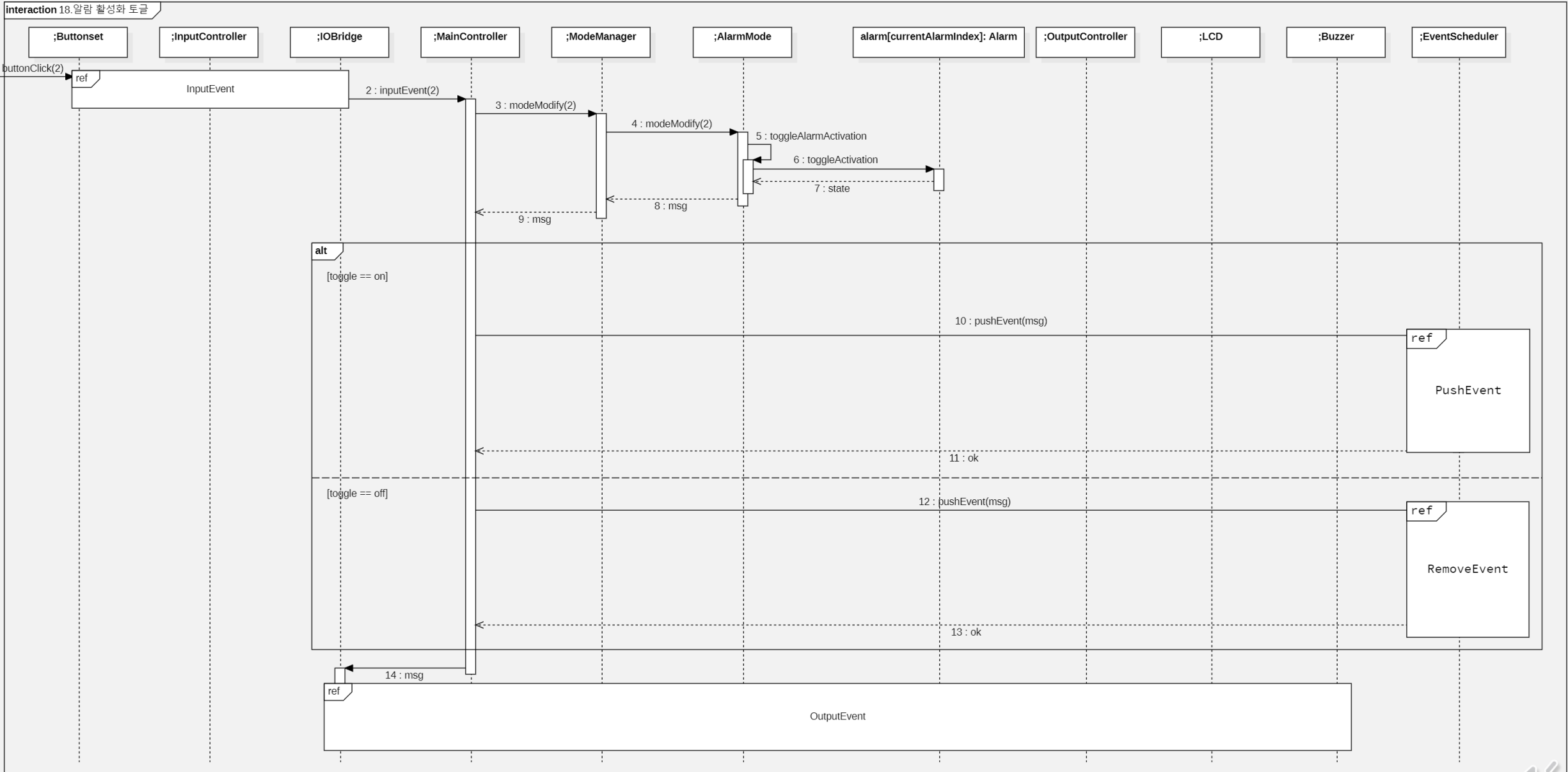
ref

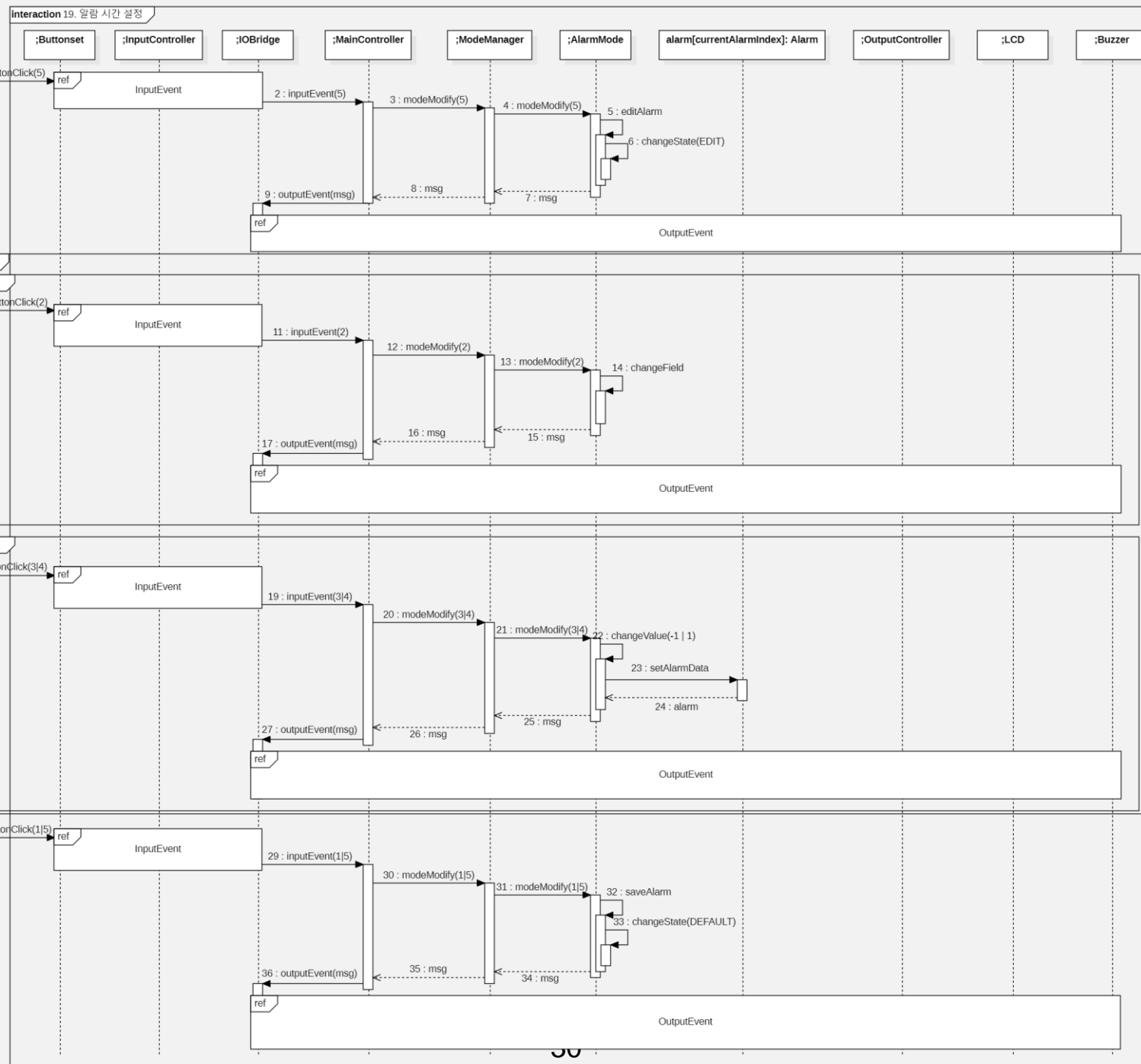
21. 알람 Buzz



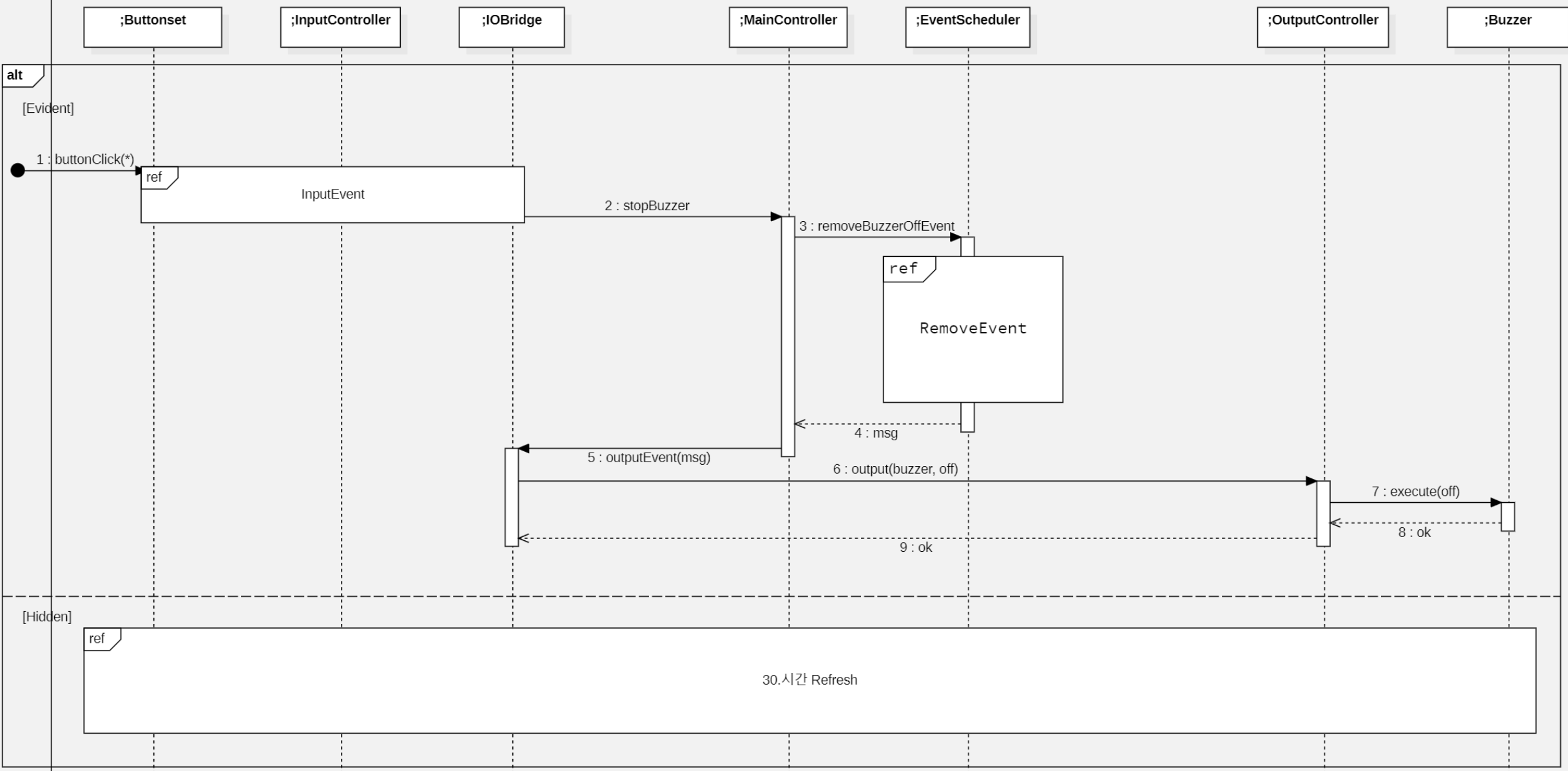




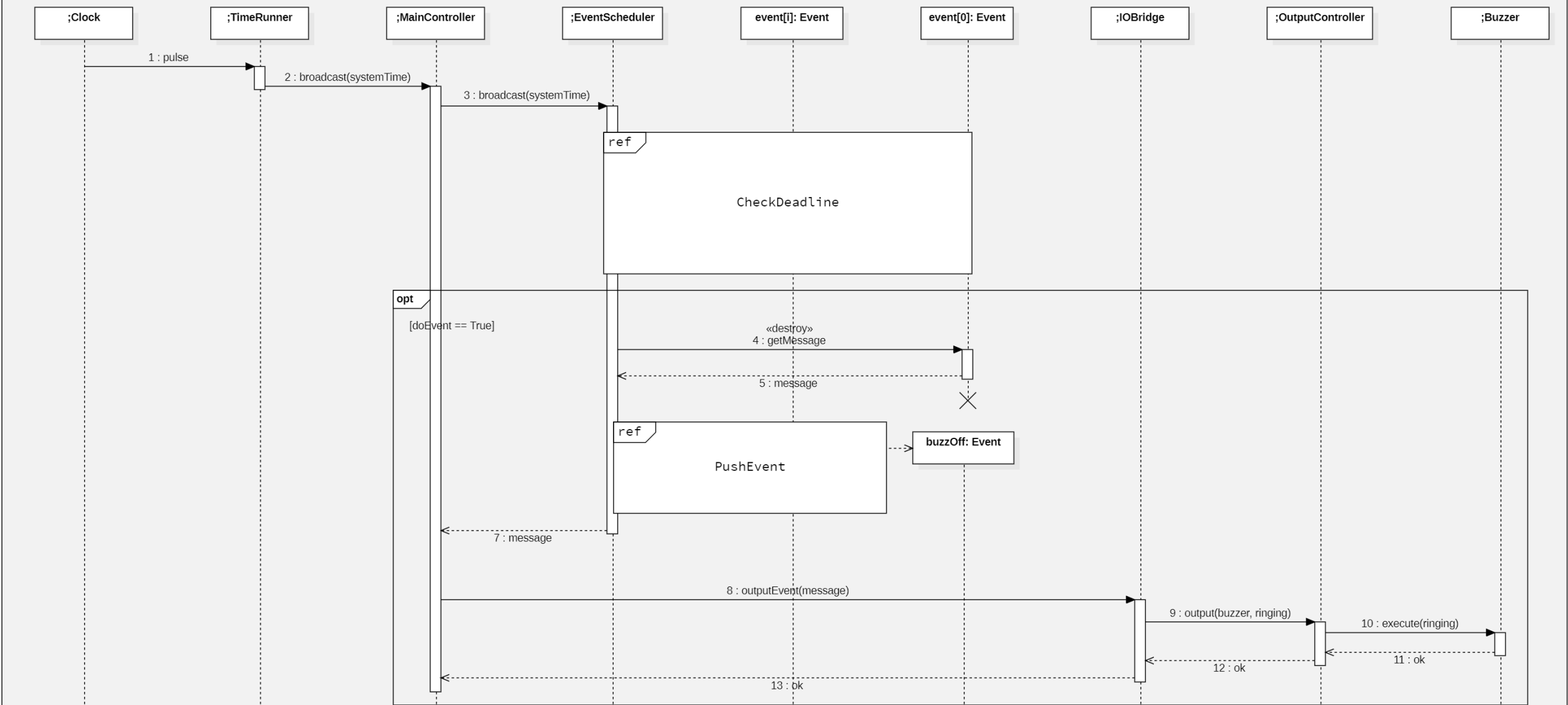


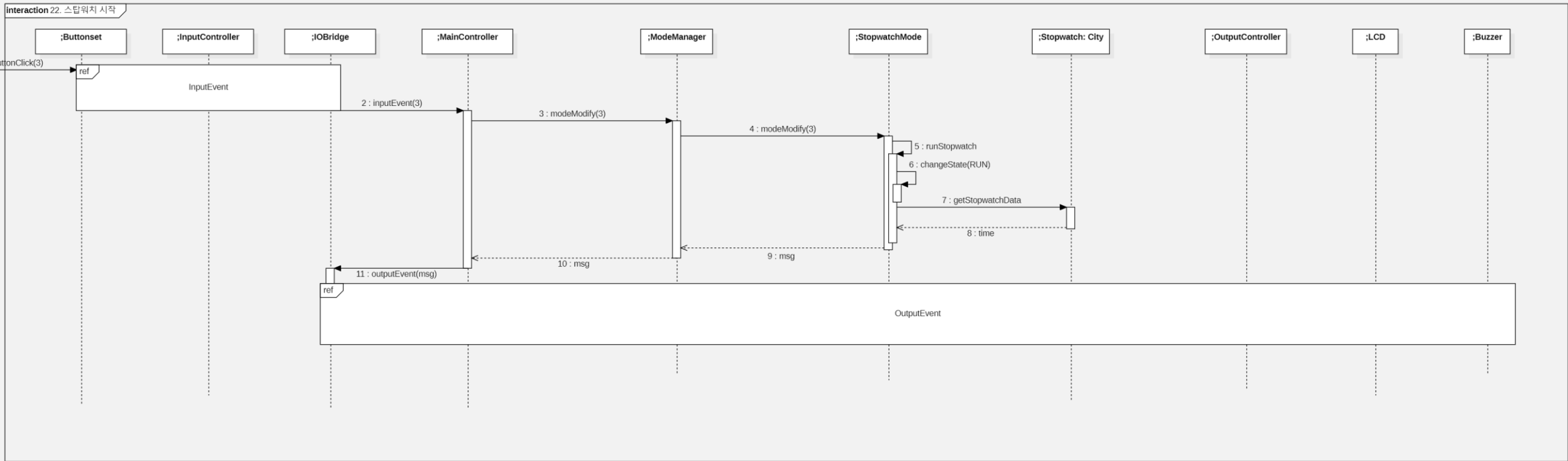


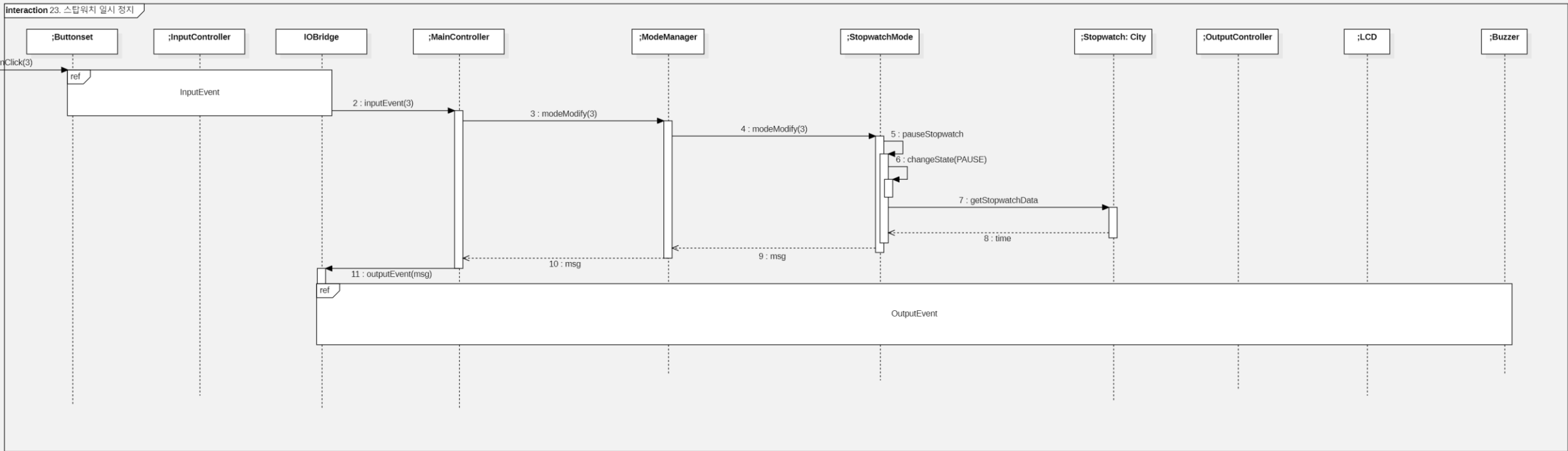
Interaction 20. 알람 Buzz 종료

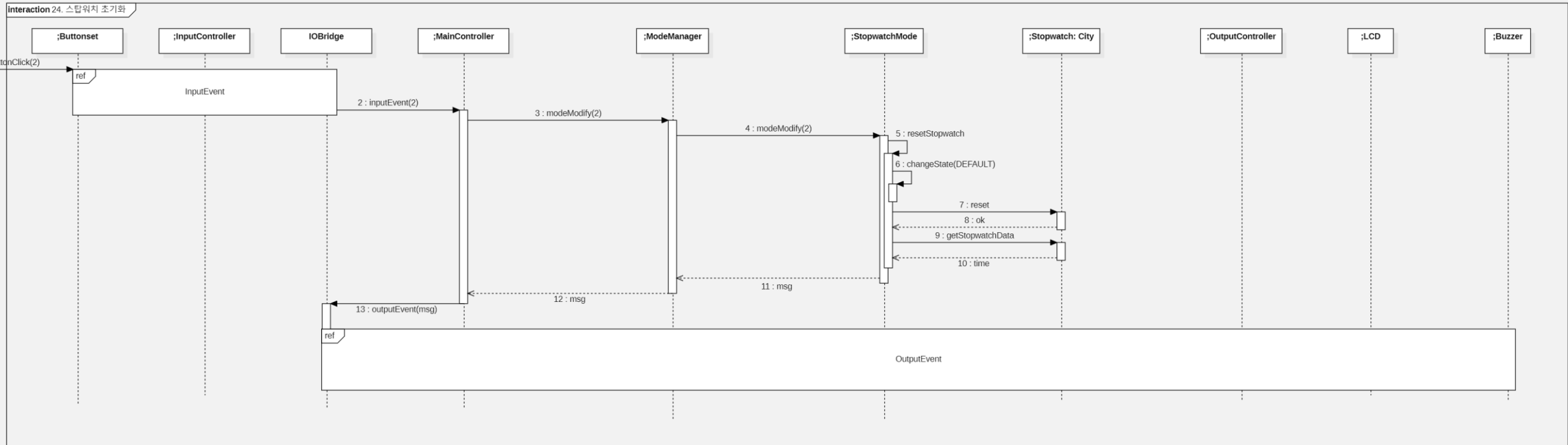


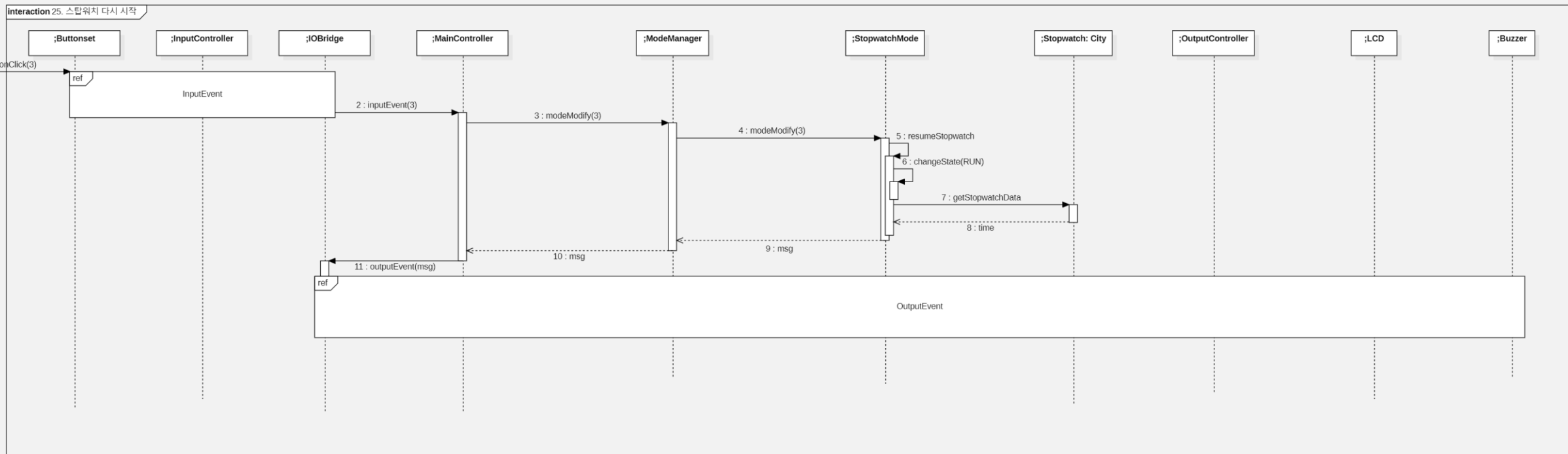
Interaction 21. 알람 Buzz



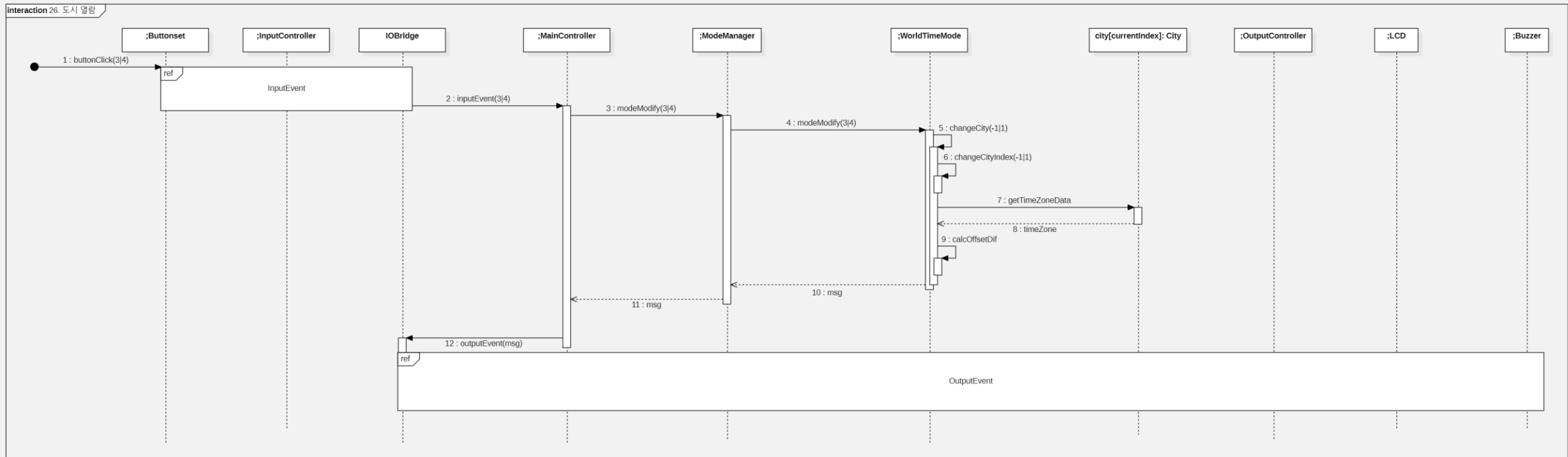


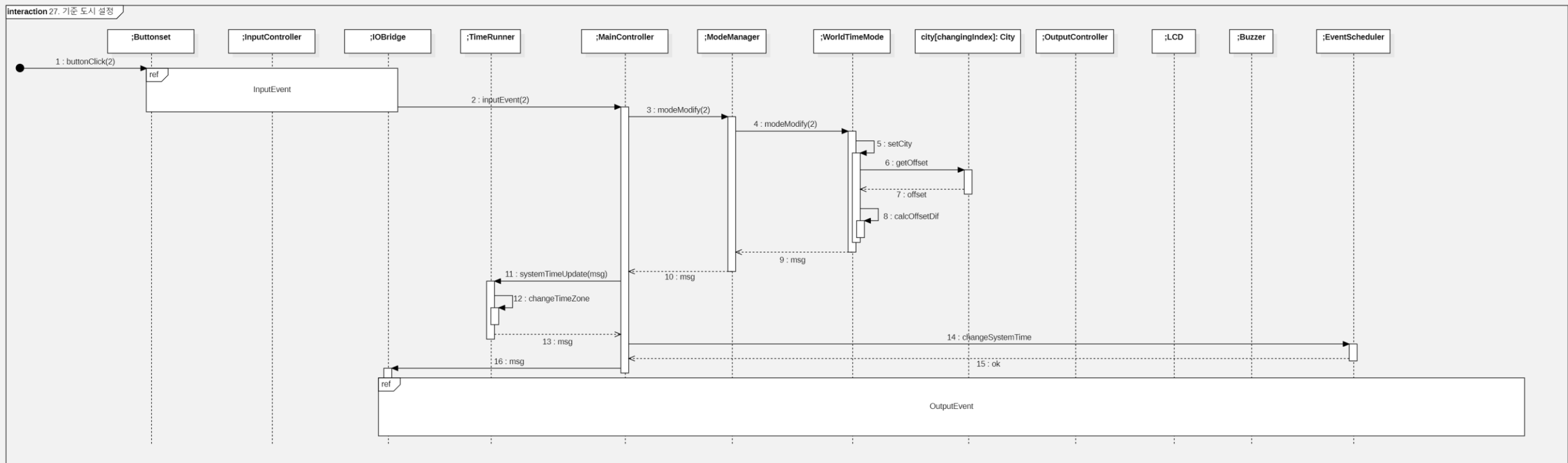


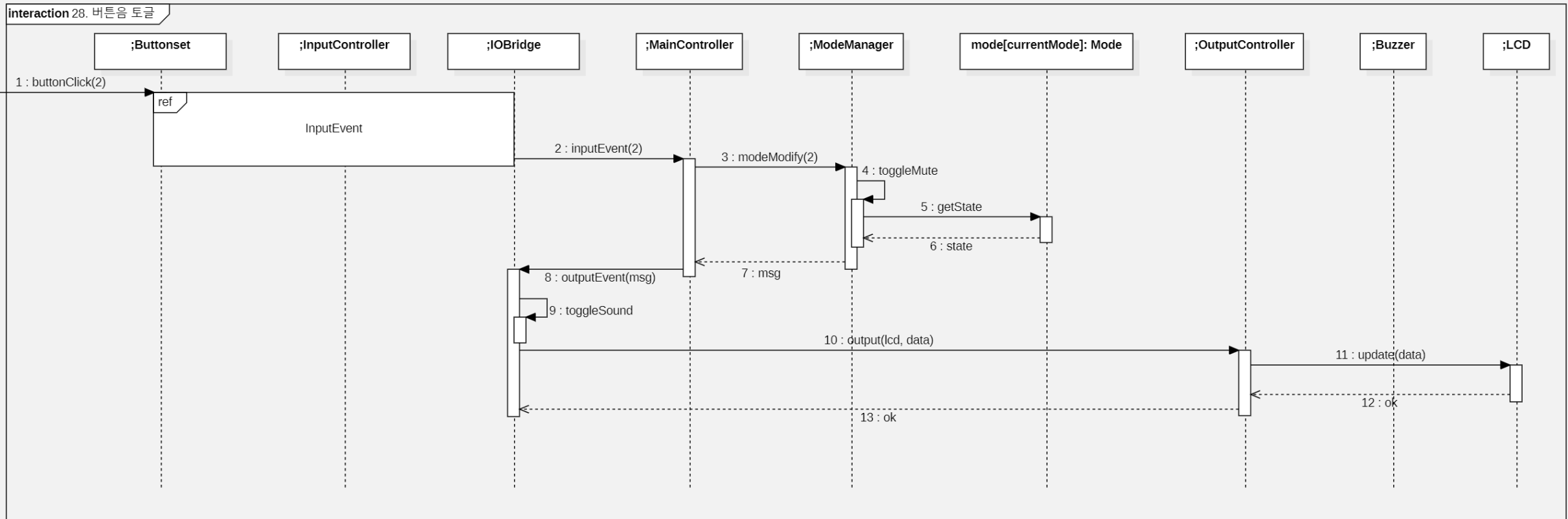


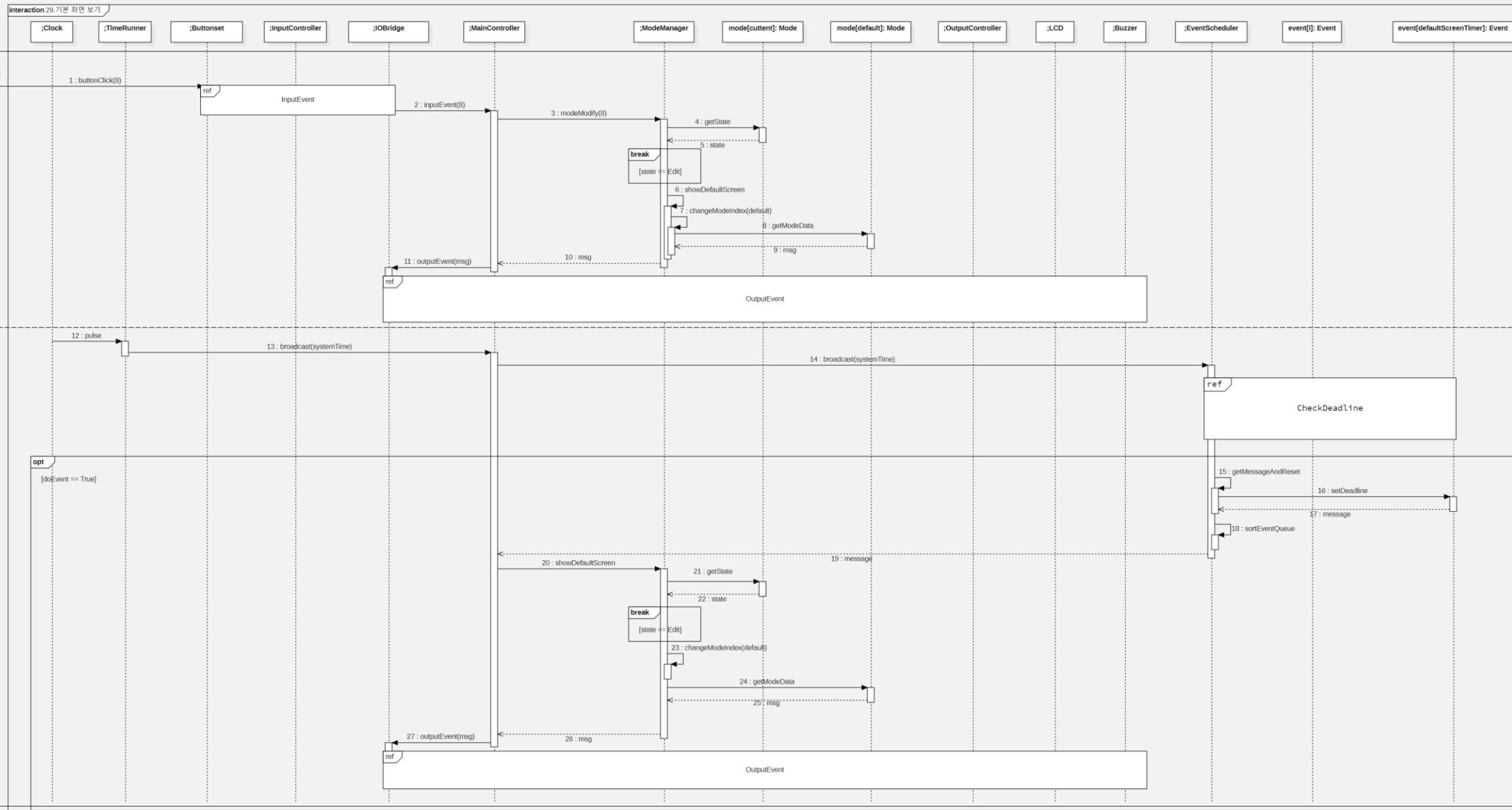


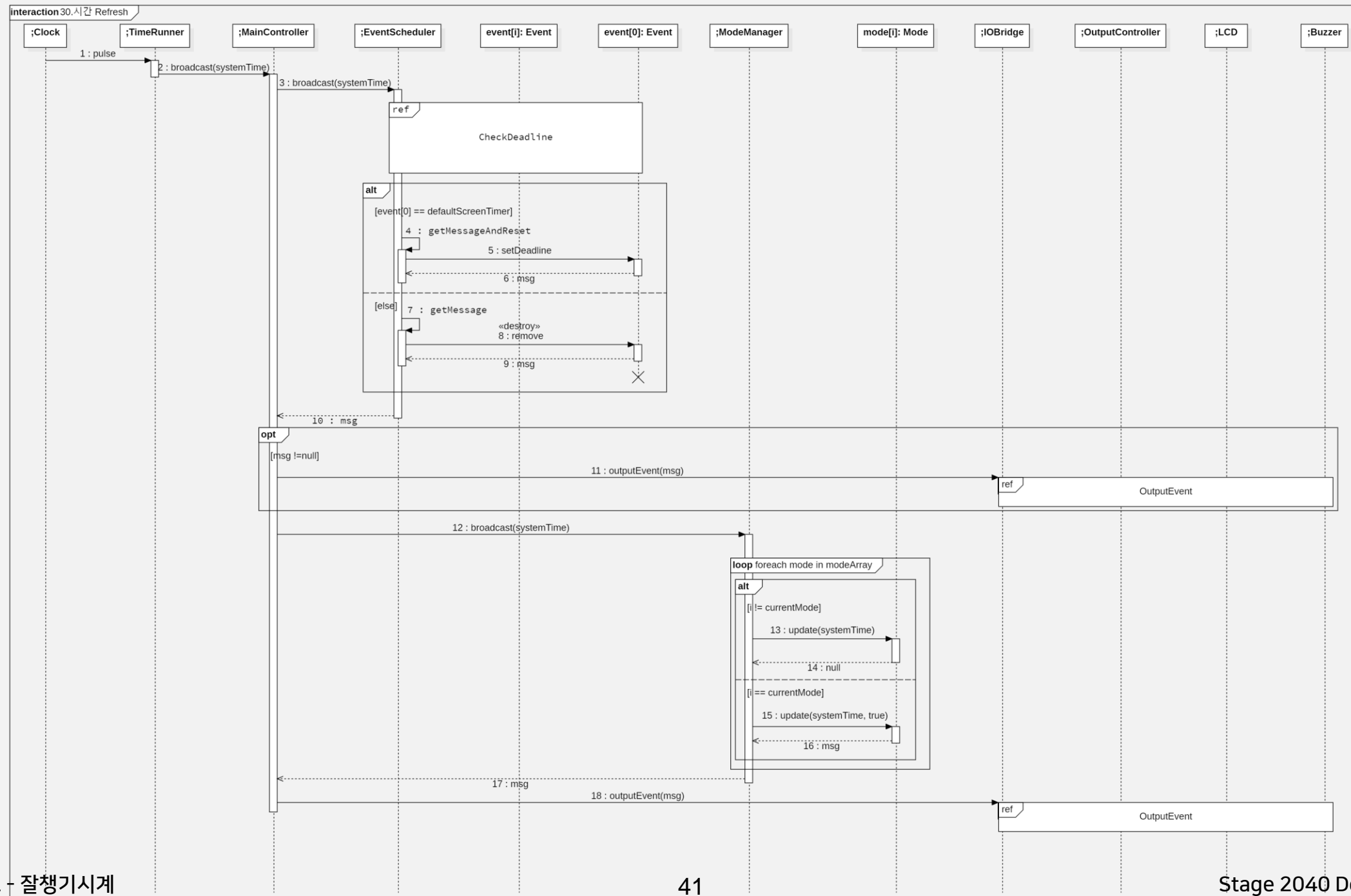
interaction 26. 도시 열람



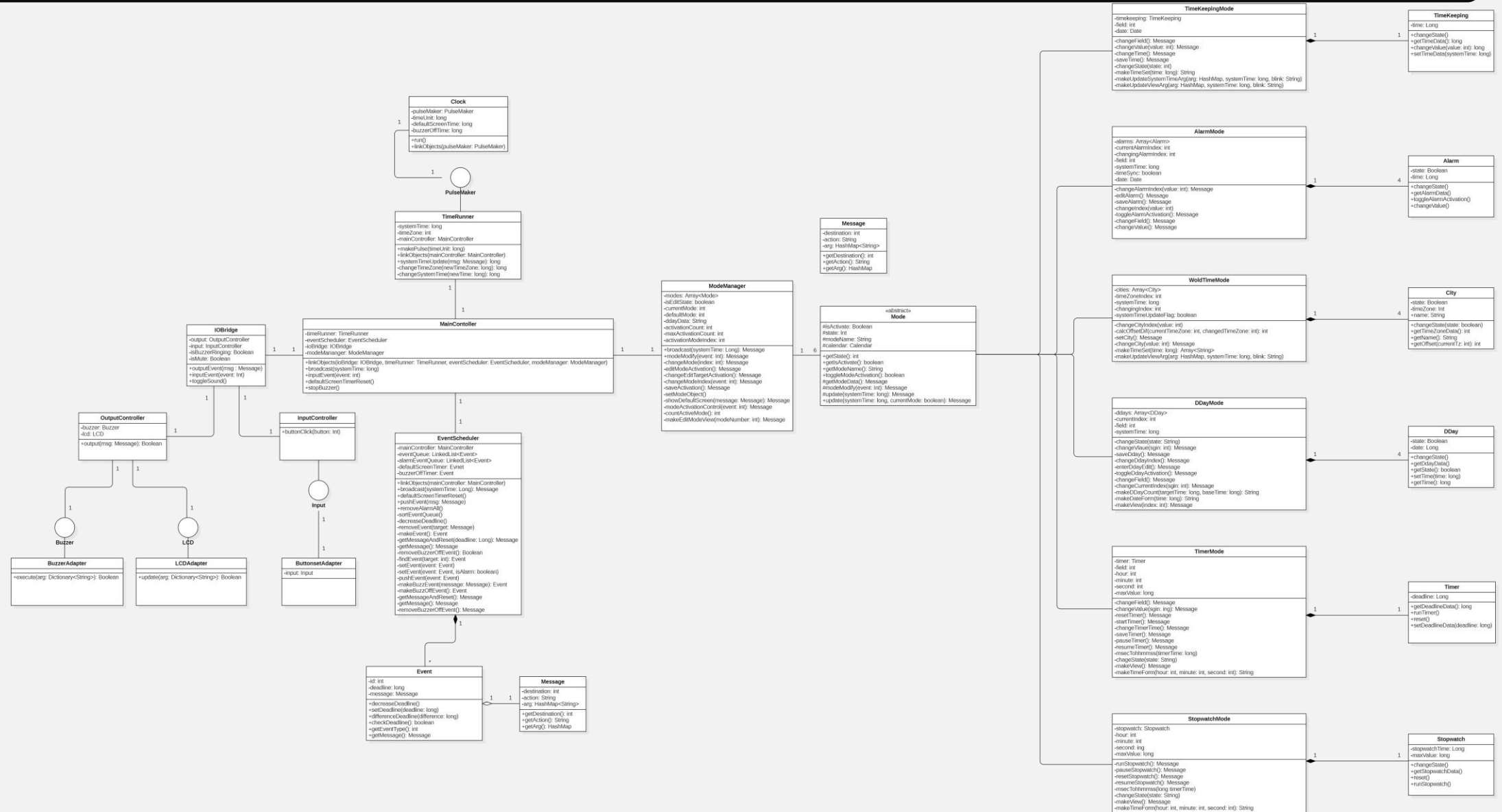








Design Class Diagram



Design Traceability Analysis

Essential Use Case	S-Link
모드 변경하기	1
모드 활성화	2, 3, 4, 5
D-DAY 항목 전환	6
D-DAY 날짜 설정	7, 8, 9, 10
D-Day 활성화 토글	11
시간 보기	
날짜 및 시간 변경	8, 9, 12, 13
D-DAY 보기	
D-DAY 표시 변경	14
타이머 시작	15
타이머 시간 설정	8, 9, 16, 17
타이머 일시 정지	18
타이머 다시 시작	19
타이머 초기화	20
타이머 Buzz	
타이머 Buzz 종료	21
알람 항목 전환	22
알람 활성화 토글	23
알람 시간 설정	8, 9, 24, 25
알람 Buzz 종료	26
알람 Buzz	
스탑워치 시작	27
스탑워치 일시 정지	28
스탑워치 초기화	29
스탑워치 다시 시작	30
도시 열람	31
기준 도시 설정	32
버튼음 토글	33
기본 화면 보기	34

SID	Operation in sequence diagram	M-Link
1	changeMode()	28, 40, 51, 60, 71, 81, 88, 29, 38, 49, 58, 69, 79, 86
2	editModeActivation()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86
3	changeModeIndex()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86, 34
4	ChangeEditTargetActivation()	28, 40, 51, 60, 71, 81, 88, 39, 50, 59, 70, 80, 87, 97, 115, 117, 119, 121, 123, 125
5	saveActivation()	28, 33, 114, 116, 118, 120, 122, 124
6	changeDDayIndex()	28, 67, 102
7	enterDDayEdit()	28, 35, 46, 64, 75
8	changeField()	28, 40, 51, 60, 71, 81, 88, 41, 52, 61, 72, 82, 89, 92, 95, 99, 101, 103, 35, 46, 64, 75, 93
9	changeValue()	28, 40, 51, 60, 71, 81, 88, 35, 46, 64, 75, 93, 102
10	saveDDay()	28, 66
11	toggleDDayActivation()	28, 77
12	changeTime()	40, 41
13	saveTime()	40, 93, 10
14	changeDDayIndex()	28, 67, 69, 102
15	startTimer()	28, 81, 82, 104
16	changeTimerTime()	28, 81, 82
17	saveTimer()	28, 81, 82
18	pauseTimer()	28, 81, 82, 104
19	resumeTimer()	28, 81, 82, 104
20	resetTimer()	28, 77, 81, 82, 105

SID	Operation in sequence diagram	M-Link
21	stopBuzzer()	19, 25, 23
22	changeAlarmIndex()	28, 51, 44, 96
23	toggleAlarmActivation()	28, 51, 97, 20, 21, 17, 19, 25, 23
24	editAlarm()	28, 51, 52
25	saveAlarm()	28, 51, 52
27	runStopwatch()	28, 88, 89, 106
28	pauseStopwatch()	28, 88, 89, 106
29	resetStopwatch()	28, 88, 89, 107
30	resumeStopwatch()	28, 88, 89, 106
31	changeCity()	28, 60, 55, 100
32	setCity()	28, 60, 55, 100, 56, 11
33	toggleSound()	28, 3
34	showDefaultScreen()	28, 108, 109, 110, 111, 112, 113, 34, 38



Activity 2046

Design Traceability Analysis

SID	Operation in sequence diagram	M-Link	SID	Operation in sequence diagram	M-Link	MID	Method	Class	MID	Method	Class
1	changeMode()	28, 40, 51, 60, 71, 81, 88, 29, 38, 49, 58, 69, 79, 86	21	stopBuzzer()	19, 25, 23	1	outputEvent()	IOBridge	35	changeField()	TimeKeepingMode
2	editModeActivation()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86	22	changeAlarmIndex()	28, 51, 44, 96	2	inputEvent()		36	changeValue()	
3	changeModeIndex()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86, 34	23	toggleAlarmActivation()	28, 51, 97, 20, 21, 17, 19, 25, 23	3	toggleMute()		37	broadcast	
4	ChangeEditTargetActivation()	28, 40, 51, 60, 71, 81, 88, 39, 50, 59, 70, 80, 87, 97, 115, 117, 119, 121, 123, 125	24	editAlarm()	28, 51, 52	4	output()	OutputController	38	getModeData	
5	saveActivation()	28, 33, 114, 116, 118, 120, 122, 124	25	saveAlarm()	28, 51, 52	5	buttonClick	InputController	39	toggleActivation	
6	changeDDayIndex()	28, 67, 102	27	runStopwatch()	28, 88, 89, 106	6	execute()	BuzzerAdapter	40	modeModify	
7	enterDDayEdit()	28, 35, 46, 64, 75	28	pauseStopwatch()	28, 88, 89, 106	7	update()	LCDAdapter	41	modeModify	
8	changeField()	28, 40, 51, 60, 71, 81, 88, 41, 52, 61, 72, 82, 89, 92, 95, 99, 101, 103, 35, 46, 64, 75, 93	29	resetStopwatch()	28, 88, 89, 107	8	makePulse()	Clock	42	update	
9	changeValue()	28, 40, 51, 60, 71, 81, 88, 35, 46, 64, 75, 93, 102	30	resumeStopwatch()	28, 88, 89, 106	9	pulse()	TimeRunner	43	receiveMessage	
10	saveDDay()	28, 66	31	changeCity()	28, 60, 55, 100	10	systemTimeUpdate()		44	changeAlarmIndex	
11	toggleDDayActivation()	28, 77	32	setCity()	28, 60, 55, 100, 56, 11	11	changeTimeZone()	MainController	46	changeField	
12	changeTime()	40, 41	33	toggleSound()	28, 3	12	broadcast(in systemTime)		47	changeValue	
13	saveTime()	40, 93, 10	34	showDefaultScreen()	28, 108, 109, 110, 111, 112, 113, 34, 38	13	inputEvent()		48	broadcast	
14	changeDDayIndex()	28, 67, 69, 102				14	defaultScreenTimerReset()		49	getModeData	
15	startTimer()	28, 81, 82, 104				15	buzzerOff()	EventScheduler	51	modeModify	
16	changeTimerTime()	28, 81, 82				16	defaultScreenTimerReset()		52	changeState	
17	saveTimer()	28, 81, 82				17	sortEventQueue()		53	update	
18	pauseTimer()	28, 81, 82, 104				18	decreaseDeadline()		54	receiveMessage	
19	resumeTimer()	28, 81, 82, 104				19	removeEvent()		55	changeCityIndex()	
20	resetTimer()	28, 77, 81, 82, 105				20	pushEvent()		56	clacOffsetDif()	
						21	makeEvent()		57	broadcast	
						22	getMessageAndReset()	58	getModeData		
						23	getMessage()	Event	59	toggleActivation	
						24	setDeadline()		60	modeModify	
						25	getEventType()	ModeManager	61	changeState	
						26	decreaseDeadline()		62	update	
						27	broadcast()		63	receiveMessage	
						28	modeModify()				
						29	chageMode()				
						30	enterModeActivationEdit()				
						31	changeActivationEditTarget()				
						34	changeModeIndex()				



Design Traceability Analysis

SID	Operation in sequence diagram	M-Link	SID	Operation in sequence diagram	M-Link	MID	Method	Class	MID	Method	Class
1	changeMode()	28, 40, 51, 60, 71, 81, 88, 29, 38, 49, 58, 69, 79, 86	21	stopBuzzer()	19, 25, 23	64	changeField()	DDayMode	99	changeState()	City
2	editModeActivation()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86	22	changeAlarmIndex()	28, 51, 44, 96	65	changeVlaue()		100	getTimeZoneData()	
3	changeModeIndex()	28, 40, 51, 60, 71, 81, 88, 38, 49, 58, 69, 79, 86, 34	23	toggleAlarmActivation()	28, 51, 97, 20, 21, 17, 19, 25, 23	66	saveDday()		101	changeState()	Timer
4	ChangeEditTargetActivation()	28, 40, 51, 60, 71, 81, 88, 39, 50, 59, 70, 80, 87 97, 115, 117, 119, 121, 123, 125	24	editAlarm()	28, 51, 52	67	changeDDayIndex()		102	102	
5	saveActivation()	28, 33, 114, 116, 118, 120, 122, 124	25	saveAlarm()	28, 51, 52	68	broadcast		103	changeState()	TimeKeepingMode
6	changeDDayIndex()	28, 67, 102	27	runStopwatch()	28, 88, 89, 106	69	getModeData		104	getDeadlineData()	
7	enterDDayEdit()	28, 35, 46, 64, 75	28	pauseStopwatch()	28, 88, 89, 106	70	toggleActivation		105	reset()	WoldTimeMode
8	changeField()	28, 40, 51, 60, 71, 81, 88, 41, 52, 61, 72, 82, 89, 92, 95, 99, 101, 103, 35, 46, 64, 75, 93	29	resetStopwatch()	28, 88, 89, 107	71	modeModify		106	getStopwatchData()	
9	changeValue()	28, 40, 51, 60, 71, 81, 88, 35, 46, 64, 75, 93, 102	30	resumeStopwatch()	28, 88, 89, 106	72	changeState		107	reset()	TimerMode
10	saveDDay()	28, 66	31	changeCity()	28, 60, 55, 100	73	update		108	getState()	
11	toggleDDayActivation()	28, 77	32	setCity()	28, 60, 55, 100, 56, 11	74	receiveMessage	109	getState()	TimeKeepingMode	
12	changeTime()	40, 41	33	toggleSound()	28, 3	75	changeField()	110	getState()		TimeKeepingMode
13	saveTime()	40, 93, 10	34	showDefaultScreen()	28, 108, 109, 110, 111, 112, 113, 34, 38	76	changeValue()	111	getState()	AlarmMode	
14	changeDDayIndex()	28, 67, 69, 102				77	resetTimer()	112	getState()		AlarmMode
15	startTimer()	28, 81, 82, 104				78	broadcast	113	getState()	WoldTimeMode	
16	changeTimerTime()	28, 81, 82				79	getModeData	114	toggleModeActivation()		WoldTimeMode
17	saveTimer()	28, 81, 82				80	toggleActivation	115	saveModeActivation()	DDayMode	
18	pauseTimer()	28, 81, 82, 104				81	modeModify	116	toggleModeActivation()		DDayMode
19	resumeTimer()	28, 81, 82, 104				82	changeState	117	saveModeActivation()	TimerMode	
20	resetTimer()	28, 77, 81, 82, 105				83	update	118	toggleModeActivation()		TimerMode
						84	receiveMessage	119	saveModeActivation()	StopwatchMode	
						85	broadcast	120	toggleModeActivation()		StopwatchMode
						86	getModeData	121	saveModeActivation()	StopwatchMode	
						87	toggleActivation	122	toggleModeActivation()		StopwatchMode
						88	modeModify	123	saveModeActivation()	StopwatchMode	
						89	changeState	124	toggleModeActivation()		StopwatchMode
						90	update	125	saveModeActivation()	StopwatchMode	
						91	receiveMessage				
						92	changeState()				
						93	getTimeData()				
						94	changeValue()				
						95	changeState()				
						96	getAlarmData()				
						97	toggleAlarmActivation()				
						98	changeValue()				





감사합니다

객체지향개발방법론 4팀
잘챙기시계

