

## Model

Package in package "

Model

Version Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Project

Package in package 'Model'

Project

Version Phase 1.0 Proposed

JunHyun created on 2018-06-19. Last modified 2018-06-20

## SWProject diagram

Class diagram in package 'Project'

SWProject

Version 1.0

JunHyun created on 2018-06-19. Last modified 2018-06-20

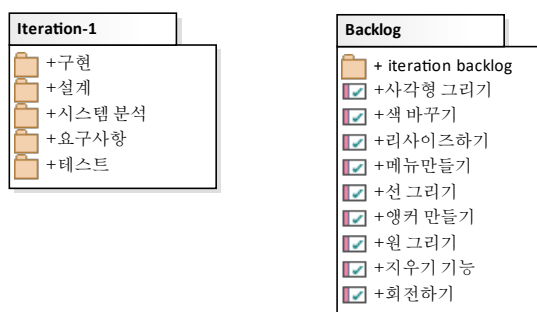


Figure 1: SWProject

## Backlog

Package in package 'Project'

Backlog

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Iteration-1

Package in package 'Project'

Iteration-1

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Backlog

Package in package 'Project'

Backlog

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Backlog diagram

Class diagram in package 'Backlog'

Backlog

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

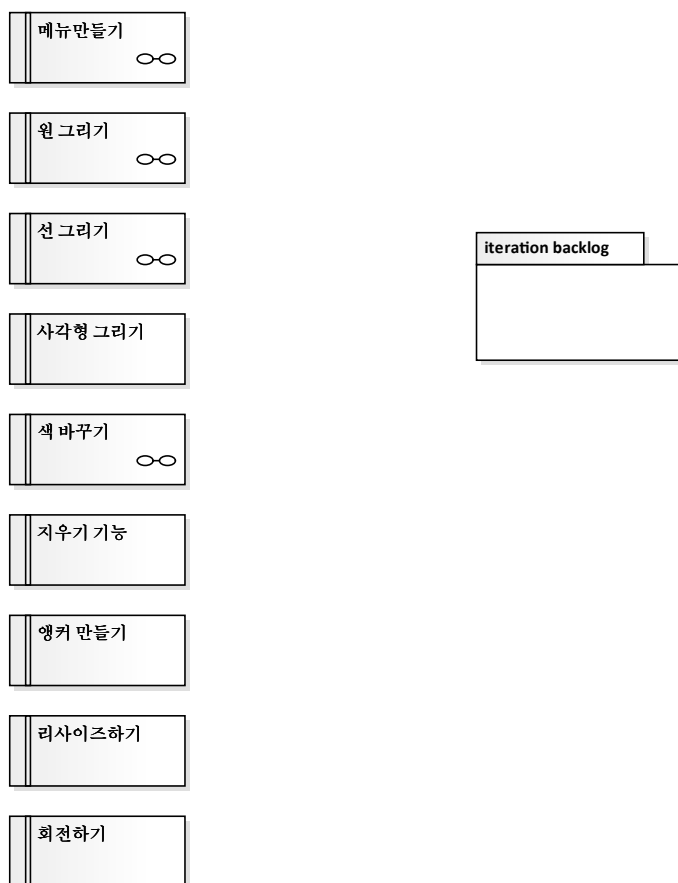


Figure 2: Backlog

## iteration backlog

Package in package 'Backlog'

iteration backlog

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## iteration backlog

Package in package 'Backlog'

iteration backlog

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## iteration backlog diagram

Class diagram in package 'iteration backlog'

iteration backlog

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

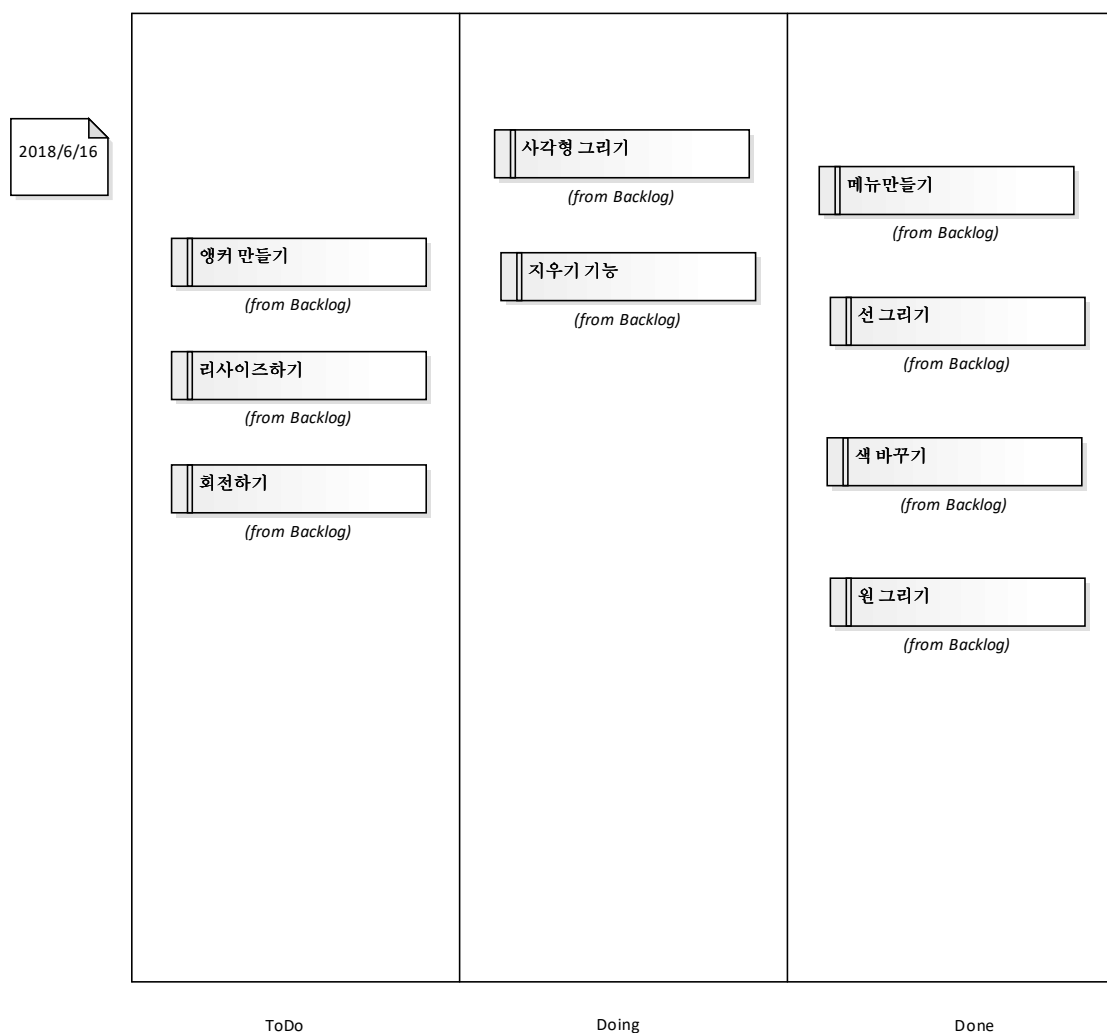


Figure 3: iteration backlog

## 사각형 그리기

Requirement «Functional» in package 'Backlog'

사각형 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 색 바꾸기

*Requirement «Functional» in package 'Backlog'*

색 바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 리사이즈하기

*Requirement «Functional» in package 'Backlog'*

리사이즈하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 메뉴만들기

*Requirement «Functional» in package 'Backlog'*

메뉴만들기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 선 그리기

*Requirement «Functional» in package 'Backlog'*

선 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 앵커 만들기

*Requirement «Functional» in package 'Backlog'*

앵커 만들기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 원 그리기

*Requirement «Functional» in package 'Backlog'*

원 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 지우기 기능

*Requirement «Functional» in package 'Backlog'*

지우기 기능

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20

## 회전하기

*Requirement «Functional» in package 'Backlog'*

회전하기

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20

## Boundary

*Boundary in package 'iteration backlog'*

Boundary

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20  
Extends

## Note

*Note in package 'iteration backlog'*

2018/6/16

Note

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20  
Extends

## Text

*Text in package 'iteration backlog'*

ToDo

Text

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20  
Extends

## Text

*Text in package 'iteration backlog'*

Doing

Text

Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20  
Extends

## Text

*Text in package 'iteration backlog'*

Done

Text

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

## 리사이즈하기

*Requirement «Functional» in package 'Backlog'*

리사이즈하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 메뉴만들기

*Requirement «Functional» in package 'Backlog'*

메뉴만들기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 사각형 그리기

*Requirement «Functional» in package 'Backlog'*

사각형 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 색 바꾸기

*Requirement «Functional» in package 'Backlog'*

색 바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 선 그리기

*Requirement «Functional» in package 'Backlog'*

선 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 앵커 만들기

*Requirement «Functional» in package 'Backlog'*

앵커 만들기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 원 그리기

*Requirement «Functional» in package 'Backlog'*

원 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 지우기 기능

*Requirement «Functional» in package 'Backlog'*

지우기 기능

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 회전하기

*Requirement «Functional» in package 'Backlog'*

회전하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Iteration-1

Package in package 'Project'

Iteration-1

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Iteration-1 diagram

Class diagram in package 'Iteration-1'

Iteration-1

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

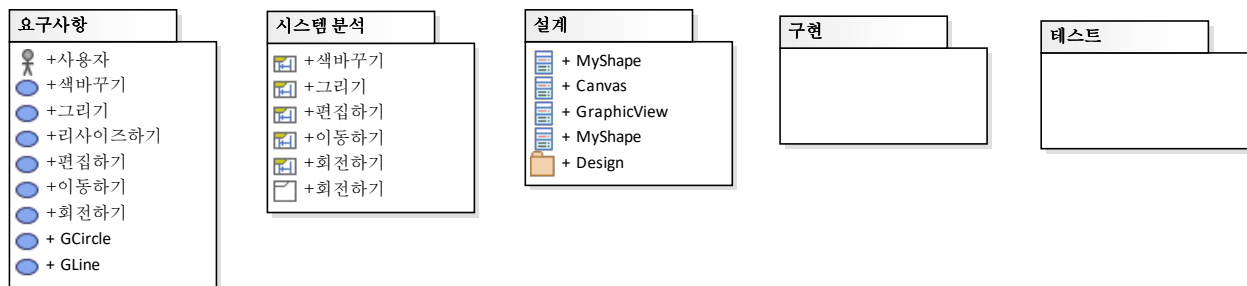


Figure 4: Iteration-1

## Note

Note in package 'Iteration-1'

1&#52264; iteration

Note

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

## 구현

Package in package 'Iteration-1'

구현

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20



## 설계

Package in package 'Iteration-1'

&#53364;&#47000;&#49828; &#45796;&#51060;&#50612;&#44536;&#47016;&#51012;  
&#51060;&#50857;&#54620; &#49444;&#44228;&#51077;&#45768;&#45796;

설계

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 시스템 분석

Package in package 'Iteration-1'

&#49884;&#53248;&#49828; &#45796;&#51060;&#50500;&#44536;&#47016;&#51012; &#53685;&#54620;  
&#49884;&#49828;&#53596; &#48516;&#49437;

시스템 분석

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 요구사항

Package in package 'Iteration-1'

&#50976;&#49828;&#52992;&#51060;&#49828;&#47484; &#53685;&#54620;  
&#50836;&#44396;&#49324;&#54637; &#51221;&#47532;

요구사항

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 테스트

Package in package 'Iteration-1'

테스트

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 구현

Package in package 'Iteration-1'

구현

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 구현 diagram

Class diagram in package '구현'

구현

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

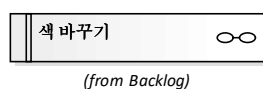
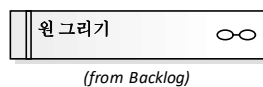
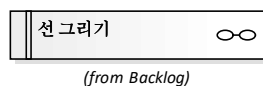
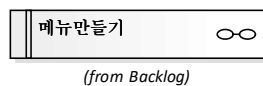


Figure 5: 구현

## 색 바꾸기

Requirement «Functional» in package 'Backlog'

색 바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 메뉴만들기

Requirement «Functional» in package 'Backlog'

메뉴만들기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 선 그리기

Requirement «Functional» in package 'Backlog'

선 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 원 그리기

Requirement «Functional» in package 'Backlog'

원 그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20



## 설계

Package in package 'Iteration-1'

53364;47000;49828; 45796;51060;50612;44536;47016;51012;  
51060;50857;54620; 49444;44228;51077;45768;45796;

설계

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 설계 diagram

Class diagram in package '설계'

설계

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

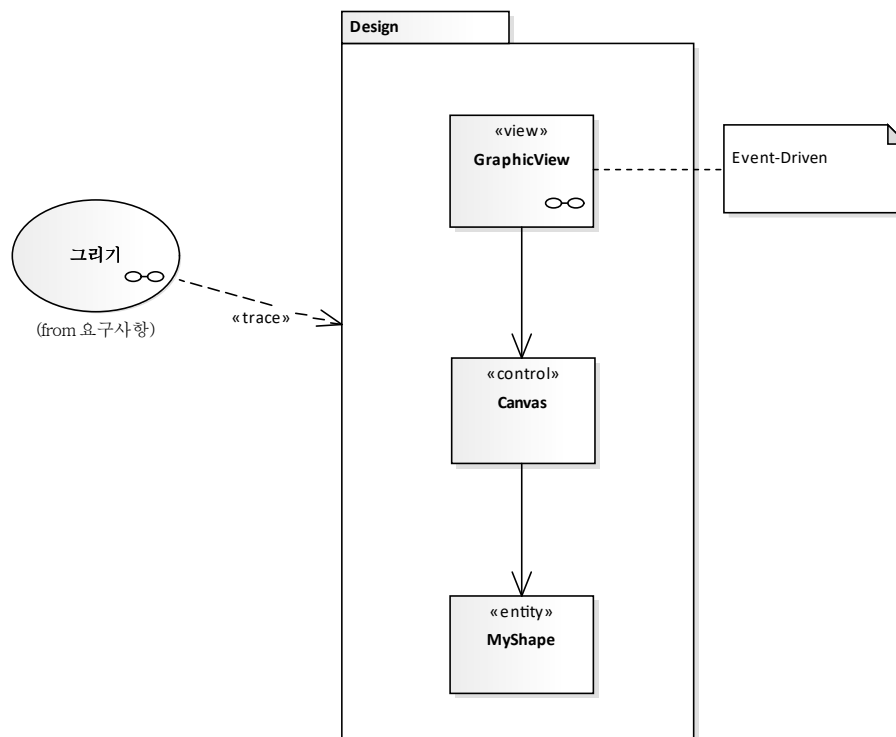


Figure 6: 설계

## 그리기

UseCase in package '요구사항'


44592;48376; 55120;47492; <br/>1. 49324;50857;51088;44032; GraphicsEditor  
50612;54540;51012; 49892;54665;54616;47732;49436; 51060;  
50976;49828;52992;51060;49828;45716; 49884;51089;54620;45796; <br/><br/>2.  
53552;52824;47484; 53685;54644;49436; 44536;47548;54032;50640;  
46020;54805;51012; 44536;47536;45796; <br/>3. 51060;50808;51032; 49324;54637;51008; 45824;50504;55120;47492; A1,  
A2;47484; 46384;47480;45796; <br/>

그리기


Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 그리기


 그리기 : Interaction

## CONNECTORS

 **Include** «include» Source -> Destination


From: 그리기 : UseCase, Public

To: GCircle : UseCase, Public

 **Include** «include» Source -> Destination

From: 그리기 : UseCase, Public

To: GLine : UseCase, Public

 **Trace** «trace» Source -> Destination

From: 그리기 : UseCase, Public

To: Design : Package, Public

## ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 그리기

## 그리기

Interaction owned by '그리기', in package '요구사항'


그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20


## ELEMENTS OWNED BY 그리기

 사용자 : Actor

 shapeSelection : InteractionFragment

 Canvas : Sequence «control»

 MyShape : Sequence «entity»

 TouchScreen (View) : Sequence «boundary»

## 사용자

Actor owned by '그리기', in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
Name: draw ↳ Sequence from 사용자 to «boundary» TouchScreen (View)
Name: selectMenu ↳ Sequence from 사용자 to «boundary» TouchScreen (View)
Name: chooseShape ↳ Sequence from 사용자 to «boundary» TouchScreen (View)

## shapeSelection

InteractionFragment owned by '그리기', in package '요구사항'

shapeSelection

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Canvas

Sequence «control» owned by '그리기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
Name: save ↳ Sequence from «control» Canvas to «entity» MyShape
Name: show ↳ Sequence from «control» Canvas to «boundary» TouchScreen (View)
INCOMING BEHAVIORAL RELATIONSHIPS
Name: paint ↳ Sequence from «boundary» TouchScreen (View) to «control» Canvas

## MyShape

Sequence «entity» owned by '그리기', in package '요구사항'

MyShape  
Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: save

→ Sequence from «control» Canvas to «entity» MyShape

### TouchScreen (View)

Sequence «boundary» owned by '그리기', in package '요구사항'

TouchScreen (View)  
Version 1.0 Phase 1.0 Proposed  
JunHyun created on 2018-06-20. Last modified 2018-06-20

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: paint

→ Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: display

→ Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: displayMenu

→ Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: draw

→ Sequence from 사용자 to «boundary» TouchScreen (View)

Name: selectMenu

→ Sequence from 사용자 to «boundary» TouchScreen (View)

Name: show

→ Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: display

→ Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: displayMenu

→ Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: chooseShape

→ Sequence from 사용자 to «boundary» TouchScreen (View)

**Note***Note in package '설계'*

Event-Driven

Note

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends


**Design***Package in package '설계'*

Design

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**CONNECTORS**

 **Trace** «trace» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: Design : Package, Public

**Design***Package in package '설계'*

Design

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**LINKS TO OTHER PACKAGES**

 Trace from '그리기' UseCase to 'Design' Package

Direction: Source -> Destination

**Design diagram***Class diagram in package 'Design'*

Design

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20



Figure 7: Design



## Canvas

Entity «control» in package '설계'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Entity) Canvas «control»	Target: Public (Entity) MyShape «entity»
 Association (direction: Source -> Destination)	
Source: Public (View) GraphicView «view»	Target: Public (Entity) Canvas «control»



## GraphicView

View «view» in package '설계'

GraphicView

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

ELEMENTS OWNED BY GraphicView	
 GraphicsEditor : Screen «view»	
ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (View) GraphicView «view»	Target: Public (Entity) Canvas «control»

## TouchScreen diagram

User Interface diagram in package '설계'

TouchScreen

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

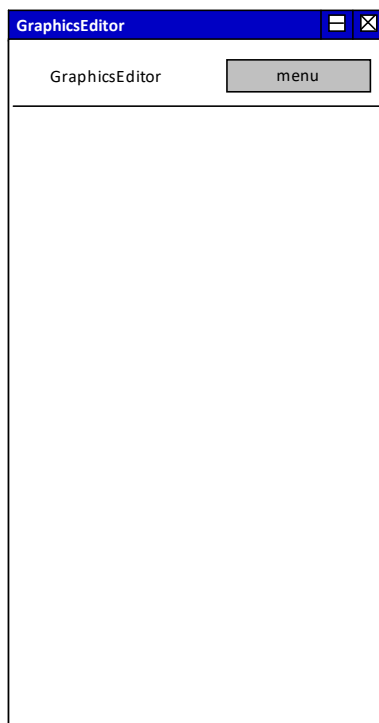


Figure 8: TouchScreen

**GraphicsEditor***Screen owned by 'GraphicView', in package '설계'*

GraphicsEditor  
 Version 1.0 Phase 1.0 Proposed  
 JunHyun created on 2018-06-20. Last modified 2018-06-20  
 Extends

**GUIElement***GUIElement «hline» owned by 'GraphicsEditor', in package '설계'*

GUIElement  
 Version 1.0 Phase 1.0 Proposed  
 JunHyun created on 2018-06-20. Last modified 2018-06-20  
 Extends

**GraphicsEditor***GUIElement «label» owned by 'GraphicsEditor', in package '설계'*

GraphicsEditor  
 Version 1.0 Phase 1.0 Proposed  
 JunHyun created on 2018-06-20. Last modified 2018-06-20  
 Extends

**menu**

GUIElement «button» owned by 'GraphicsEditor', in package '설계'

menu

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

**MyShape**

Entity «entity» in package '설계'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**ASSOCIATIONS**

Association (direction: Source -> Destination)

Source: Public (Entity) Canvas «control»

Target: Public (Entity) MyShape «entity»

**MyShape**

Class «entity» in package '설계'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 시스템 분석

Package in package 'Iteration-1'

&#49884;&#53248;&#49828; &#45796;&#51060;&#50500;&#44536;&#47016;&#51012; &#53685;&#54620;  
&#49884;&#49828;&#53596; &#48516;&#49437;

시스템 분석

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 시스템 분석 diagram

Class diagram in package '시스템 분석'

시스템 분석

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20



Figure 9: 시스템 분석

## 그리기

InteractionOccurrence in package '시스템 분석'

그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 색바꾸기

*InteractionOccurrence in package '시스템 분석'*

색바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 이동하기

*InteractionOccurrence in package '시스템 분석'*

이동하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 편집하기

*InteractionOccurrence in package '시스템 분석'*

편집하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 회전하기

*Interaction in package '시스템 분석'*

회전하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

## 회전하기

*InteractionOccurrence in package '시스템 분석'*

회전하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 요구사항

Package in package 'Iteration-1'

&#50976;&#49828;&#52992;&#51060;&#49828;&#47484; &#53685;&#54620;  
&#50836;&#44396;&#49324;&#54637; &#51221;&#47532;

요구사항

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 요구사항 diagram

Use Case diagram in package '요구사항'

요구사항

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

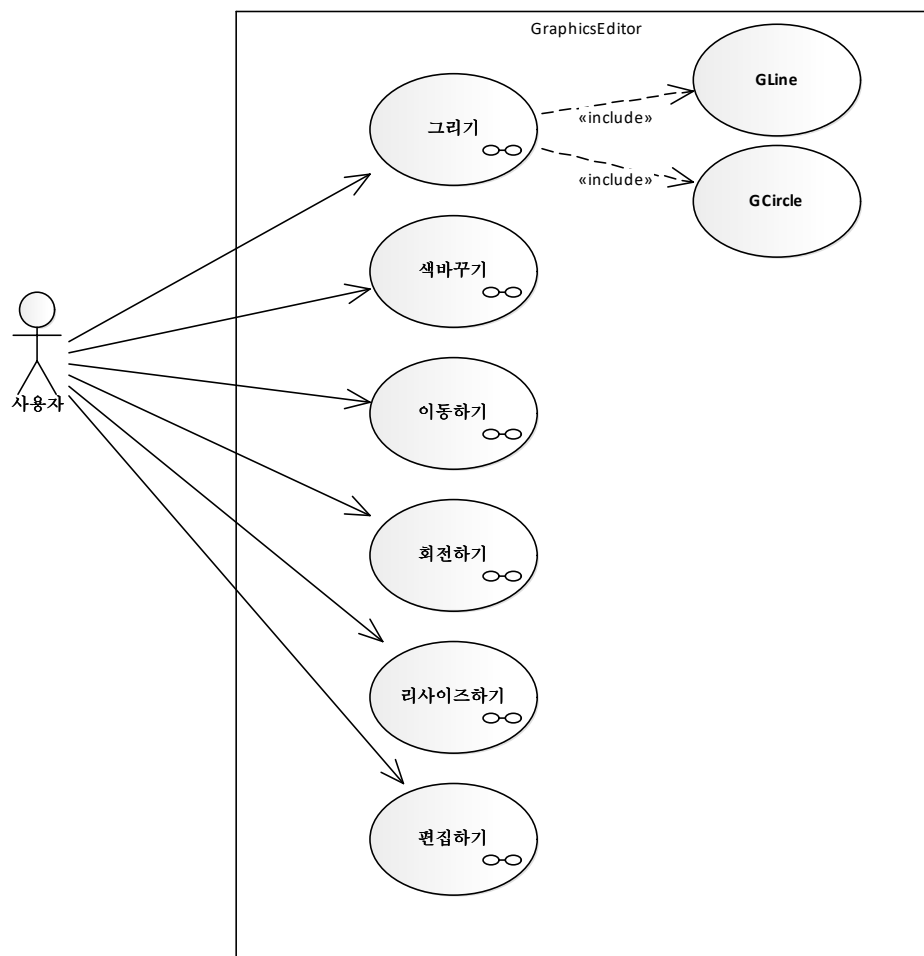


Figure 10: 요구사항

## GraphicsEditor

Boundary in package '요구사항'

GraphicsEditor

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends







## 사용자

Actor in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

ASSOCIATIONS	
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 그리기
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 리사이즈하기
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 회전하기
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 색바꾸기
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 편집하기
 Association (direction: Source -> Destination)	
Source: Public (Actor) 사용자	Target: Public (UseCase) 이동하기

## GCircle

UseCase in package '요구사항'

&#45824;&#50504;&#55120;&#47492; A2<br/>1. &#47700;&#45684;&#47484;  
 &#49440;&#53469;&#54620;&#45796;<br/>2. Circle&#51012; &#49440;&#53469;&#54620;&#45796;<br/>3.  
 &#44536;&#47536;&#45796;


GCircle

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

CONNECTORS
------------

## CONNECTORS

 **Include** «include» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: GCircle : UseCase, Public

## GLine

UseCase in package '요구사항'


1. GraphicsEditor  
 2. Line  
 3.

GLine

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## CONNECTORS

 **Include** «include» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: GLine : UseCase, Public

## 그리기

UseCase in package '요구사항'


1. GraphicsEditor  
 2.  
 3. A1,  
 A2

그리기


Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 그리기


 그리기 : Interaction


## CONNECTORS

 **Include** «include» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: GCircle : UseCase, Public



**CONNECTORS**

 **Include** «include» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: GLine : UseCase, Public

 **Trace** «trace» Source -> Destination  
 From: 그리기 : UseCase, Public  
 To: Design : Package, Public

**ASSOCIATIONS**

 Association (direction: Source -> Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 그리기

**그리기**

Interaction owned by '그리기', in package '요구사항'


그리기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20


**ELEMENTS OWNED BY 그리기**

 사용자 : Actor

 shapeSelection : InteractionFragment

 Canvas : Sequence «control»

 MyShape : Sequence «entity»

 TouchScreen (View) : Sequence «boundary»

**그리기 *diagram***

Interaction diagram in package '요구사항'

그리기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

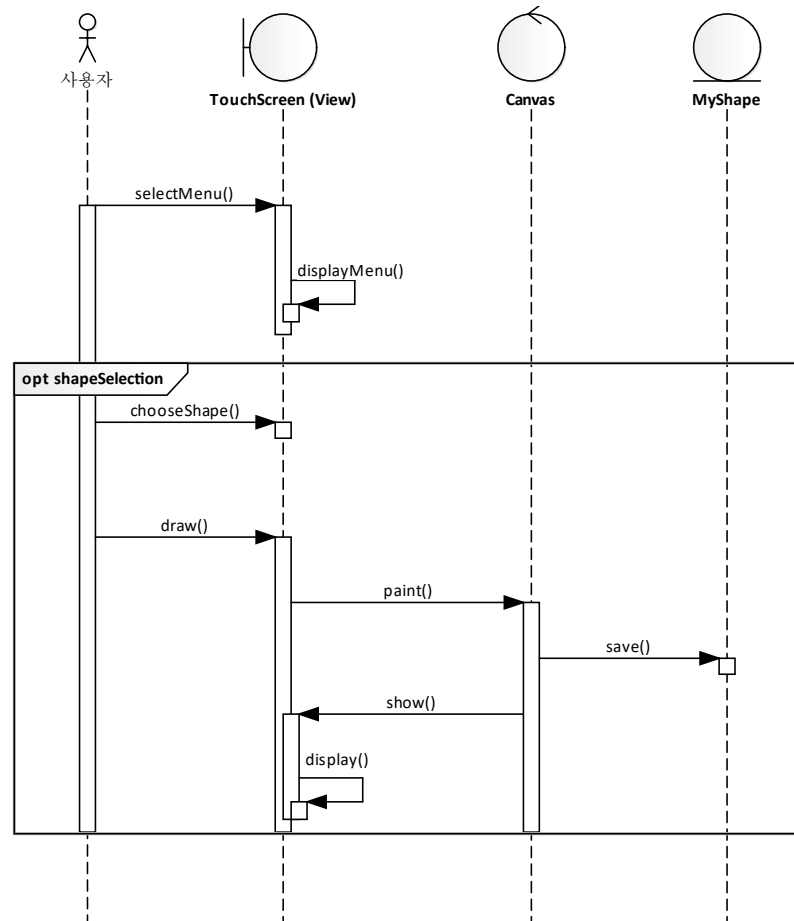


Figure 11: 그리기

## INTERACTION MESSAGES

✉ 1.0 'selectMenu' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.1 'displayMenu' from 'TouchScreen (View)' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.2 'chooseShape' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.3 'draw' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.4 'paint'** from 'TouchScreen (View)' sent to 'Canvas'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.5 'save'** from 'Canvas' sent to 'MyShape'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.6 'show'** from 'Canvas' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.7 'display'** from 'TouchScreen (View)' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

## 사용자

*Actor owned by '그리기', in package '요구사항'*

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: draw

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: selectMenu

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: chooseShape

Sequence from 사용자 to «boundary» TouchScreen (View)

## shapeSelection

*InteractionFragment owned by '그리기', in package '요구사항'*

shapeSelection

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## Canvas

Sequence «control» owned by '그리기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: save

Sequence from «control» Canvas to «entity» MyShape

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: paint

Sequence from «boundary» TouchScreen (View) to «control» Canvas

### MyShape

Sequence «entity» owned by '그리기', in package '요구사항'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

#### INCOMING BEHAVIORAL RELATIONSHIPS

Name: save

Sequence from «control» Canvas to «entity» MyShape

### TouchScreen (View)

Sequence «boundary» owned by '그리기', in package '요구사항'

TouchScreen (View)

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

#### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: paint

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: displayMenu

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

## OUTGOING BEHAVIORAL RELATIONSHIPS

## INCOMING BEHAVIORAL RELATIONSHIPS

Name: draw

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: selectMenu

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: displayMenu

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: chooseShape

Sequence from 사용자 to «boundary» TouchScreen (View)

## 리사이즈하기

UseCase in package '요구사항'

1. 사용자 : 리사이즈하기  
 2. 사용자 : 리사이즈하기  
 2. 사용자 : 리사이즈하기

리사이즈하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 리사이즈하기

리사이즈하기 : Interaction

## ASSOCIATIONS

Association (direction: Source -&gt; Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 리사이즈하기





## 리사이즈하기

Interaction owned by '리사이즈하기', in package '요구사항'

리사이즈하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

ELEMENTS OWNED BY 리사이즈하기
 사용자 : Actor
 Canvas : Sequence «control»
 MyShape : Sequence «entity»
 TouchScreen (View) : Sequence «boundary»

## 리사이즈하기 *diagram*

Interaction diagram in package '요구사항'

리사이즈하기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

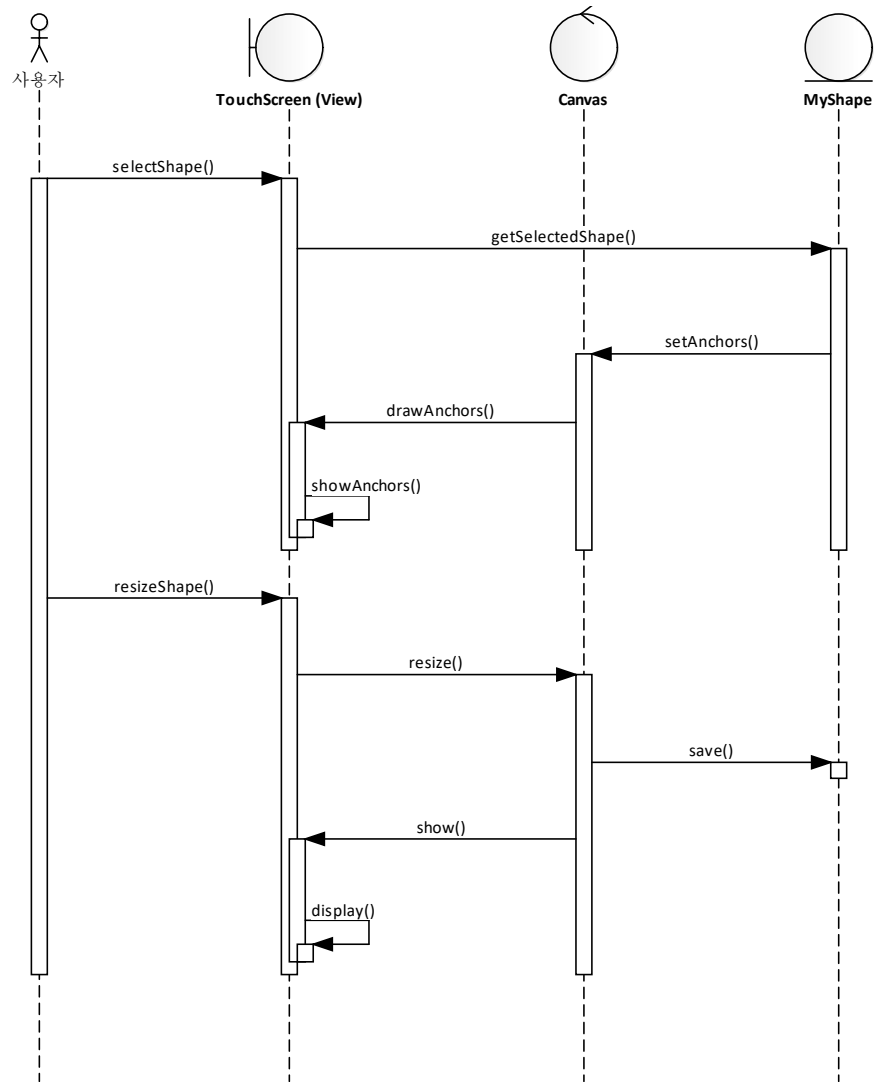


Figure 12: 리사이즈하기

## INTERACTION MESSAGES

✉ 1.0 'selectShape' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.1 'getSelectedShape' from 'TouchScreen (View)' sent to 'MyShape'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.2 'setAnchors' from 'MyShape' sent to 'Canvas'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

<p>✉ <b>1.3 'drawAnchors'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.4 'showAnchors'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.5 'resizeShape'</b> from '사용자' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.6 'resize'</b> from 'TouchScreen (View)' sent to 'Canvas'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.7 'save'</b> from 'Canvas' sent to 'MyShape'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.8 'show'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.9 'display'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>

## 사용자

Actor owned by '리사이즈하기', in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
<p>Name: selectShape</p> <p>Sequence from 사용자 to «boundary» TouchScreen (View)</p>
<p>Name: resizeShape</p> <p>Sequence from 사용자 to «boundary» TouchScreen (View)</p>








## Canvas

Sequence «control» owned by '리사이즈하기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
Name: show  Sequence from «control» Canvas to «boundary» TouchScreen (View)
Name: drawAnchors  Sequence from «control» Canvas to «boundary» TouchScreen (View)
Name: save  Sequence from «control» Canvas to «entity» MyShape
INCOMING BEHAVIORAL RELATIONSHIPS
Name: resize  Sequence from «boundary» TouchScreen (View) to «control» Canvas
Name: setAnchors  Sequence from «entity» MyShape to «control» Canvas




## MyShape

Sequence «entity» owned by '리사이즈하기', in package '요구사항'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
Name: setAnchors  Sequence from «entity» MyShape to «control» Canvas
INCOMING BEHAVIORAL RELATIONSHIPS
Name: getSelectedShape  Sequence from «boundary» TouchScreen (View) to «entity» MyShape
Name: save  Sequence from «control» Canvas to «entity» MyShape

## TouchScreen (View)

Sequence «boundary» owned by '리사이즈하기', in package '요구사항'

TouchScreen (View)

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: showAnchors

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: resize

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: getSelectedShape

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

### INCOMING BEHAVIORAL RELATIONSHIPS

Name: selectShape

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: showAnchors

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: resizeShape

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: drawAnchors

Sequence from «control» Canvas to «boundary» TouchScreen (View)

## 색바꾸기

UseCase in package '요구사항'


&#44592;&#48376; &#55120;&#47492; <br/>1. &#49324;&#50857;&#51088;&#44032; &#47700;&#45684;&#47484;  
 &#49440;&#53469;&#54616;&#47732;&#49436; &#51060;  
 &#50976;&#49828;&#52992;&#51060;&#49828;&#45716; &#49884;&#51089;&#54620;&#45796;.<br/><br/>2.  
 &#47700;&#45684;&#50640;&#49436; &#50896;&#54616;&#45716; &#49353;&#51012;  
 &#49440;&#53469;&#54620;&#45796;<br/>&#32;&#32;&#32;&#32;&#32;<br/>

색바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 색바꾸기

 색바꾸기 : Interaction

## ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 색바꾸기

## 색바꾸기

Interaction owned by '색바꾸기', in package '요구사항'


색바꾸기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20


## ELEMENTS OWNED BY 색바꾸기

 사용자 : Actor

 ColorSelection : InteractionFragment

 Canvas : Sequence «control»

 MyShape : Sequence «entity»

 TouchScreen (View) : Sequence «boundary»
색바꾸기 *diagram*

Interaction diagram in package '요구사항'

색바꾸기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

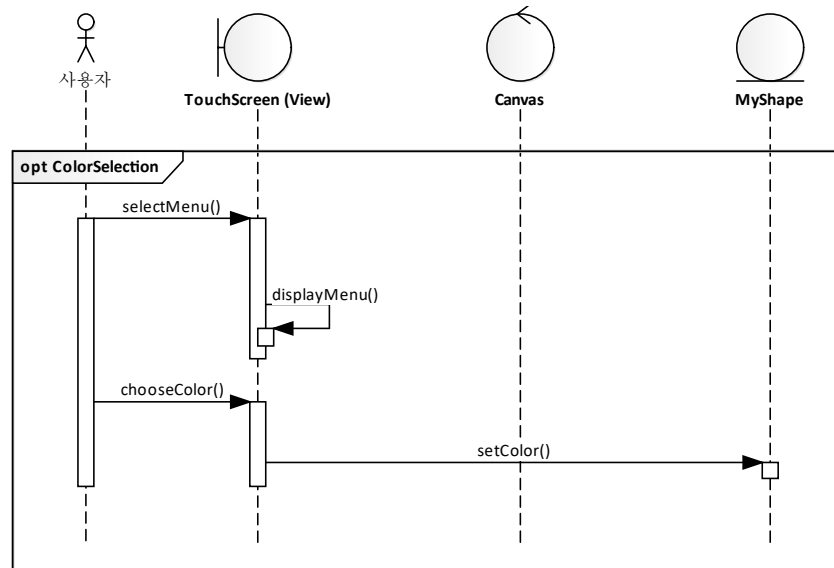


Figure 13: 색바꾸기

## INTERACTION MESSAGES

✉ **1.0 'selectMenu'** from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.1 'displayMenu'** from 'TouchScreen (View)' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.2 'chooseColor'** from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.3 'setColor'** from 'TouchScreen (View)' sent to 'MyShape'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

## 사용자

Actor owned by '색바꾸기', in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## OUTGOING BEHAVIORAL RELATIONSHIPS

Name: selectMenu

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: chooseColor

Sequence from 사용자 to «boundary» TouchScreen (View)

**ColorSelection**

InteractionFragment owned by '색바꾸기', in package '요구사항'

ColorSelection

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**Canvas**

Sequence «control» owned by '색바꾸기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**MyShape**

Sequence «entity» owned by '색바꾸기', in package '요구사항'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**INCOMING BEHAVIORAL RELATIONSHIPS**

Name: setColor

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

**TouchScreen (View)**

Sequence «boundary» owned by '색바꾸기', in package '요구사항'

TouchScreen (View)

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: setColor

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

Name: displayMenu

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

## OUTGOING BEHAVIORAL RELATIONSHIPS

## INCOMING BEHAVIORAL RELATIONSHIPS

Name: displayMenu

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: selectMenu

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: chooseColor

Sequence from 사용자 to «boundary» TouchScreen (View)

## 이동하기

UseCase in package '요구사항'

1. 사용자 : 터치스크린 (View)을 터치하여 메뉴를 표시한다.  
 2. 사용자 : 터치스크린 (View)을 터치하여 메뉴를 선택한다.  
 3. 사용자 : 터치스크린 (View)을 터치하여 색을 선택한다.

이동하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 이동하기

이동하기 : Interaction

## ASSOCIATIONS

Association (direction: Source -&gt; Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 이동하기

## 이동하기

Interaction owned by '이동하기', in package '요구사항'

이동하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 이동하기

사용자 : Actor

## ELEMENTS OWNED BY 이동하기

Canvas : Sequence «control»

MyShape : Sequence «entity»

TouchScreen (View) : Sequence «boundary»

이동하기 *diagram*

Interaction diagram in package '요구사항'

이동하기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

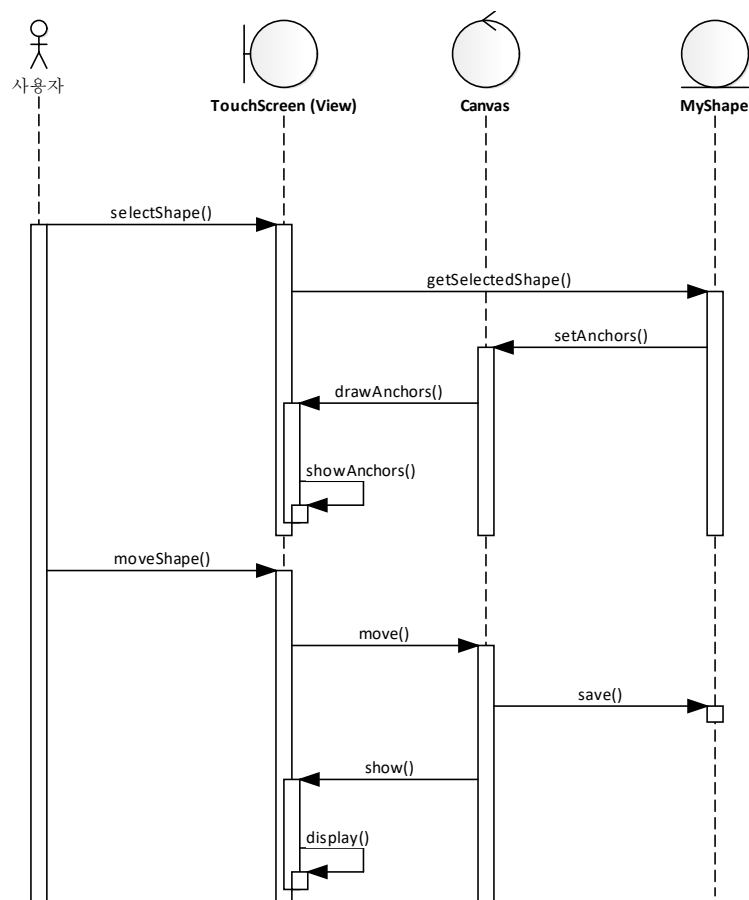


Figure 14: 이동하기

## INTERACTION MESSAGES

1.0 'selectShape' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

<p>✉ <b>1.1 'getSelectedShape'</b> from 'TouchScreen (View)' sent to 'MyShape'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.2 'setAnchors'</b> from 'MyShape' sent to 'Canvas'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.3 'drawAnchors'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.4 'showAnchors'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.5 'moveShape'</b> from '사용자' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.6 'move'</b> from 'TouchScreen (View)' sent to 'Canvas'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.7 'save'</b> from 'Canvas' sent to 'MyShape'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.8 'show'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.9 'display'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>

## 사용자

*Actor owned by '이동하기', in package '요구사항'*



JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: selectShape

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: moveShape

Sequence from 사용자 to «boundary» TouchScreen (View)

**Canvas***Sequence «control» owned by '이동하기', in package '요구사항'*

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: drawAnchors

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: save

Sequence from «control» Canvas to «entity» MyShape

**INCOMING BEHAVIORAL RELATIONSHIPS**

Name: move

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: setAnchors

Sequence from «entity» MyShape to «control» Canvas

**MyShape***Sequence «entity» owned by '이동하기', in package '요구사항'*

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: setAnchors

Sequence from «entity» MyShape to «control» Canvas

**OUTGOING BEHAVIORAL RELATIONSHIPS****INCOMING BEHAVIORAL RELATIONSHIPS**Name: `getSelectedShape`

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

Name: `save`

Sequence from «control» Canvas to «entity» MyShape

***TouchScreen (View)****Sequence «boundary» owned by '이동하기', in package '요구사항'*

TouchScreen (View)

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**Name: `move`

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: `showAnchors`

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: `getSelectedShape`

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

Name: `display`

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

**INCOMING BEHAVIORAL RELATIONSHIPS**Name: `show`

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: `selectShape`

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: `showAnchors`

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: `drawAnchors`

Sequence from «control» Canvas to «boundary» TouchScreen (View)

## INCOMING BEHAVIORAL RELATIONSHIPS

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: moveShape

Sequence from 사용자 to «boundary» TouchScreen (View)

## 편집하기

UseCase in package '요구사항'


&#44592;&#48376; &#55120;&#47492; <br/><br/>1. &#49324;&#50857;&#51088;&#44032;  
 &#47700;&#45684;&#47484; &#49440;&#53469;&#54616;&#47732;&#49436; &#51060;  
 &#50976;&#49828;&#52992;&#51060;&#49828;&#45716; &#49884;&#51089;&#54620;&#45796;.<br/><br/>2.  
 &#47700;&#45684;&#50640;&#49436; &#50896;&#54616;&#45716; &#44592;&#45733;&#51012;  
 &#49440;&#53469;&#54620;&#45796;<br/>&#32;&#32;&#32;&#32;<br/><br/>

편집하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 편집하기

 편집하기 : Interaction

## ASSOCIATIONS

 Association (direction: Source -> Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 편집하기

## 편집하기

Interaction owned by '편집하기', in package '요구사항'

편집하기

Version 1.0 Phase 1.0 Proposed


JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 편집하기

 사용자 : Actor

 Canvas : Sequence «control»

 MyShape : Sequence «entity»

 TouchScreen : Sequence «boundary»

## 편집하기 *diagram*

Interaction diagram in package '요구사항'

편집하기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

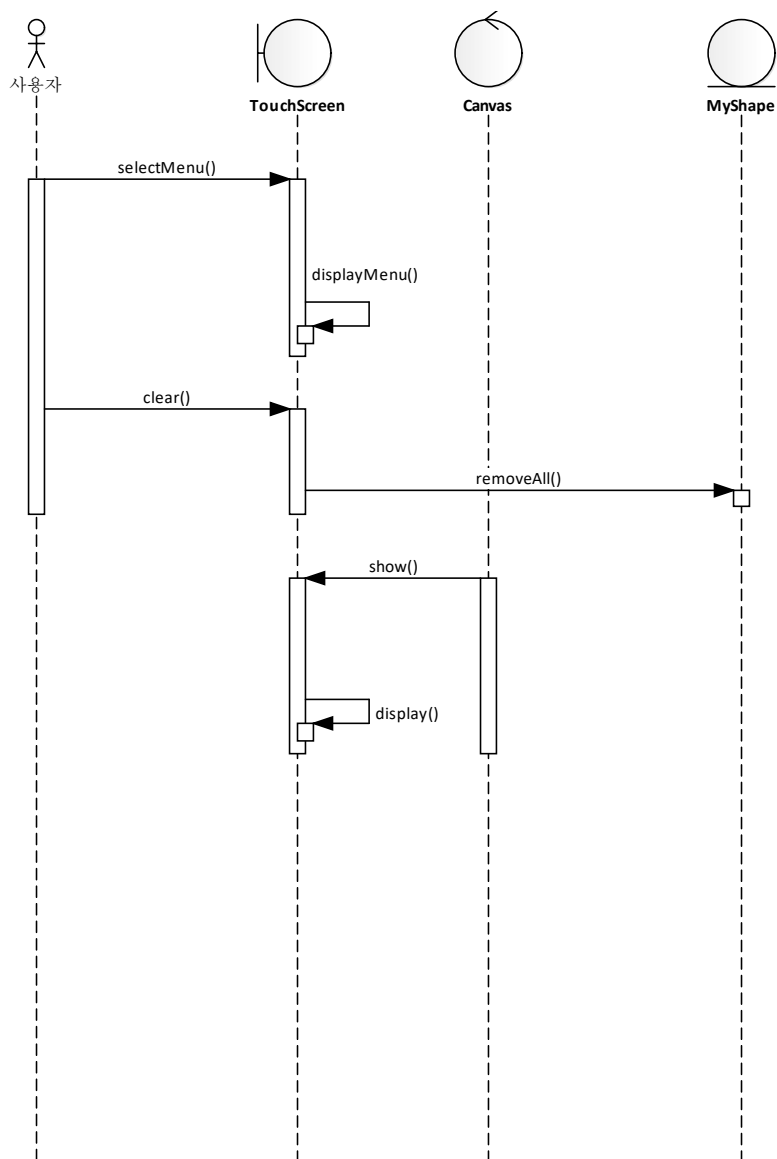


Figure 15: 편집하기

### INTERACTION MESSAGES

✉ 1.0 'selectMenu' from '사용자' sent to 'TouchScreen'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.1 'displayMenu'** from 'TouchScreen' sent to 'TouchScreen'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.2 'clear'** from '사용자' sent to 'TouchScreen'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.3 'removeAll'** from 'TouchScreen' sent to 'MyShape'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.4 'show'** from 'Canvas' sent to 'TouchScreen'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ **1.5 'display'** from 'TouchScreen' sent to 'TouchScreen'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

## 사용자

Actor owned by '편집하기', in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: selectMenu

Sequence from 사용자 to «boundary» TouchScreen

Name: clear

Sequence from 사용자 to «boundary» TouchScreen

## Canvas

Sequence «control» owned by '편집하기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen

**MyShape***Sequence «entity» owned by '편집하기', in package '요구사항'*

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**INCOMING BEHAVIORAL RELATIONSHIPS**

Name: removeAll

Sequence from «boundary» TouchScreen to «entity» MyShape

**TouchScreen***Sequence «boundary» owned by '편집하기', in package '요구사항'*

TouchScreen

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: removeAll

Sequence from «boundary» TouchScreen to «entity» MyShape

Name: displayMenu

Sequence from «boundary» TouchScreen to «boundary» TouchScreen

Name: display

Sequence from «boundary» TouchScreen to «boundary» TouchScreen

**INCOMING BEHAVIORAL RELATIONSHIPS**

Name: displayMenu

Sequence from «boundary» TouchScreen to «boundary» TouchScreen

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen

Name: display

Sequence from «boundary» TouchScreen to «boundary» TouchScreen

## INCOMING BEHAVIORAL RELATIONSHIPS

Name: selectMenu

Sequence from 사용자 to «boundary» TouchScreen

Name: clear

Sequence from 사용자 to «boundary» TouchScreen

## 회전하기

UseCase in package '요구사항'

1. 사용자 : 터치스크린을 클릭하여 메뉴를 선택한다.  
 2. 사용자 : 터치스크린을 클릭하여 화면을 클리어한다.  
 3. 사용자 : 터치스크린을 클릭하여 화면을 회전시킨다.

회전하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 회전하기

회전하기 : Interaction

## ASSOCIATIONS

Association (direction: Source -&gt; Destination)

Source: Public (Actor) 사용자

Target: Public (UseCase) 회전하기

## 회전하기

Interaction owned by '회전하기', in package '요구사항'

회전하기

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## ELEMENTS OWNED BY 회전하기

사용자 : Actor

Canvas : Sequence «control»

MyShape : Sequence «entity»

TouchScreen (View) : Sequence «boundary»

회전하기 *diagram*

Interaction diagram in package '요구사항'

회전하기

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

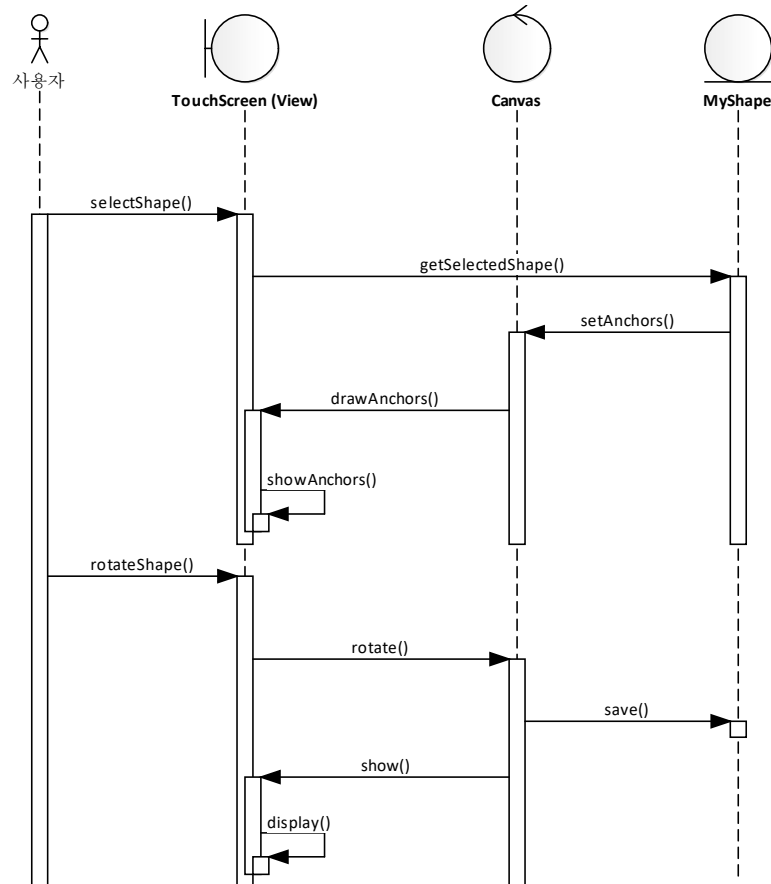


Figure 16: 회전하기

## INTERACTION MESSAGES

✉ 1.0 'selectShape' from '사용자' sent to 'TouchScreen (View)'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.1 'getSelectedShape' from 'TouchScreen (View)' sent to 'MyShape'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]

✉ 1.2 'setAnchors' from 'MyShape' sent to 'Canvas'.

Synchronous Call. Returns void.

[ Return is False. Iteration is False. New group is False. ]



<p>✉ <b>1.3 'drawAnchors'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.4 'showAnchors'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.5 'rotateShape'</b> from '사용자' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.6 'rotate'</b> from 'TouchScreen (View)' sent to 'Canvas'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.7 'save'</b> from 'Canvas' sent to 'MyShape'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.8 'show'</b> from 'Canvas' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>
<p>✉ <b>1.9 'display'</b> from 'TouchScreen (View)' sent to 'TouchScreen (View)'.</p> <p>Synchronous Call. Returns void.</p> <p>[ Return is False. Iteration is False. New group is False. ]</p>

## 사용자

Actor owned by '회전하기', in package '요구사항'

사용자

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

OUTGOING BEHAVIORAL RELATIONSHIPS
<p>Name: selectShape</p> <p>Sequence from 사용자 to «boundary» TouchScreen (View)</p>
<p>Name: rotateShape</p> <p>Sequence from 사용자 to «boundary» TouchScreen (View)</p>

## Canvas

Sequence «control» owned by '회전하기', in package '요구사항'

Canvas

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: drawAnchors

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: save

Sequence from «control» Canvas to «entity» MyShape

### INCOMING BEHAVIORAL RELATIONSHIPS

Name: rotate

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: setAnchors

Sequence from «entity» MyShape to «control» Canvas

## MyShape

Sequence «entity» owned by '회전하기', in package '요구사항'

MyShape

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

### OUTGOING BEHAVIORAL RELATIONSHIPS

Name: setAnchors

Sequence from «entity» MyShape to «control» Canvas

### INCOMING BEHAVIORAL RELATIONSHIPS

Name: getSelectedShape

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

Name: save

Sequence from «control» Canvas to «entity» MyShape

**TouchScreen (View)**

Sequence «boundary» owned by '회전하기', in package '요구사항'

TouchScreen (View)

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

**OUTGOING BEHAVIORAL RELATIONSHIPS**

Name: rotate

Sequence from «boundary» TouchScreen (View) to «control» Canvas

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: getSelectedShape

Sequence from «boundary» TouchScreen (View) to «entity» MyShape

Name: showAnchors

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

**INCOMING BEHAVIORAL RELATIONSHIPS**

Name: drawAnchors

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: display

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: selectShape

Sequence from 사용자 to «boundary» TouchScreen (View)

Name: show

Sequence from «control» Canvas to «boundary» TouchScreen (View)

Name: showAnchors

Sequence from «boundary» TouchScreen (View) to «boundary» TouchScreen (View)

Name: rotateShape

Sequence from 사용자 to «boundary» TouchScreen (View)

## 테스트

Package in package 'Iteration-1'

테스트

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

## 테스트 diagram

Class diagram in package '테스트'

테스트

Version 1.0

JunHyun created on 2018-06-20. Last modified 2018-06-20

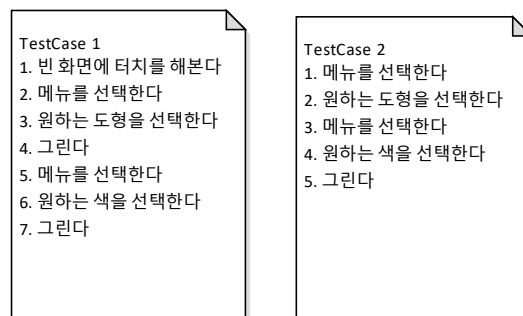


Figure 17: 테스트

## Note

Note in package '테스트'

TestCase 1  
1. 빈 화면에 터치해본다  
2. 메뉴를 선택한다  
3. 원하는 도형을 선택한다  
4. 그린다  
5. 메뉴를 선택한다  
6. 원하는 색을 선택한다  
7. 그린다

Note

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

## Note

Note in package '테스트'

TestCase 2  
1. 메뉴를 선택한다  
2. 원하는 도형을 선택한다  
3. 메뉴를 선택한다  
4. 원하는 색을 선택한다  
5. 그린다

Note

Version 1.0 Phase 1.0 Proposed

JunHyun created on 2018-06-20. Last modified 2018-06-20

Extends

