ANDROID DEVELOPER CHALLENGE

Menu 구현

학습 목표

교육 목표

- Menu
- Options Menu
  - Icon Menu
  - Expanded Menu
- Context Menu

Navigation voice

Traffic view

Street View

Menu (1)

Menu

❖ 기능

◆ Activity에 표시할 메뉴를 나타내는 기능

❖ 종류

◆ Options menus

- Shortcut, item icon을 지원하지 않음

◆ Context menus

- Item check mark 지원하지 않음
- Condensed title 지원
- Expanded menus 지원

◆ Sub menus

- item icon을 지원하지 않음

public interface
Menu

android.view.Menu

▶Known Indirect Subclasses
ContextMenu, SubMenu

Menu (2)

Constants

Constants		
int	CATEGORY_ALTERNATIVE	Category code for the order integer for items/groups that are alternative actions on the data that is currently displayed -- or/add this with your base value.
int	CATEGORY_CONTAINER	Category code for the order integer for items/groups that are part of a container -- or/add this with your base value.
int	CATEGORY_SECONDARY	Category code for the order integer for items/groups that are user-supplied secondary (infrequently used) options -- or/add this with your base value.
int	CATEGORY_SYSTEM	Category code for the order integer for items/groups that are provided by the system -- or/add this with your base value.
int	FIRST	First value for group and item identifier integers.
int	FLAG_ALWAYS_PERFORM_CLOSE	Flag for `performShortcut(int, KeyEvent, int)`: if set, always close the menu after executing the shortcut.
int	FLAG_APPEND_TO_GROUP	Flag for `addIntentOptions(int, int, int, ComponentName, Intent[], Intent, int, MenuItem[])`: if set, do not automatically remove any existing menu items in the same group.
int	FLAG_PERFORM_NO_CLOSE	Flag for `performShortcut(int, KeyEvent, int)`: if set, do not close the menu after executing the shortcut.
int	NONE	Value to use for group and item identifier integers when you don't care about them.

Menu (3)

- Method

public abstract MenuItem **add** (int titleRes)

Add a new item to the menu. This item displays the given title for its label.

Parameters

titleRes Resource identifier of title string.

Returns

The newly added menu item.

Public Methods	
abstract MenuItem	add (int titleRes) Add a new item to the menu.
abstract MenuItem	add (int groupId, int itemId, int order, CharSequence title) Add a new item to the menu.
abstract MenuItem	add (int groupId, int itemId, int order, int titleRes) Variation on `add(int, int, int, CharSequence)` that takes a string resource identifier instead of the string itself.
abstract MenuItem	add (CharSequence title) Add a new item to the menu.
abstract int	addIntentOptions (int groupId, int itemId, int order, ComponentName caller, Intent[] specifics, Intent intent, int flags, MenuItem[] outSpecificItems) Add a group of menu items corresponding to actions that can be performed for a particular Intent.
abstract SubMenu	addSubMenu (int titleRes) Add a new sub-menu to the menu.
abstract SubMenu	addSubMenu (int groupId, int itemId, int order, int titleRes) Variation on `addSubMenu(int, int, int, CharSequence)` that takes a string resource identifier for the title instead of the string itself.
abstract SubMenu	addSubMenu (CharSequence title) Add a new sub-menu to the menu.
abstract SubMenu	addSubMenu (int groupId, int itemId, int order, CharSequence title) Add a new sub-menu to the menu.
abstract void	clear () Remove all existing items from the menu, leaving it empty as if it had just been created.
abstract void	close () Closes the menu, if open.

Menu (4)

abstract MenuItem	findItem (int id) Return the menu item with a particular identifier.
abstract MenuItem	getItem (int index) Gets the menu item at the given index.
abstract boolean	hasVisibleItems () Return whether the menu currently has item items that are visible.
abstract boolean	isShortcutKey (int keyCode, KeyEvent event) Is a keypress one of the defined shortcut keys for this window.
abstract boolean	performIdentifierAction (int id, int flags) Execute the menu item action associated with the given menu identifier.
abstract boolean	performShortcut (int keyCode, KeyEvent event, int flags) Execute the menu item action associated with the given shortcut character.
abstract void	removeGroup (int groupId) Remove all items in the given group.
abstract void	removeItem (int id) Remove the item with the given identifier.
abstract void	setGroupCheckable (int group, boolean checkable, boolean exclusive) Control whether a particular group of items can show a check mark.
abstract void	setGroupEnabled (int group, boolean enabled) Enable or disable all menu items that are in the given group.
abstract void	setGroupVisible (int group, boolean visible) Show or hide all menu items that are in the given group.
abstract void	setQwertyMode (boolean isQwerty) Control whether the menu should be running in qwerty mode (alphabetic shortcuts) or 12-key mode (numeric shortcuts).
abstract int	size () Get the number of items in the menu.

Options Menu (1)

Options Menu

❖ 기능

◆ 현재 실행 중인 Activity를 위한 Menu (Menu button click시 나타남)

❖ onCreateOptionsMenu (Menu menu)

◆ option menu 호출 시 한번 실행

public boolean onCreateOptionsMenu (Menu menu)	
parameter	시스템에 의해 생성된 menu 객체
return	true / false = 화면 출력 / 화면 출력 안됨

❖ onPrepareOptionsMenu (Menu menu)

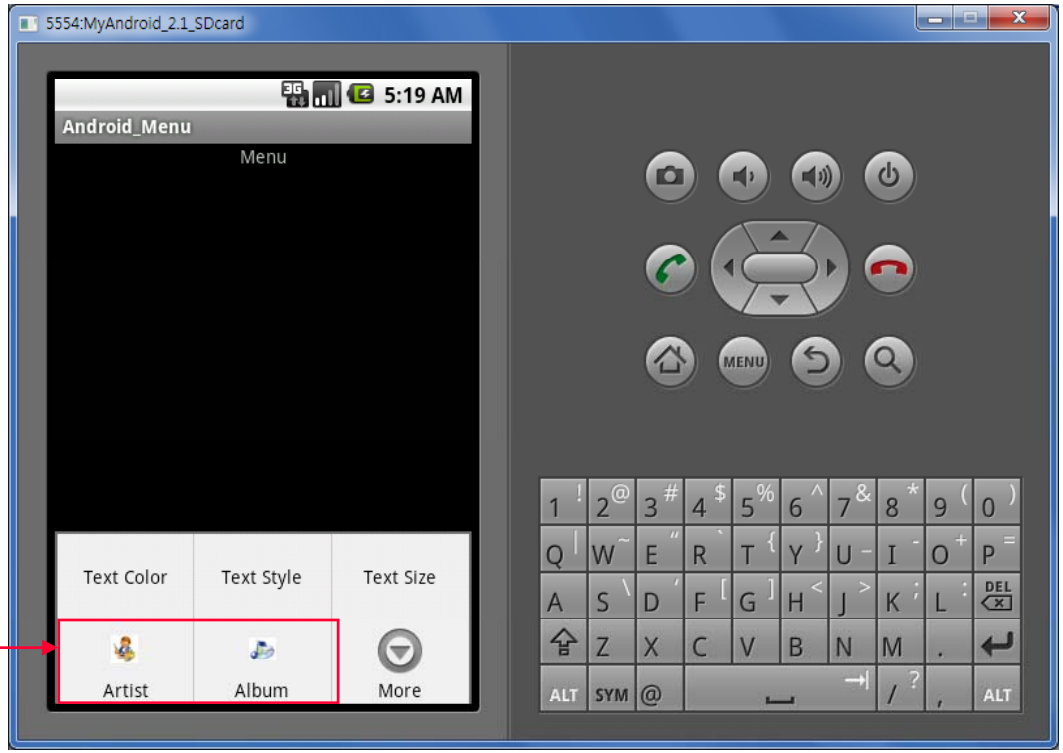
◆ option menu 화면 출력 전에 항상 호출

public boolean onPrepareOptionsMenu (Menu menu)	
parameter	이 메소드를 호출한 Activity의 option menu
return	true / false = 화면 출력 / 화면 출력 안됨

Options Menu (2)

❖ Icon Menu

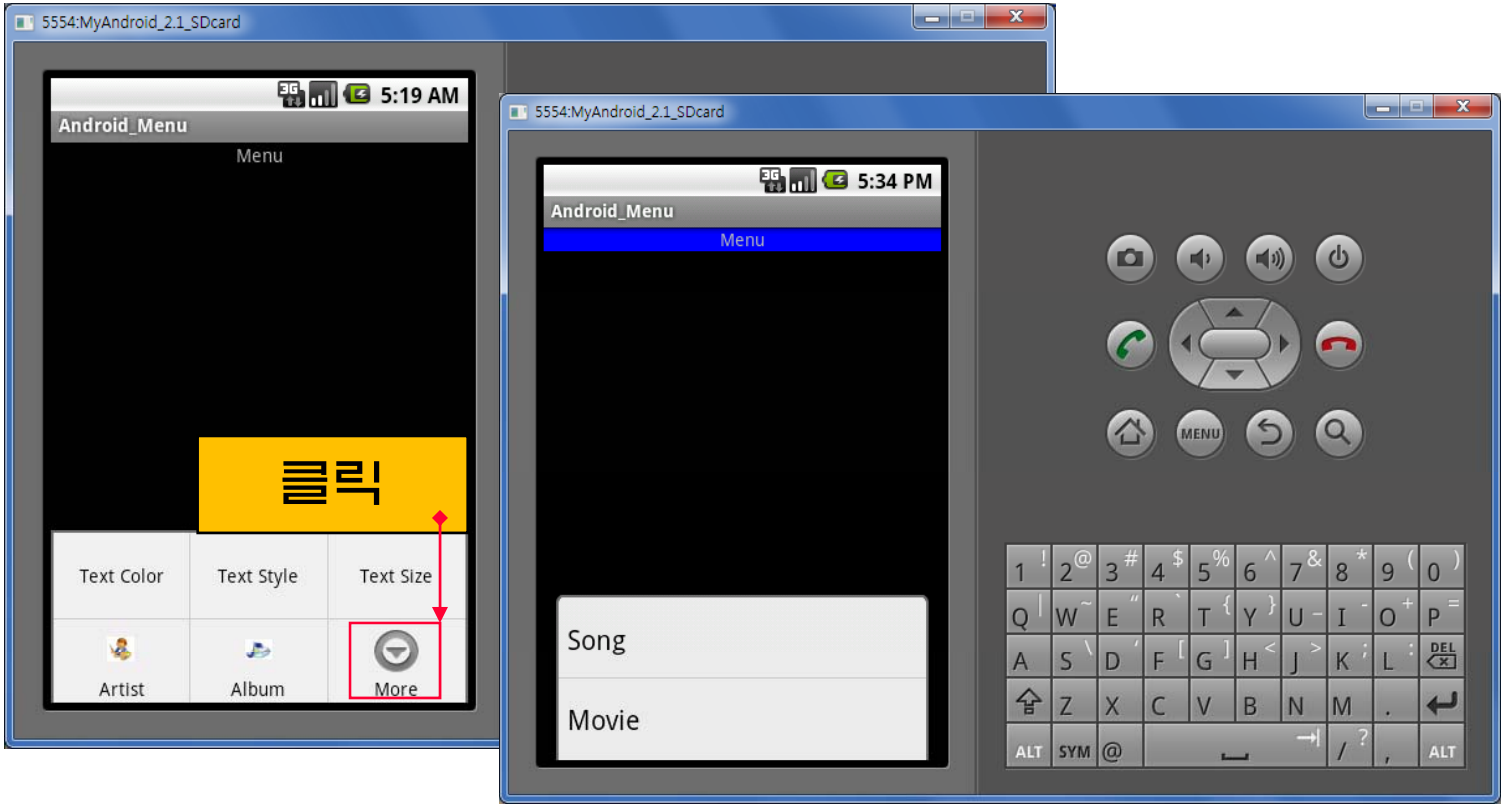
- ◆ Android screen 하단에서 상승
- ◆ 최대 6 개까지의 text + icon(옵션) 형태 메뉴 표시
- ◆ 마지막 6번째 icon menu 버튼은 more로 표시



Options Menu (3)

❖ Expanded Menu

- ◆ option menu의 총 항목 개수가 6개
- ◆ 마지막 6번째 icon menu 버튼이 more로 표시되었을 때 이를 사용하면 출력되는 text기반 list 형식의 메뉴



Context Menu (1)

Context Menu

❖ 기능

◆ Activity 내부의 view가 제공하는 text기반의 list 메뉴

❖ registerForContextMenu (View view)

◆ Context Menu 제공 view임을 Activity에 알리는 메소드

public void registerForContextMenu (View view)	
parameter	Context Menu 제공 view 지정

❖ onCreateContextMenu (Menu menu)

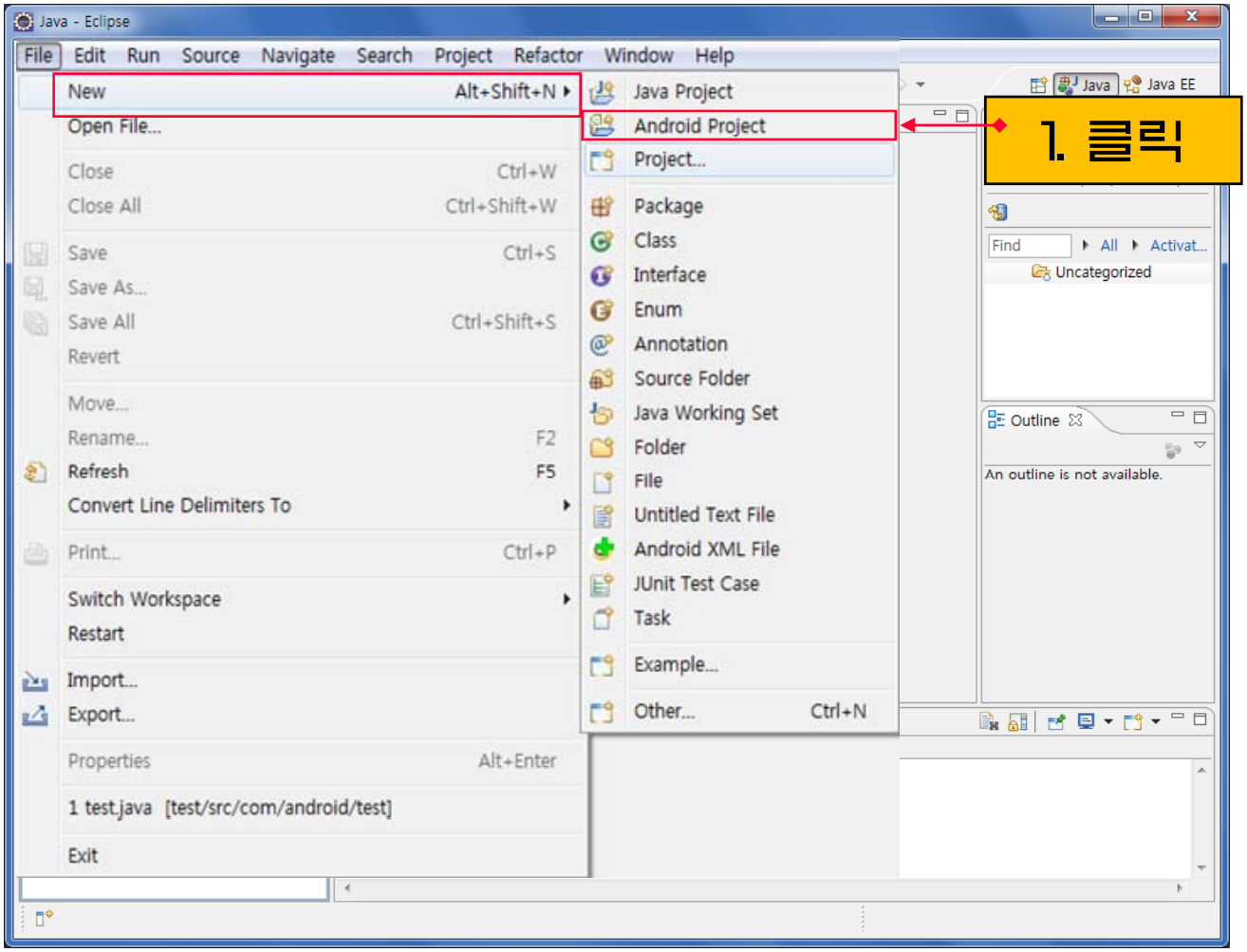
◆ option menu 화면 출력 전에 항상 호출

public void onCreateContextMenu (ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo)	
parameters	• menu : 시스템에 의해 생성된 Context Menu 객체 • v : Context Menu를 소유한 view 인스턴스 • menuInfo : context menu가 표현할 menu item에 대한 추가 정보 전달 기능

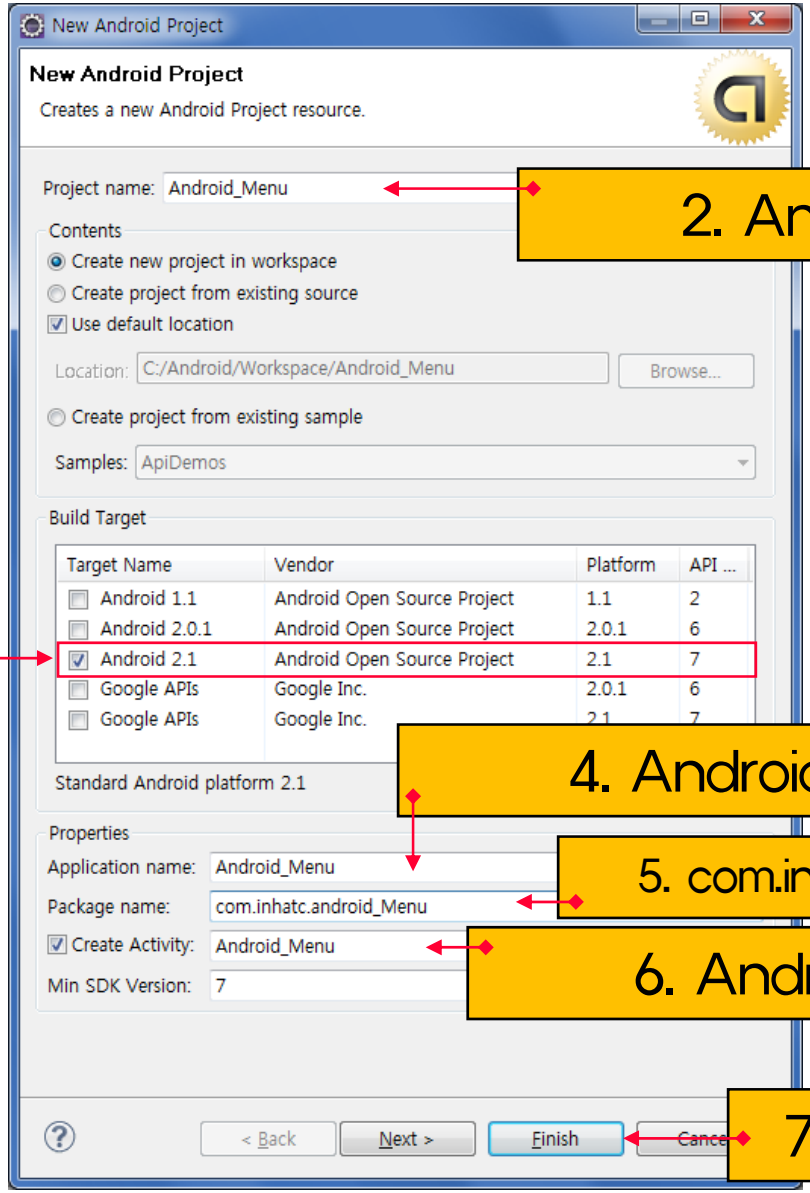
Menu 구현 (1)

Android 프로젝트 생성

- 프로젝트 명 : Android_Menu



Menu 구현 (2)



2. Android_Menu 입력

3. 클릭

4. Android_Menu 입력

5. com.inhatc.android_Menu 입력

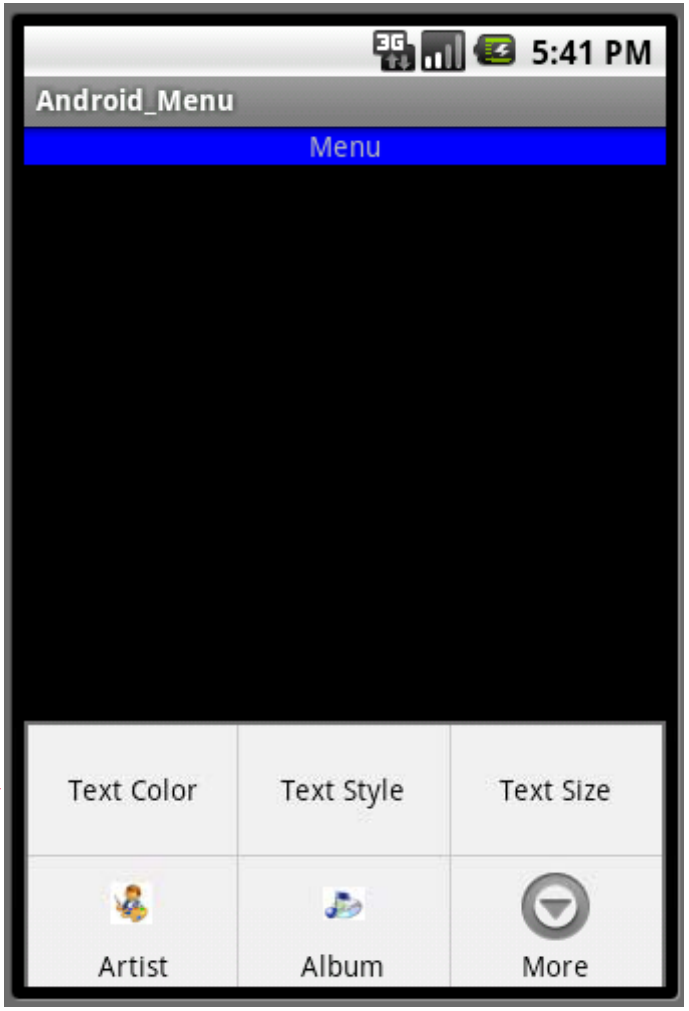
6. Android_Menu 입력

7. 클릭

Menu 구현 (3)

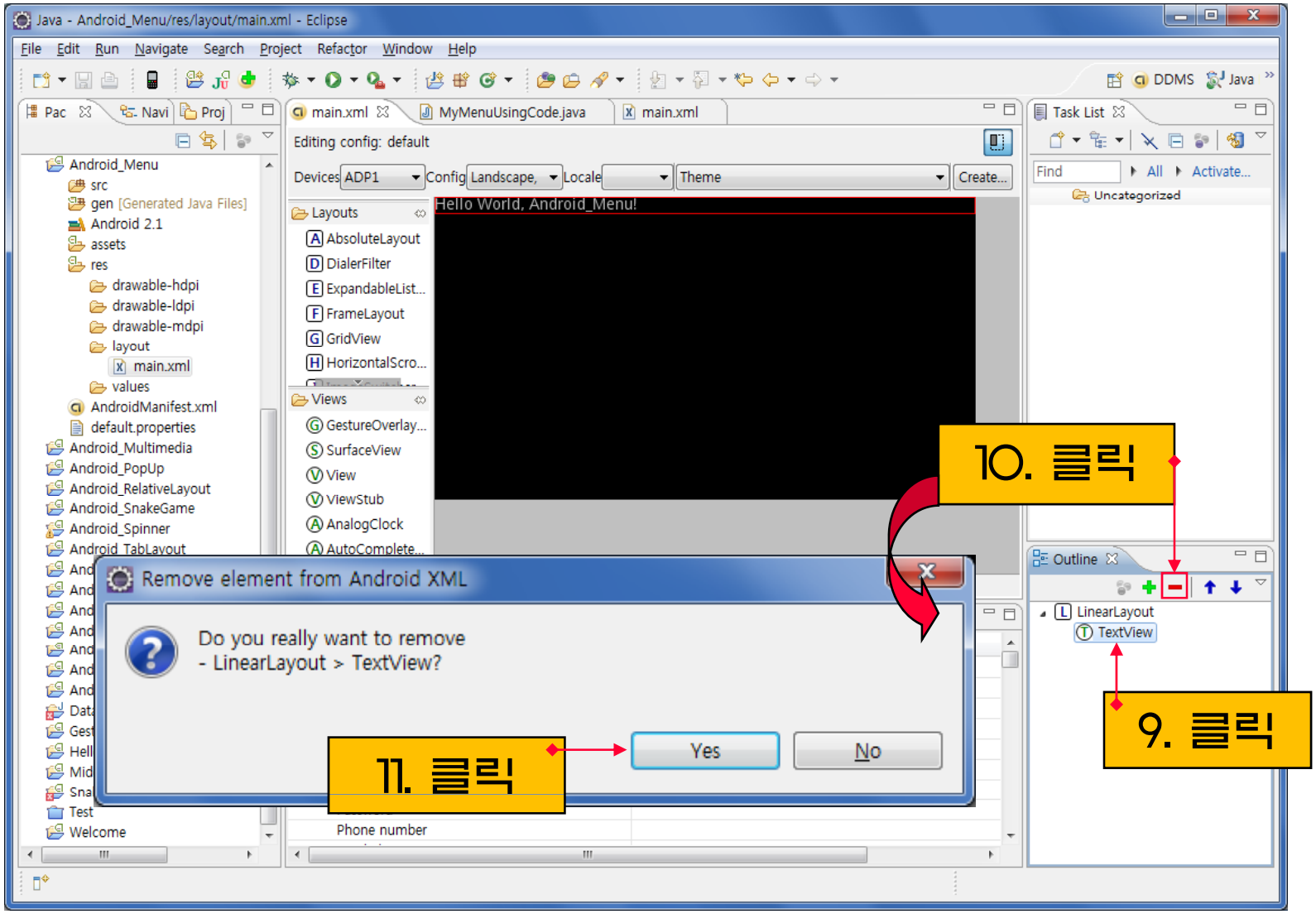
UI 설계

8. UI 설계 및 속성 지정



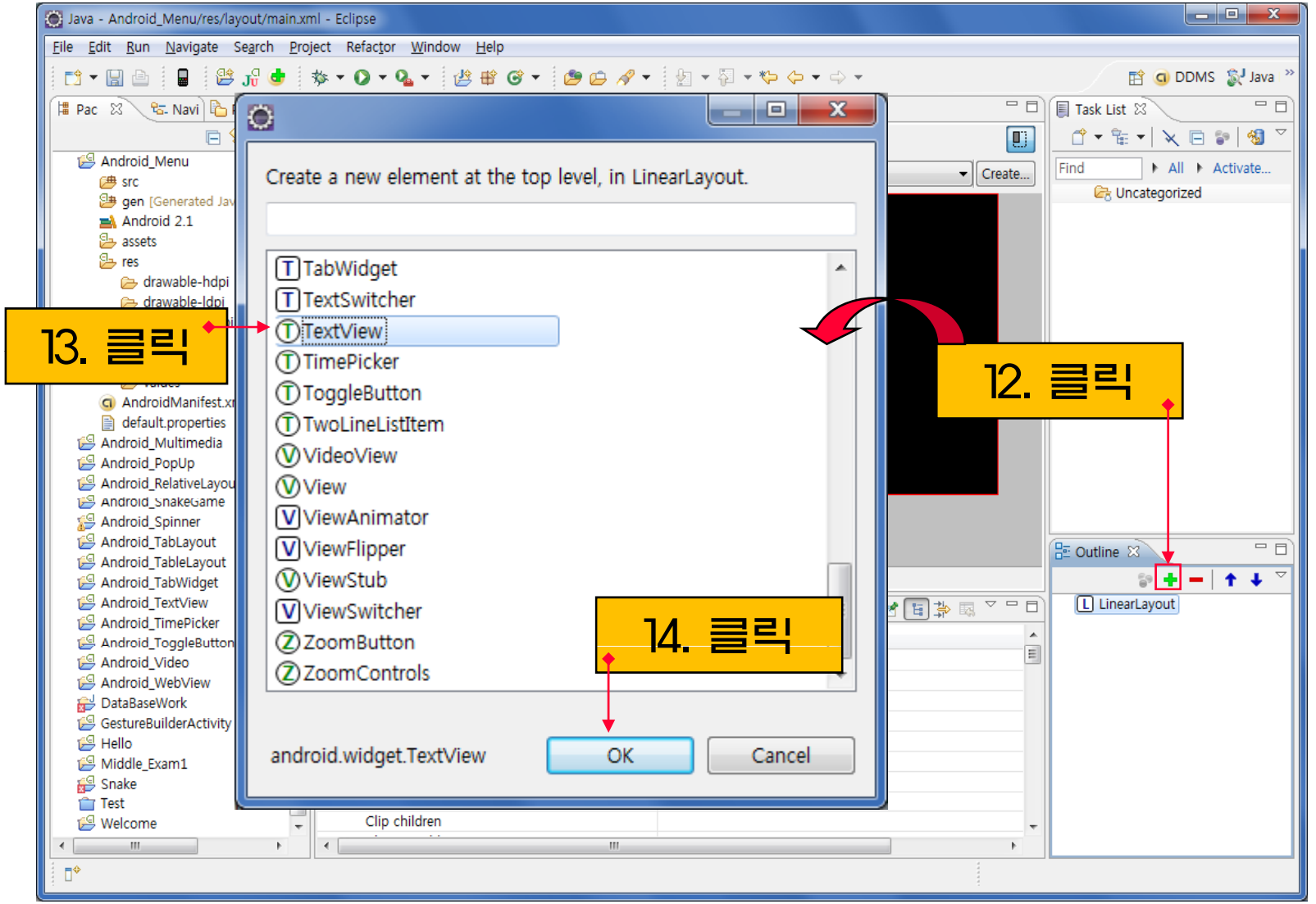
Menu 구현 (4)

❖ TextView 삭제



Menu 구현 (5)

❖ TextView 추가



Menu 구현 (6)

❖ TextView 속성 지정

컨트롤	속성 지정
TextView	• android:id="@+id/TextView01" • android:layout_width="fill_parent" • android:layout_height="wrap_content" • android:text="Menu" • android:gravity="center" • android:layout_gravity="center"

Menu 구현 (7)

❖ Main.xml

*main.xml

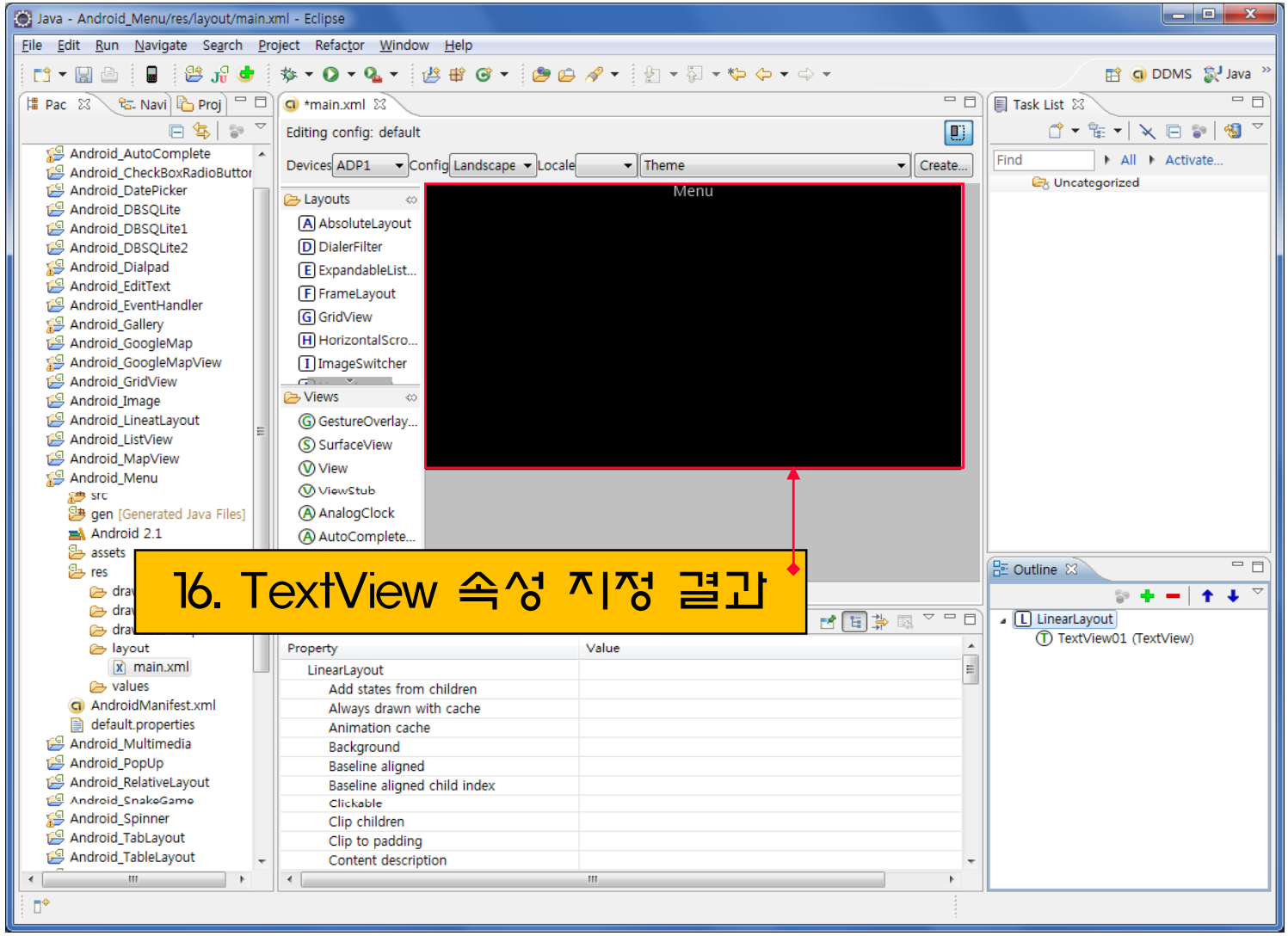
```
1<?xml version="1.0" encoding="utf-8"?>
2<LinearLayout
3    xmlns:android="http://schemas.android.com/apk/res/android"
4    android:orientation="vertical"
5    android:layout_width="fill_parent"
6    android:layout_height="fill_parent">
7
8    <TextView
9        android:id="@+id/TextView01"
10       android:layout_height="wrap_content"
11       android:text="Menu"
12       android:gravity="center"
13       android:layout_gravity="center"
14       android:layout_width="fill_parent">
15   </TextView>
16
17</LinearLayout>
```

Layout | main.xml

15. XML code 추가 확인

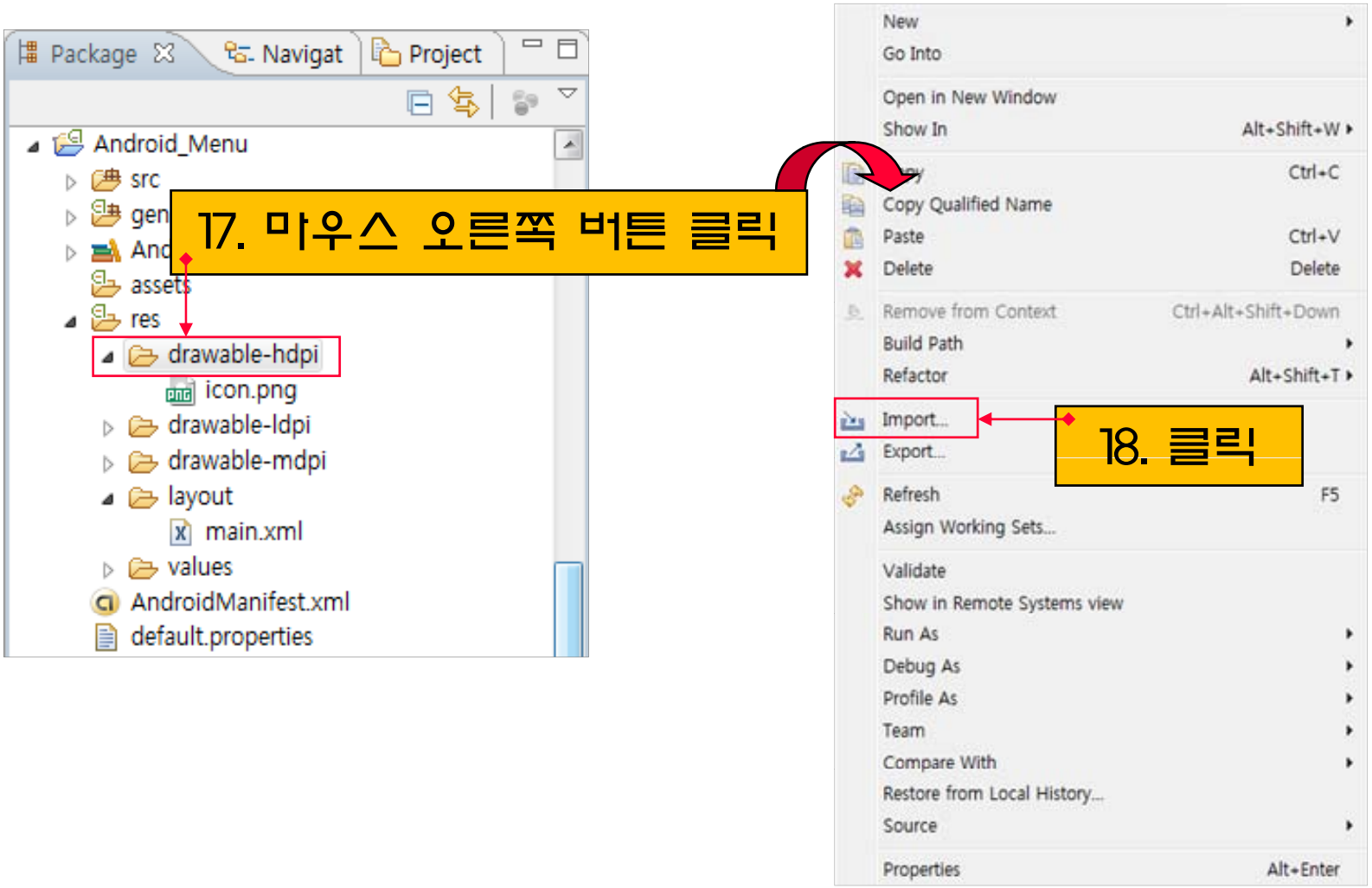
Menu 구현 (8)

❖ TextView 속성 지정 결과

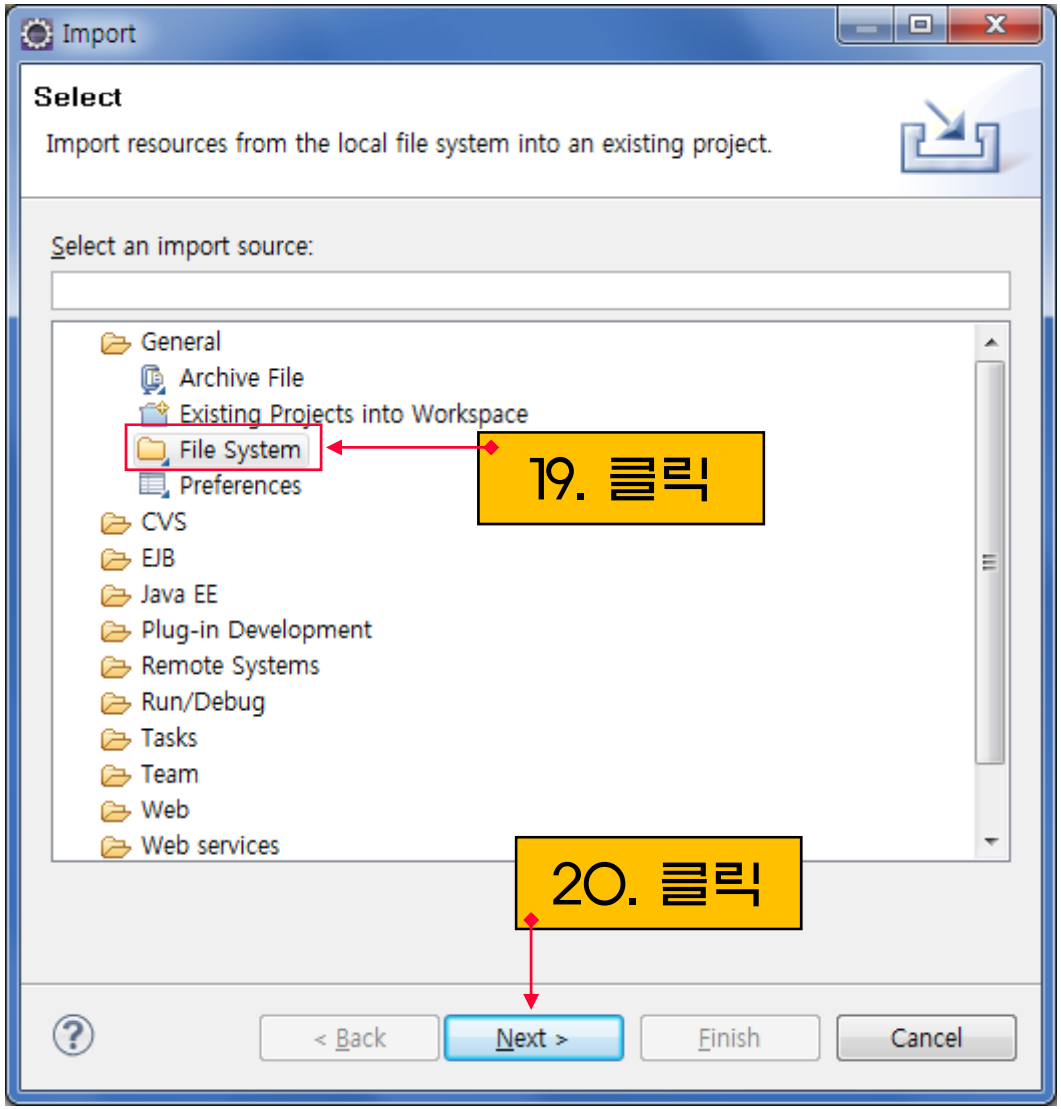


Menu 구현 (9)

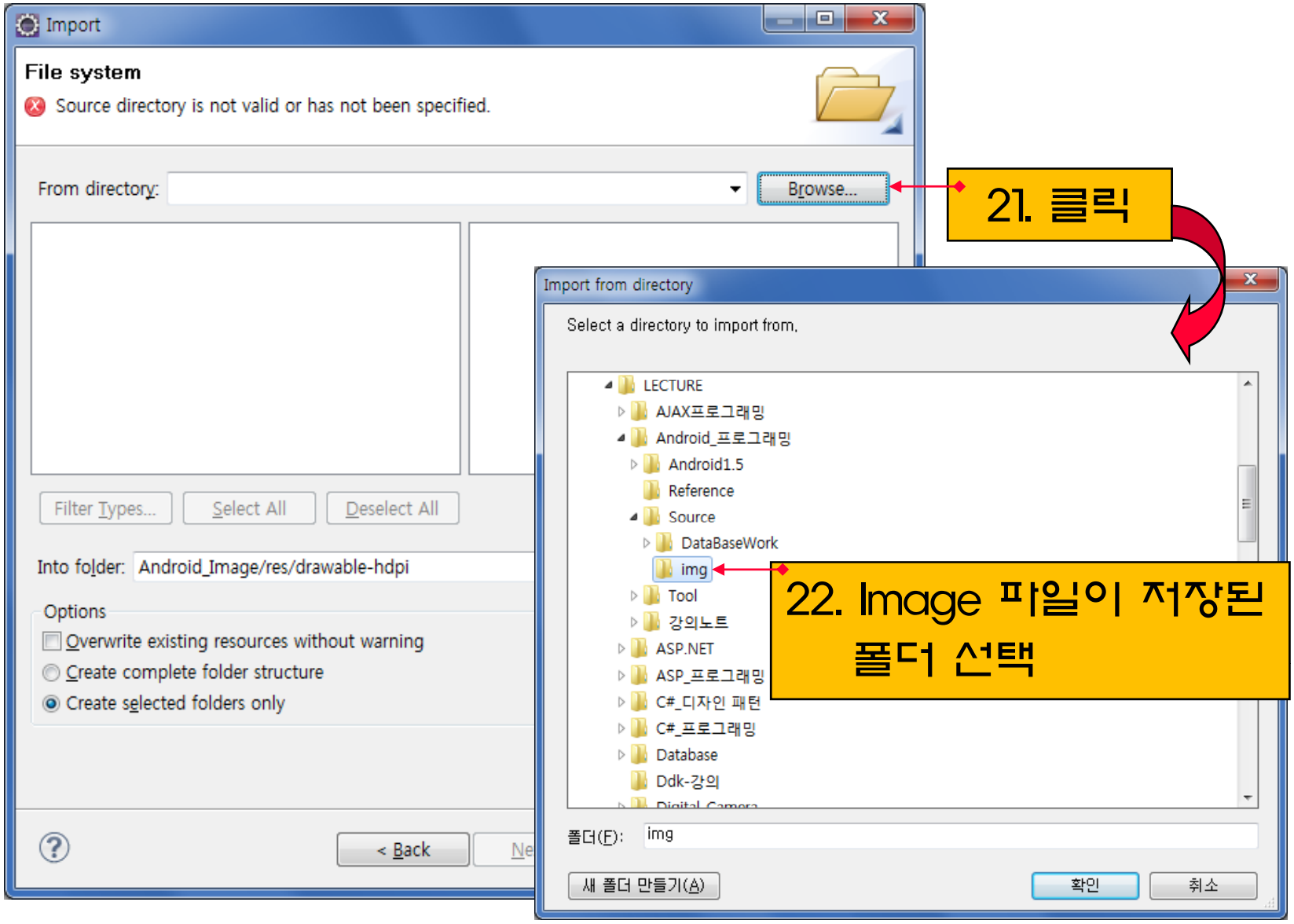
❖ Image import



Menu 구현 (10)


Import
Select
Import resources from the local file system into an existing project.
Select an import source:
General
Archive File
Existing Projects into Workspace
File System
Preferences
CVS
EJB
Java EE
Plug-in Development
Remote Systems
Run/Debug
Tasks
Team
Web
Web services
19. 클릭
20. 클릭
< Back
Next >
Finish
Cancel

Menu 구현 (11)


Import
File system
Source directory is not valid or has not been specified.
From directory:
Browse...
21. 클릭
Filter Types...
Select All
Deselect All
Into folder: Android_Image/res/drawable-hdpi
Options
Overwrite existing resources without warning
Create complete folder structure
Create selected folders only
< Back
Import from directory
Select a directory to import from.
LECTURE
AJAX프로그래밍
Android_프로그래밍
Android1.5
Reference
Source
DataBaseWork
img
Tool
강의노트
ASP.NET
ASP_프로그래밍
C#_디자인 패턴
C#_프로그래밍
Database
Ddk-강의
22. Image 파일이 저장된 폴더 선택
폴더(F): img
새 폴더 만들기(A)
확인
취소

Menu 구현 (12)

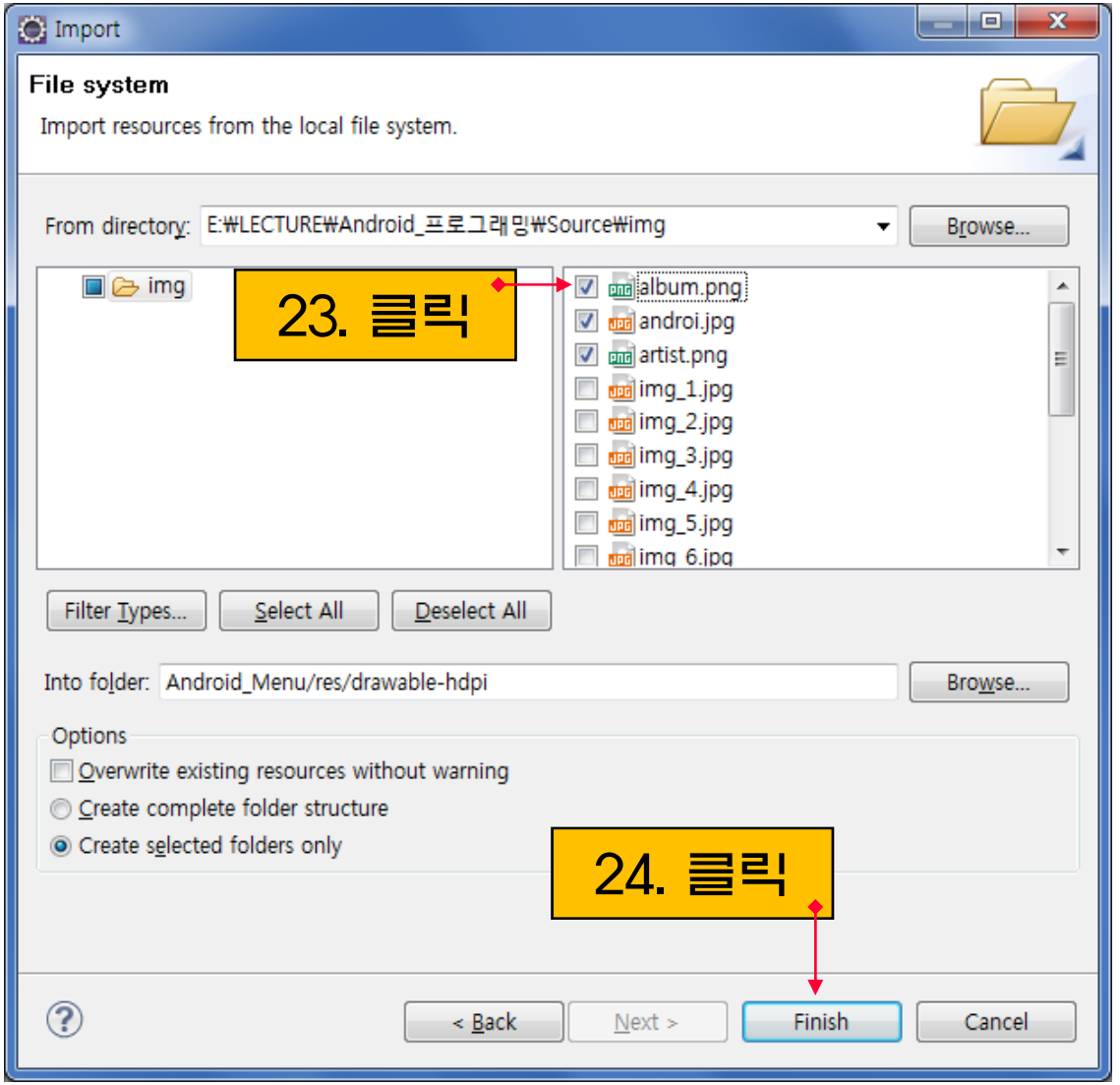
❖ Image 파일 선택

◆ album.png

◆ Artist.png

◆ Song.png

◆ Androi.jpg



Menu 구현 (13)

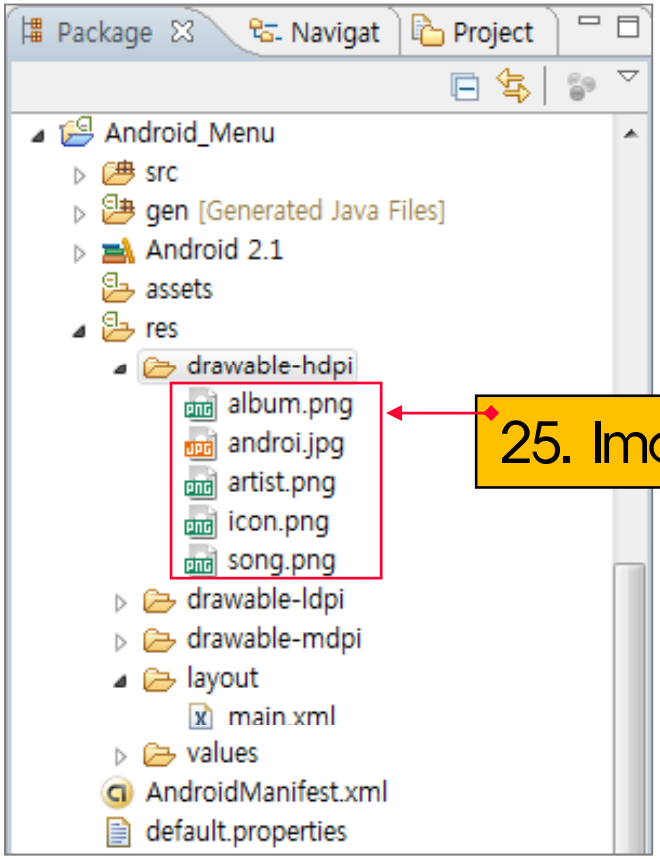
❖ Image 파일 import 확인

◆ album.png

◆ Artist.png

◆ Song.png

◆ Androi.jpg



25. Image 파일 import 확인

Menu 구현 (14)

❖ R.java

R.java

```
1  /* AUTO-GENERATED FILE.  DO NOT MODIFY.
7
8  package com.inhatc.android_Menu;
9
10 public final class R {
11     public static final class attr {
12     }
13     public static final class drawable {
14         public static final int album=0x7f020000;
15         public static final int androi=0x7f020001;
16         public static final int artist=0x7f020002;
17         public static final int icon=0x7f020003;
18         public static final int song=0x7f020004;
19     }
20     public static final class id {
21         public static final int TextView01=0x7f050000;
22     }
23     public static final class layout {
24         public static final int main=0x7f030000;
25     }
26     public static final class string {
27         public static final int app_name=0x7f040001;
28         public static final int hello=0x7f040000;
29     }
30 }
```

26. drawable, id 클래스 변수 추가 확인

Menu 구현 (15)

❖ onCreate() Method 구현

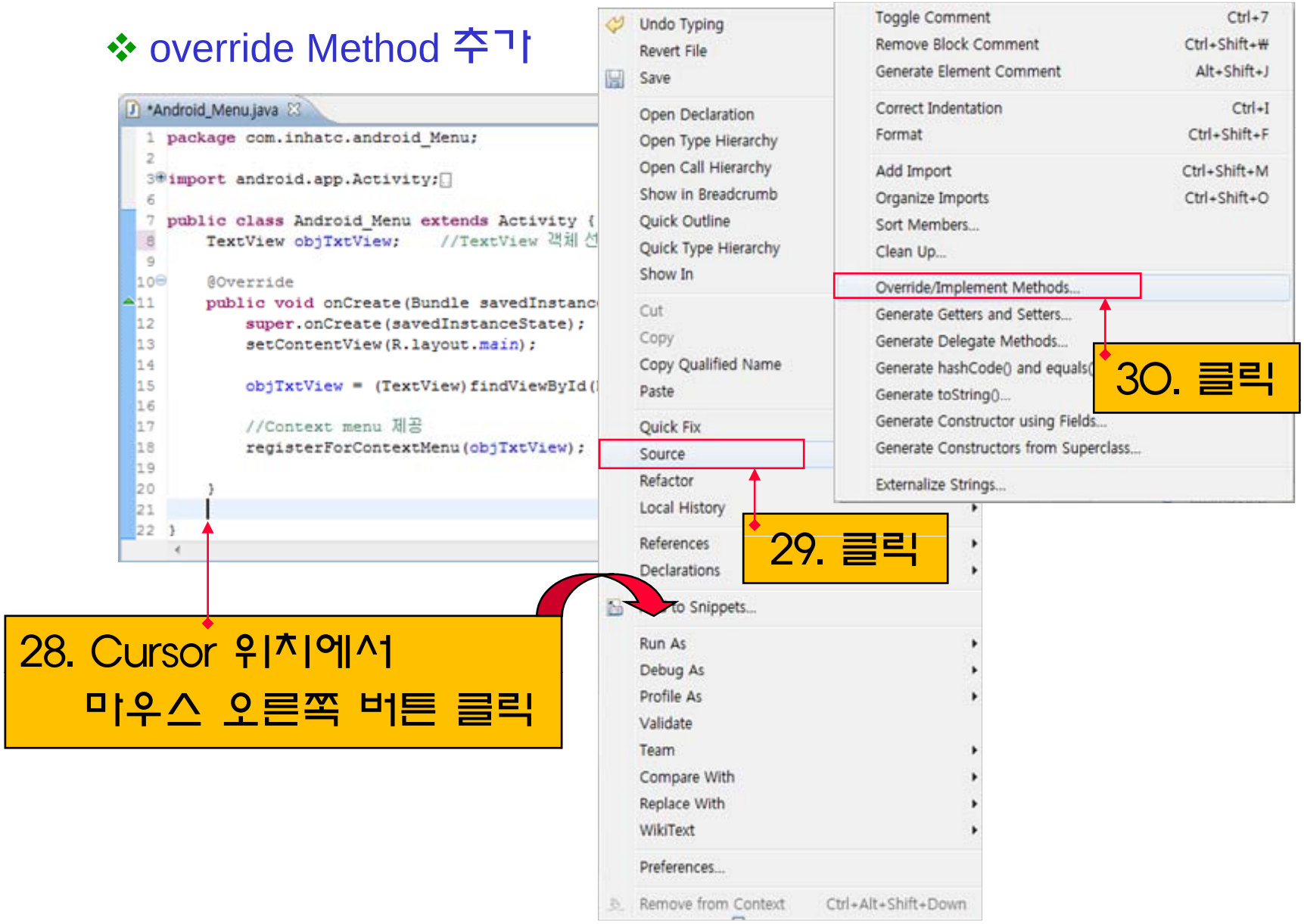
*Android_Menu.java

```
1  package com.inhatc.android_Menu;
2
3  import android.app.Activity;
6
7  public class Android_Menu extends Activity {
8      TextView objTxtView;     //TextView 객체 선언
9
10     @Override
11     public void onCreate(Bundle savedInstanceState) {
12         super.onCreate(savedInstanceState);
13         setContentView(R.layout.main);
14
15         objTxtView = (TextView)findViewById(R.id.TextView01);
16
17         //Context menu 제공
18         registerForContextMenu(objTxtView);
19
20     }
21
22 }
```

27. Coding

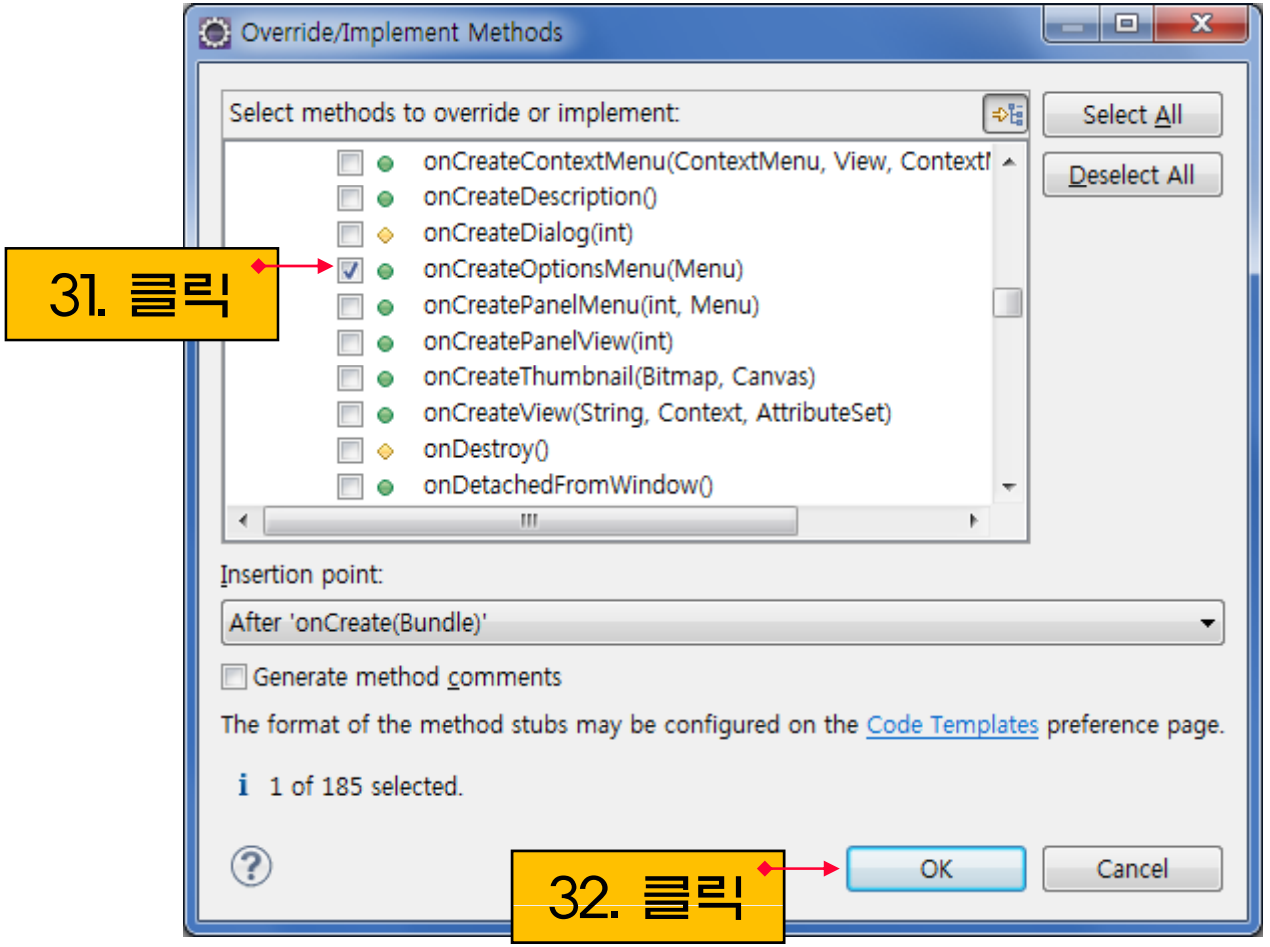
Menu 구현 (16)

❖ override Method 추가



Menu 구현 (17)

❖ Override / Implement Methods 추가



Menu 구현 (18)

onCreateOptionMenu() Method 구현

- Text
- Text + Icon

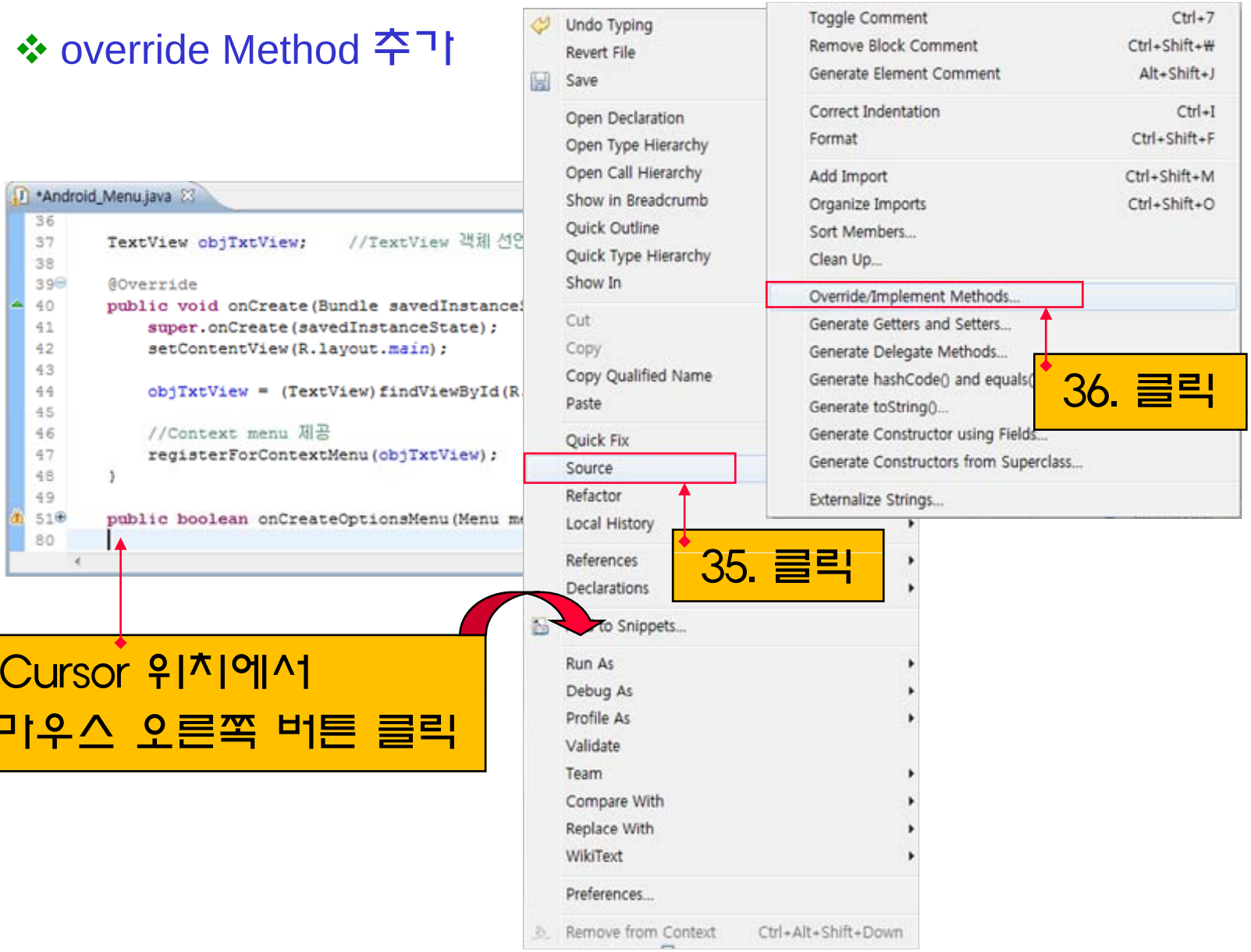
Android_Menu.java

```
22
23      @Override       //Options Menu 생성 및 Item 생성
24      public boolean onCreateOptionsMenu(Menu menu) {
25          SubMenu mnuTextColor = menu.addSubMenu("Text Color");
26
27          SubMenu mnuTextStyle = menu.addSubMenu("Text Style");
28
29          SubMenu mnuTextSize = menu.addSubMenu("Text Size");
30
31          SubMenu mnuArtist = menu.addSubMenu("Artist");
32          mnuArtist.setIcon(R.drawable.artist);
33
34          SubMenu mnuAlbum = menu.addSubMenu("Album");
35          mnuAlbum.setIcon(R.drawable.album);
36
37          SubMenu mnuSong = menu.addSubMenu("Song");
38          mnuSong.setIcon(R.drawable.song);
39
40          SubMenu mnuMovie = menu.addSubMenu("Movie");
41
42          return super.onCreateOptionsMenu(menu);
43      }
44  }
```

33. Coding

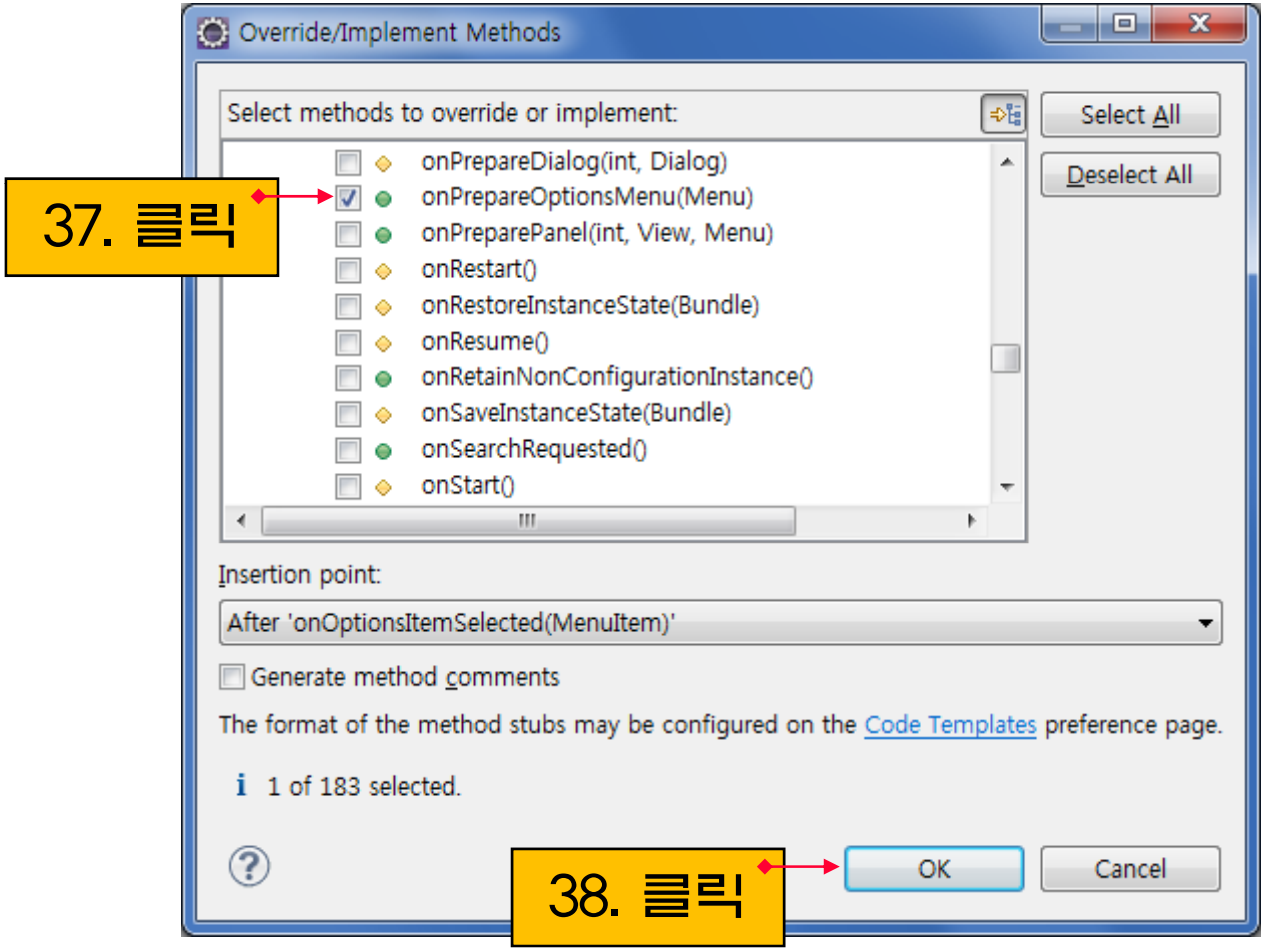
Menu 구현 (19)

❖ override Method 추가



Menu 구현 (20)

❖ Override / Implement Methods 추가



Menu 구현 (21)

- onPrepareOptionMenu() Method 구현

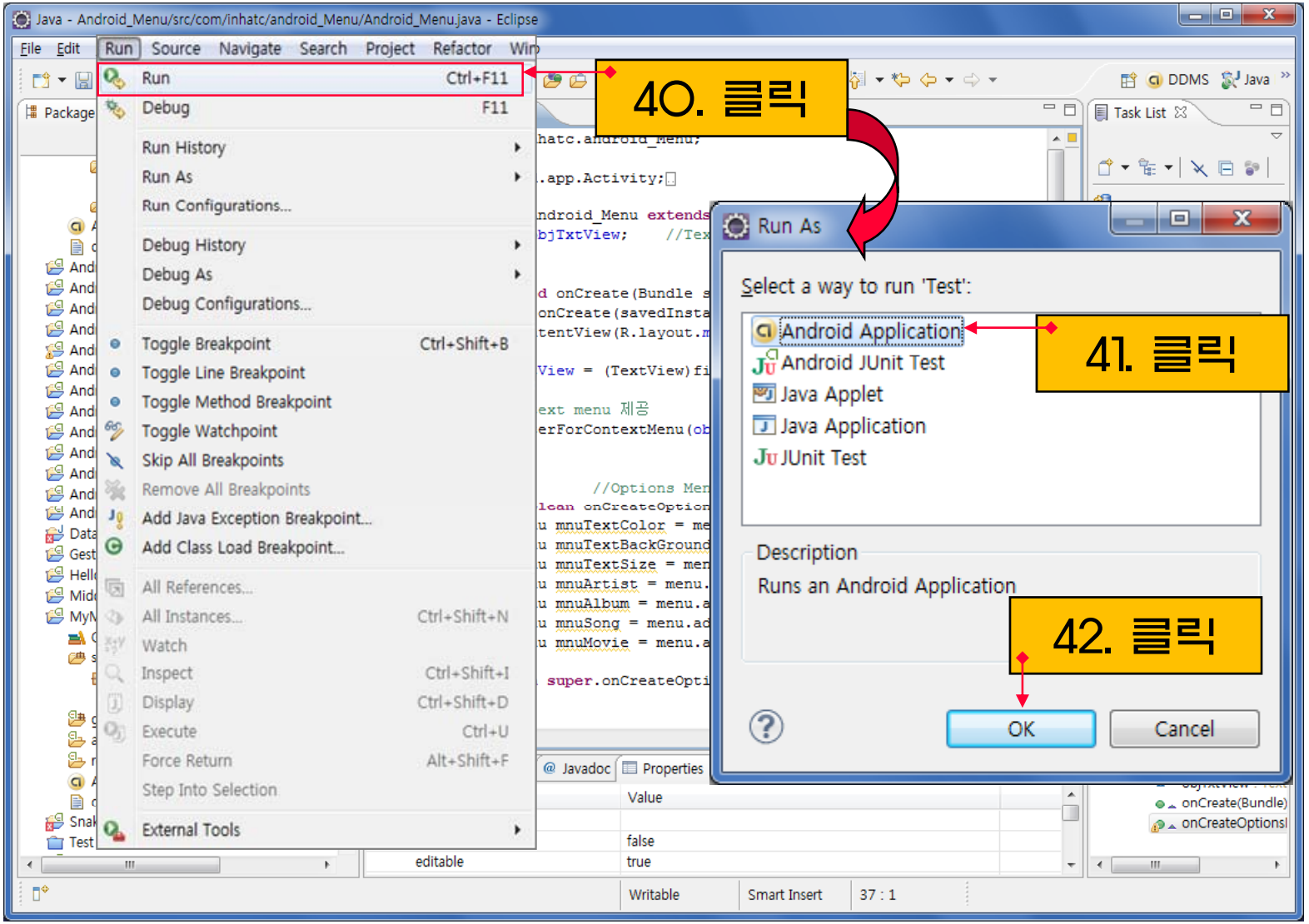
*Android_Menu.java

```
36
37      TextView objTxtView;     //TextView 객체 선언
38
39      @Override
40      public void onCreate(Bundle savedInstanceState) {
41          super.onCreate(savedInstanceState);
42          setContentView(R.layout.main);
43
44          objTxtView = (TextView)findViewById(R.id.TextView01);
45
46          //Context menu 제공
47          registerForContextMenu(objTxtView);
48      }
49
51      public boolean onCreateOptionsMenu(Menu menu) {
80
81      @Override        // Option menu 화면 출력전 호출
82      public boolean onPrepareOptionsMenu(Menu menu) {
83          // TODO Auto-generated method stub
84          return super.onPrepareOptionsMenu(menu);
85      }
```

39. Coding

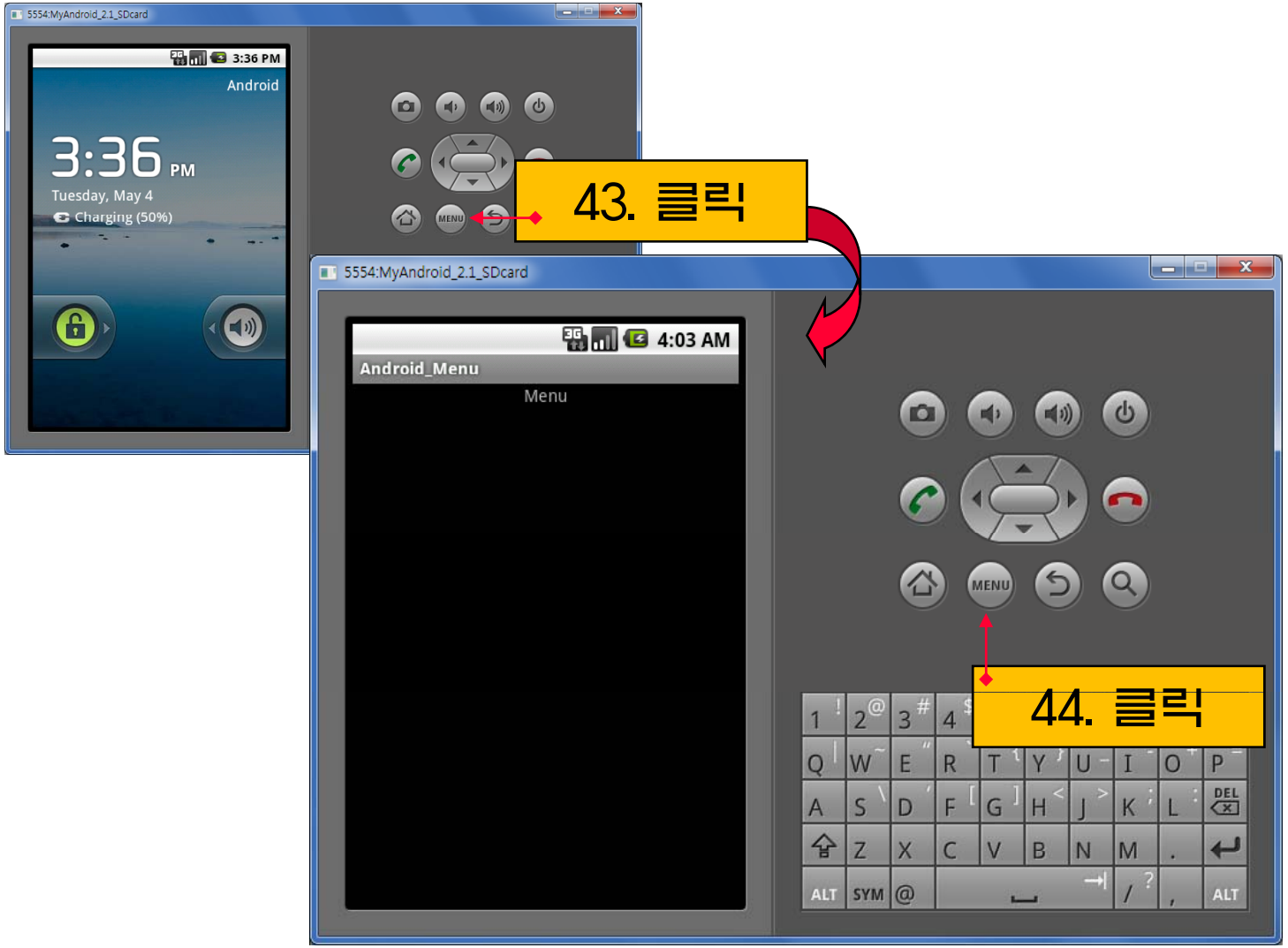
Menu 구현 (22)

❖ Android 프로젝트 실행

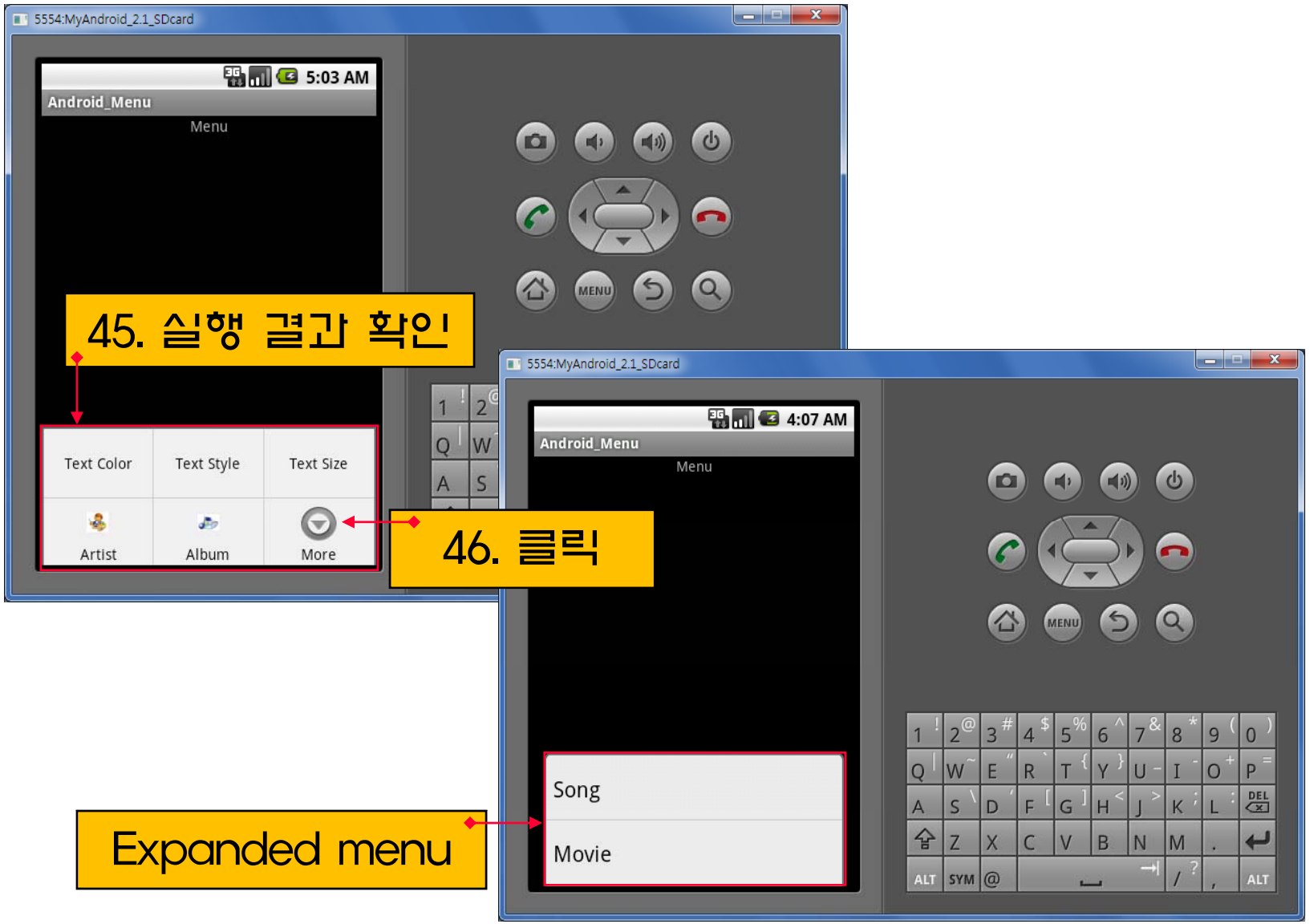


Menu 구현 (23)

❖ 실행 결과



Menu 구현 (24)


5554:MyAndroid_2.1_SDcard
5:03 AM
Android_Menu
Menu
45. 실행 결과 확인
Text Color
Text Style
Text Size
Artist
Album
More
46. 클릭
5554:MyAndroid_2.1_SDcard
4:07 AM
Android_Menu
Menu
Song
Movie
Expanded menu

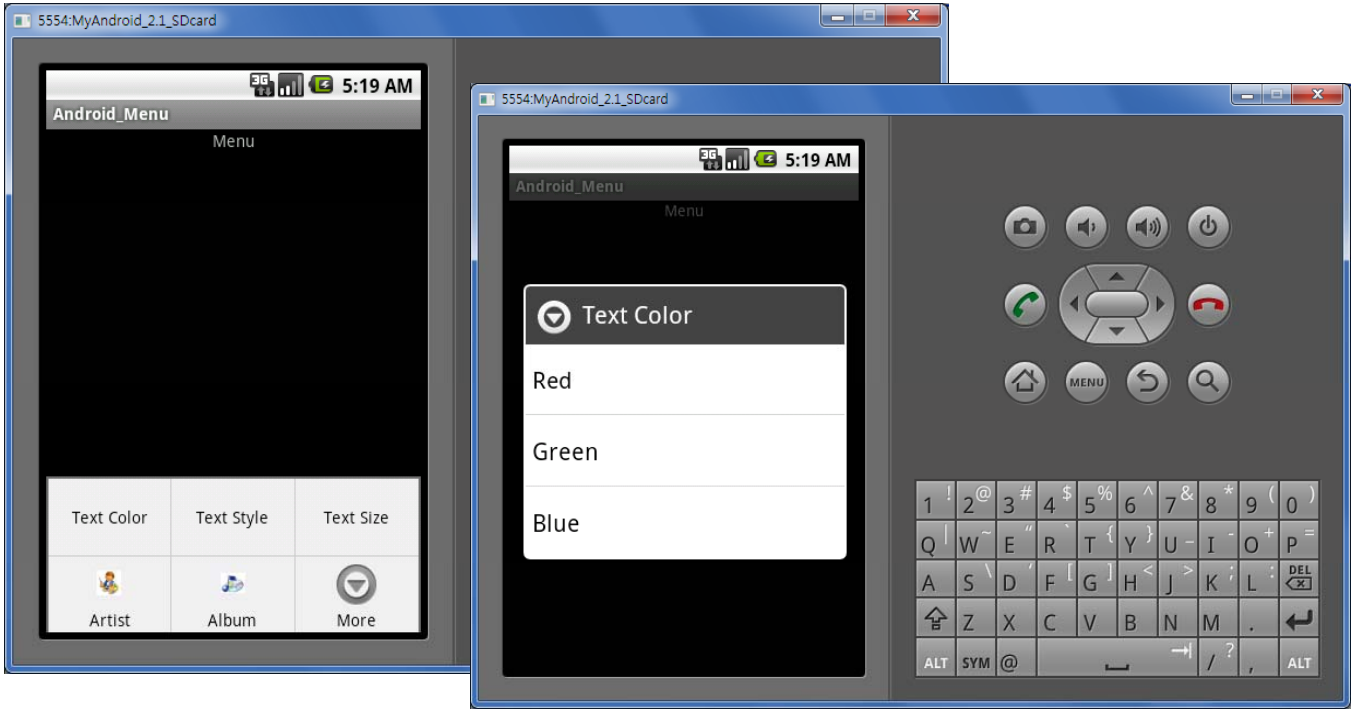
실습 I : Text Color 메뉴의 SubMenu 구현

Android_Menu (실습 시간 : 30분)

❖ 아래 그림과 같이 Text Color 메뉴의 SubMenu와 Menu Item Event Handler를 구현하시오.

◆ SubMenu 구현

◆ SubMenu Item Click Event Handler 구현



Text Color 메뉴의 SubMenu 구현 (1)

SubMenu 구현

- Group No 지정
- Text Color Item No 지정

*Android_Menu.java

```
1  package com.inhatc.android_Menu;
2
3  import android.app.Activity;
10
11 public class Android_Menu extends Activity {
12     // Group No.
13     public static final int ID_GROUP_TEXT_COLOR     = 1;
14     public static final int ID_GROUP_TEXT_STYLE     = 2;
15     public static final int ID_GROUP_TEXT_SIZE      = 3;
16     public static final int ID_GROUP_ARTIST         = 4;
17     public static final int ID_GROUP_ALBUM          = 5;
18     public static final int ID_GROUP_SONG           = 6;
19     public static final int ID_GROUP_MOVIE          = 7;
20
21     // Text Color Item No.
22     public static final int ID_COLOR_RED            = 11;
23     public static final int ID_COLOR_GREEN          = 12;
24     public static final int ID_COLOR_BLUE           = 13;
25
26     TextView objTxtView;     //TextView 객체 선언
27
```

1. Coding

Text Color 메뉴의 SubMenu 구현 (2)

❖ onCreateOptionMenu() Method 구현

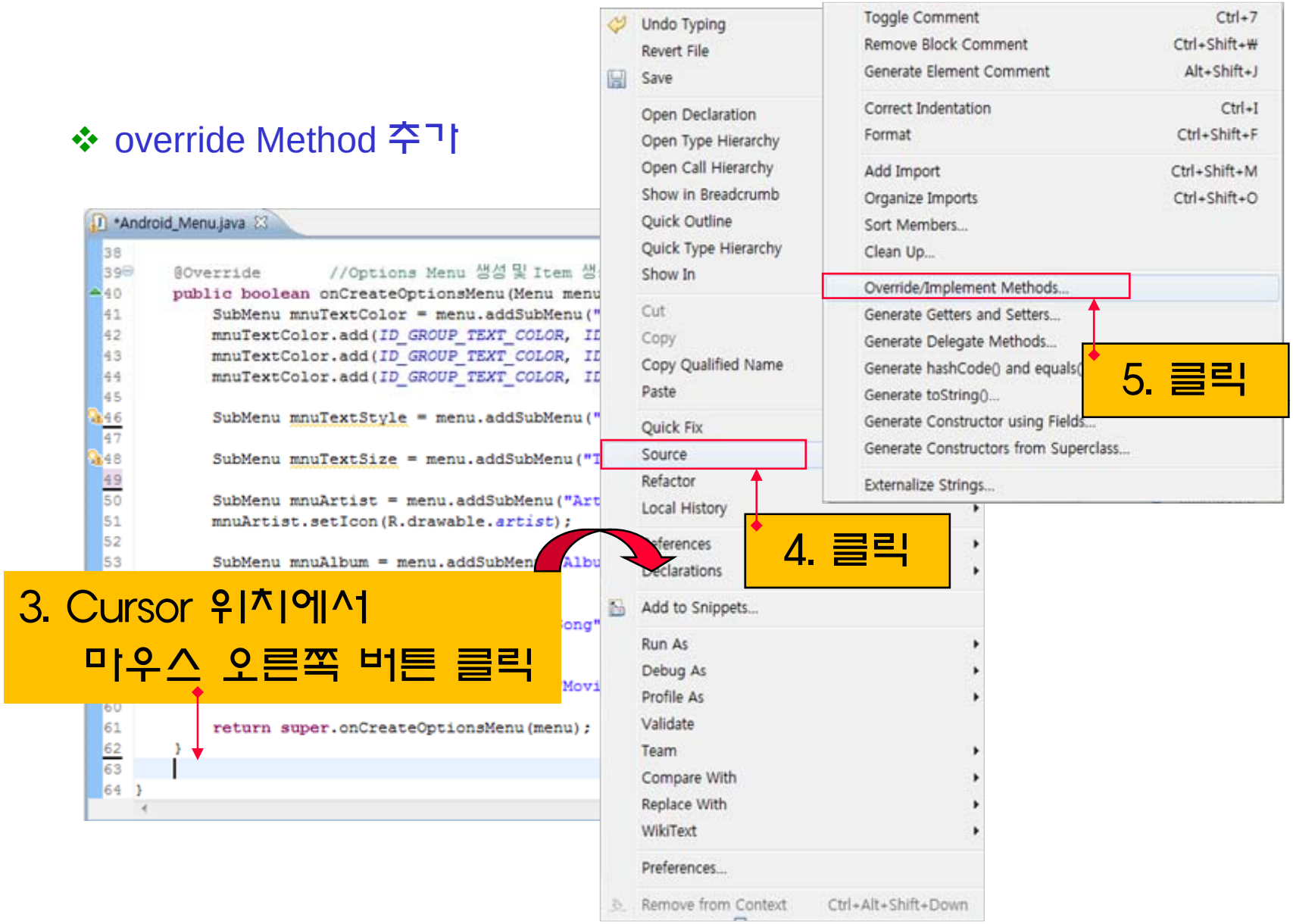
*Android_Menu.java

```
38
39      @Override       //Options Menu 생성 및 Item 생성
40      public boolean onCreateOptionsMenu(Menu menu) {
41          SubMenu mnuTextColor = menu.addSubMenu("Text Color");
42          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_RED, 1, "Red");
43          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_GREEN, 2, "Green");
44          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_BLUE, 3, "Blue");
45
46          SubMenu mnuTextStyle = menu.addSubMenu("Text Style");
47
48          SubMenu mnuTextSize = menu.addSubMenu("Text Size");
49
50          SubMenu mnuArtist = menu.addSubMenu("Artist");
51          mnuArtist.setIcon(R.drawable.artist);
52
53          SubMenu mnuAlbum = menu.addSubMenu("Album");
54          mnuAlbum.setIcon(R.drawable.album);
55
56          SubMenu mnuSong = menu.addSubMenu("Song");
57          mnuSong.setIcon(R.drawable.song);
58
59          SubMenu mnuMovie = menu.addSubMenu("Movie");
60
61          return super.onCreateOptionsMenu(menu);
62      }
```

2. Coding

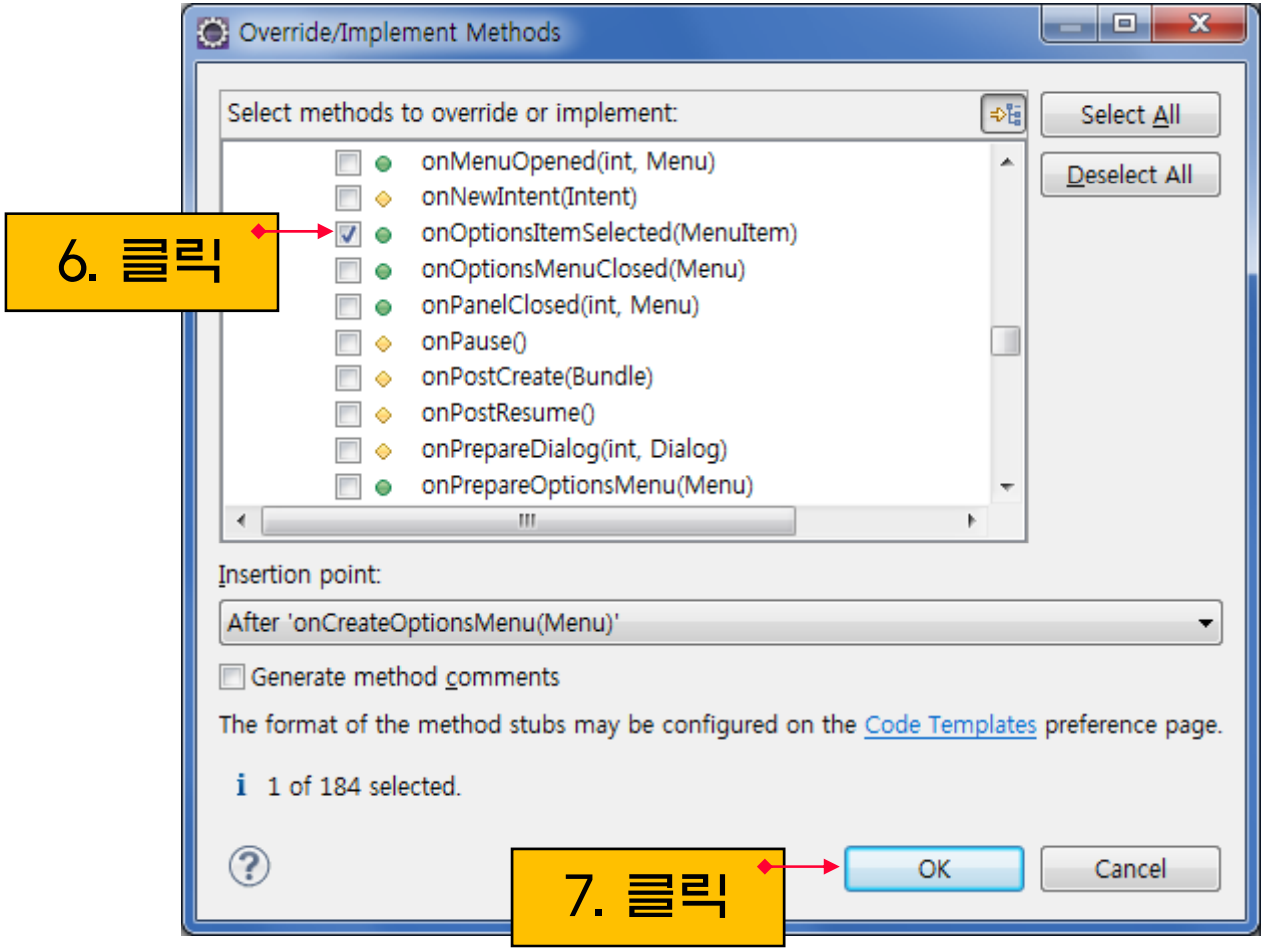
Text Color 메뉴의 SubMenu 구현 (3)

❖ override Method 추가



Text Color 메뉴의 SubMenu 구현 (4)

❖ Override / Implement Methods 추가



Text Color 메뉴의 SubMenu 구현 (5)

❖ onOptionsItemSlected() Method 구현

- ◆ Text Color > RED
- ◆ Text Color > GREEN
- ◆ Text Color > BLUE

*Android_Menu.java

```
63
64      @Override    // Option menu item 의 Click event handler
65      public boolean onOptionsItemSelected(MenuItem item) {
66          switch (item.getItemId()) {
67          case ID_COLOR_RED:
68              objTxtView.setTextColor(Color.RED);
69              return true;
70          case ID_COLOR_GREEN:
71              objTxtView.setTextColor(Color.GREEN);
72              return true;
73          case ID_COLOR_BLUE:
74              objTxtView.setTextColor(Color.BLUE);
75              return true;
76          }
77          return super.onOptionsItemSelected(item);
78      }
79  }
```

8. Coding

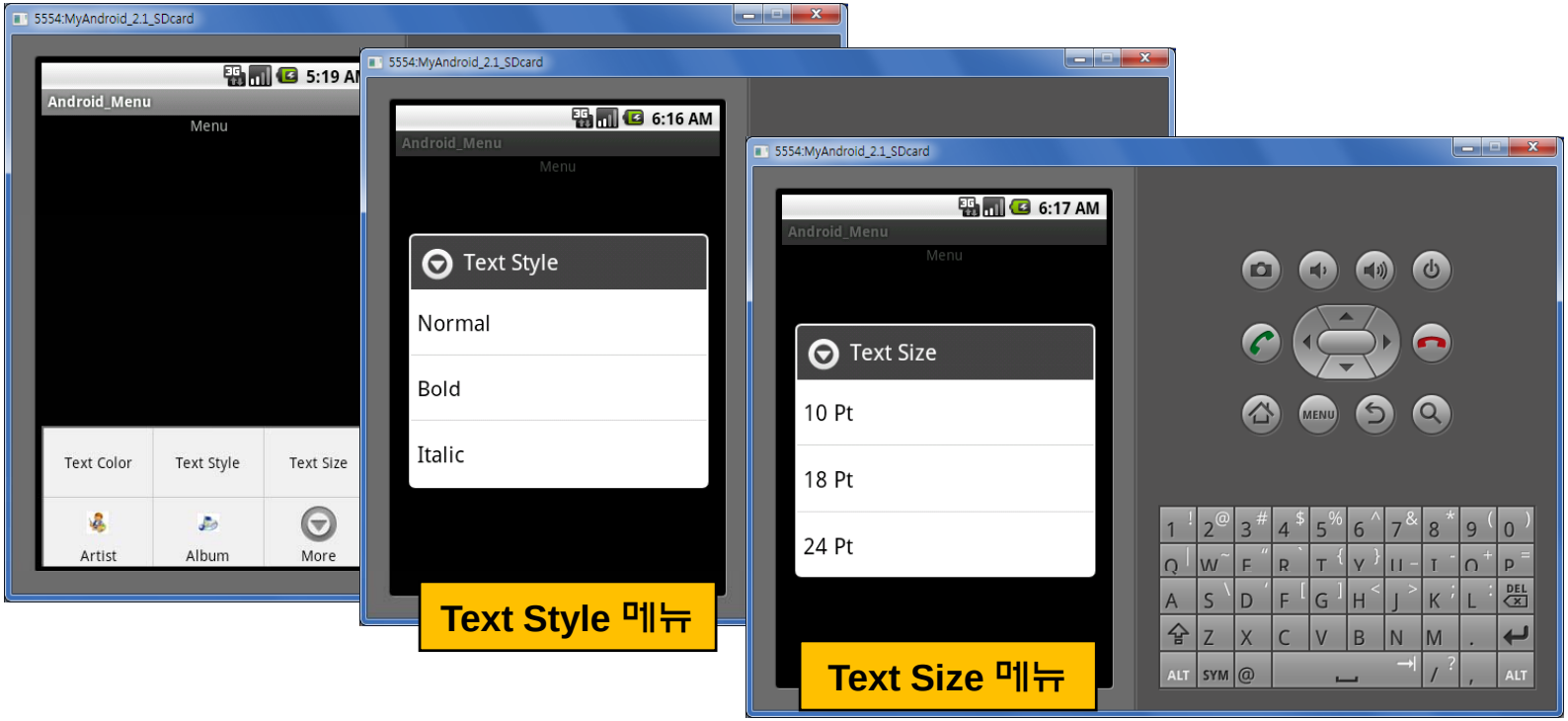
실습 II : Text Style/ Text Size 메뉴의 SubMenu 구현

Android_Menu (실습 시간 : 30분)

❖ 아래 그림과 Text Style / Text Size 메뉴의 SubMenu와 Menu Item Event Handler를 구현하시오.

◆ SubMenu 구현

◆ SubMenu Item Click Event Handler 구현



Text Style/ Text Size 메뉴의 SubMenu 구현 (1)

SubMenu 구현

❖ Text Style Item No / Text Size Item No 지정

Android_Menu.java

```
1  package com.inhatc.android_Menu;
2
3  import android.app.Activity;
11
12 public class Android_Menu extends Activity {
13     // Group No.
14     public static final int ID_GROUP_TEXT_COLOR     = 1;
15     public static final int ID_GROUP_TEXT_STYLE     = 2;
16     public static final int ID_GROUP_TEXT_SIZE      = 3;
17     public static final int ID_GROUP_ARTIST         = 4;
18     public static final int ID_GROUP_ALBUM          = 5;
19     public static final int ID_GROUP_SONG           = 6;
20     public static final int ID_GROUP_MOVIE          = 7;
21
22     // Text Color Item No.
23     public static final int ID_COLOR_RED            = 11;
24     public static final int ID_COLOR_GREEN          = 12;
25     public static final int ID_COLOR_BLUE           = 13;
26
27     // Text Style Item No.
28     public static final int ID_TEXT_NORMAL          = 21;
29     public static final int ID_TEXT_BOLD            = 22;
30     public static final int ID_TEXT_ITALIC          = 23;
31
32     // Text Size Item No.
33     public static final int ID_TEXTSIZE_10P         = 31;
34     public static final int ID_TEXTSIZE_18P         = 32;
35     public static final int ID_TEXTSIZE_24P         = 33;
36
37     TextView objTxtView;    //TextView 객체 선언
```

1. Coding

Text Style/ Text Size 메뉴의 SubMenu 구현 (2)

onCreateOptionMenu() Method 구현

*Android_Menu.java

```
52
53      @Override       //Options Menu 생성 및 Item 생성
54      public boolean onCreateOptionsMenu(Menu menu) {
55          SubMenu mnuTextColor = menu.addSubMenu("Text Color");
56          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_RED, 1, "Red");
57          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_GREEN, 2, "Green");
58          mnuTextColor.add(ID_GROUP_TEXT_COLOR, ID_COLOR_BLUE, 3, "Blue");
59
60          SubMenu mnuTextStyle = menu.addSubMenu("Text Style");
61          mnuTextStyle.add(ID_GROUP_TEXT_STYLE, ID_TEXT_NORMAL, 1, "Normal").setChecked(true);
62          mnuTextStyle.add(ID_GROUP_TEXT_STYLE, ID_TEXT_BOLD, 2, "Bold");
63          mnuTextStyle.add(ID_GROUP_TEXT_STYLE, ID_TEXT_ITALIC, 3, "Italic");
64          mnuTextStyle.setGroupCheckable(ID_GROUP_TEXT_STYLE, true, true);
65
66          SubMenu mnuTextSize = menu.addSubMenu("Text Size");
67          mnuTextSize.add(ID_GROUP_TEXT_SIZE, ID_TEXTSIZE_10P, 1, "10 Pt");
68          mnuTextSize.add(ID_GROUP_TEXT_SIZE, ID_TEXTSIZE_18P, 2, "18 Pt");
69          mnuTextSize.add(ID_GROUP_TEXT_SIZE, ID_TEXTSIZE_24P, 3, "24 Pt");
70
71          SubMenu mnuArtist = menu.addSubMenu("Artist");
72          mnuArtist.setIcon(R.drawable.artist);
73
74          SubMenu mnuAlbum = menu.addSubMenu("Album");
75          mnuAlbum.setIcon(R.drawable.album);
76
77          SubMenu mnuSong = menu.addSubMenu("Song");
78          mnuSong.setIcon(R.drawable.song);
79
80          SubMenu mnuMovie = menu.addSubMenu("Movie");
81
82          return super.onCreateOptionsMenu(menu);
83      }
```

2. Coding

Text Style/ Text Size 메뉴의 SubMenu 구현 (2)

onOptionsItemSlected() Method 구현

- Text Style
  - Normal
  - Bold
  - Italic
- Text Size
  - 10 Pt
  - 18 Pt
  - 24 Pt

3. Coding

Android_Menu.java

```
80
81      @Override    // Option menu item 의 Click event handler
82      public boolean onOptionsItemSelected(MenuItem item) {
83          switch (item.getItemId()) {
84          case ID_COLOR_RED:
85              objTxtView.setTextColor(Color.RED);
86              return true;
87          case ID_COLOR_GREEN:
88              objTxtView.setTextColor(Color.GREEN);
89              return true;
90          case ID_COLOR_BLUE:
91              objTxtView.setTextColor(Color.BLUE);
92              return true;
93          case ID_TEXT_NORMAL:
94              objTxtView.setTypeface(Typeface.DEFAULT, Typeface.NORMAL);
95              item.setChecked(true);
96              return true;
97          case ID_TEXT_BOLD:
98              objTxtView.setTypeface(Typeface.DEFAULT, Typeface.BOLD);
99              item.setChecked(true);
100             return true;
101         case ID_TEXT_ITALIC:
102             objTxtView.setTypeface(Typeface.DEFAULT, Typeface.ITALIC);
103             item.setChecked(true);
104             return true;
105         case ID_TEXTSIZE_10P:
106             objTxtView.setTextSize(10);
107             return true;
108         case ID_TEXTSIZE_18P:
109             objTxtView.setTextSize(18);
110             return true;
111         case ID_TEXTSIZE_24P:
112             objTxtView.setTextSize(24);
113             return true;
114         }
115         return super.onOptionsItemSelected(item);
116     }
117 }
```

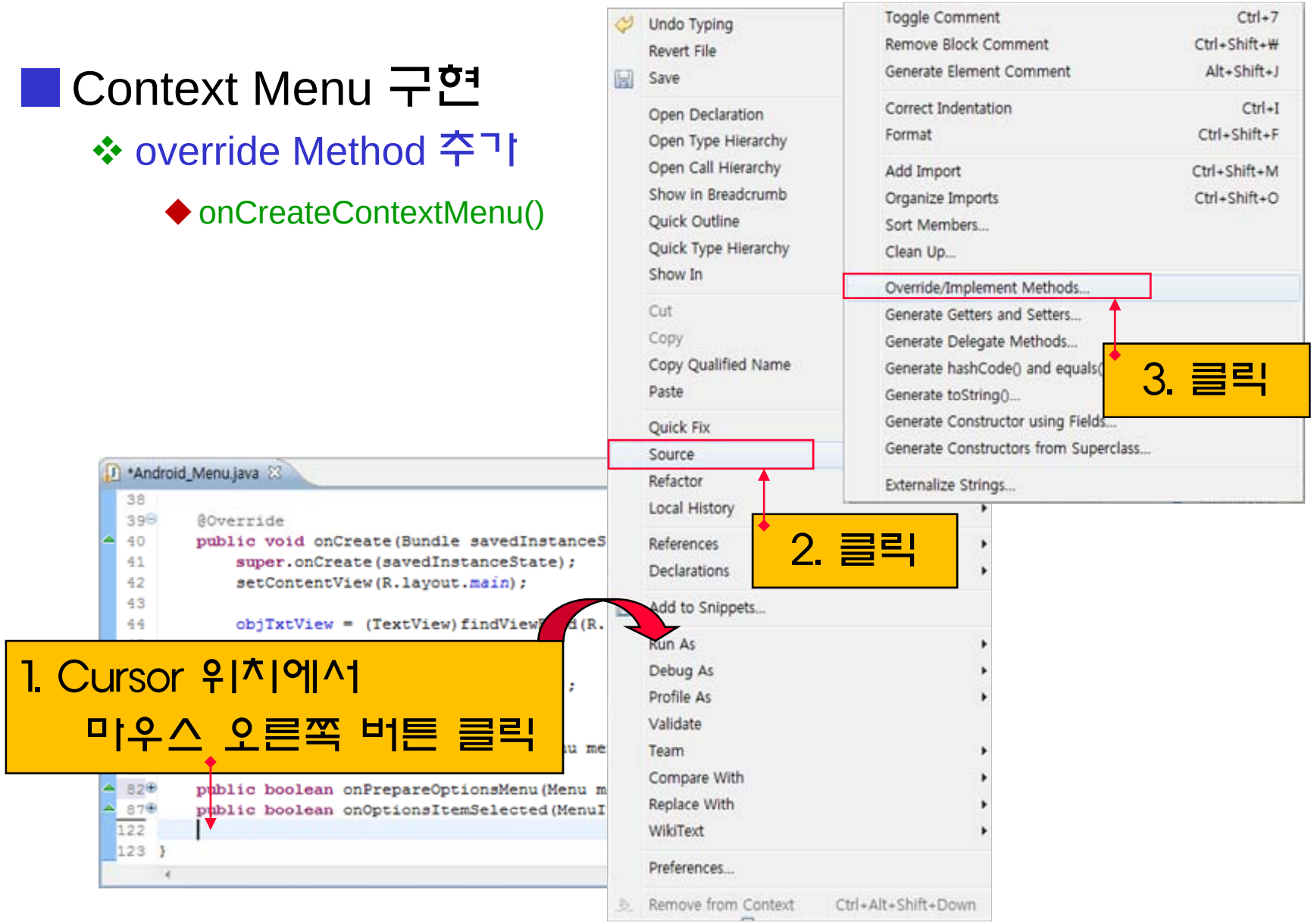
실습 Ⅲ : Context Menu 구현

Android_Menu (실습 시간 : 30분)

- 아래 그림과 같이 Text 배경색을 지정하는 Context Menu를 구현하시오.

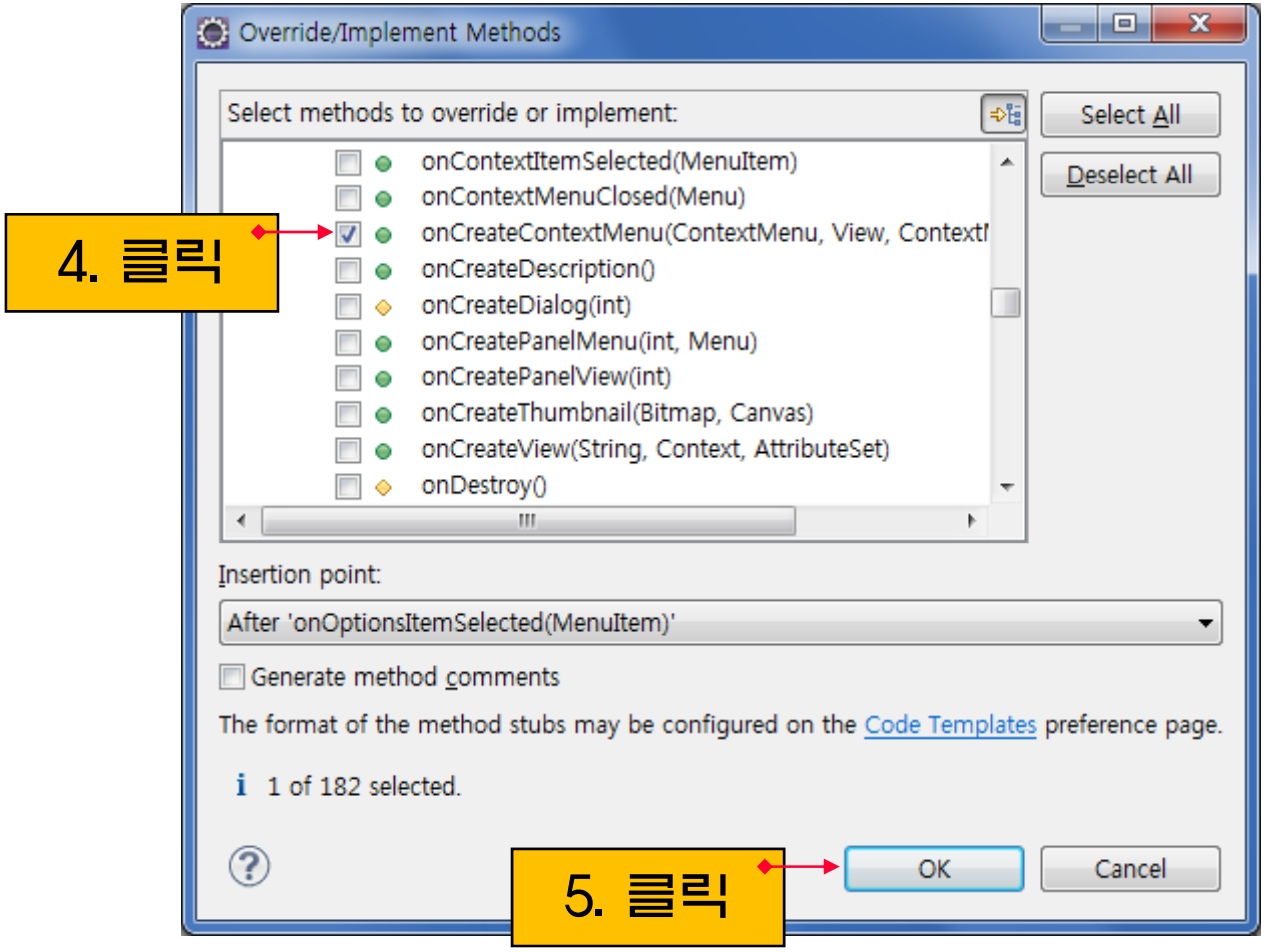
Context Menu 구현 (1)

- Context Menu 구현
  - override Method 추가
    - onCreateContextMenu()



Context Menu 구현 (2)

❖ Override / Implement Methods 추가



Context Menu 구현 (3)

onCreateContextMenu() Method 구현

❖ Text 배경색

- ◆ RED
- ◆ GREEN
- ◆ BLUE

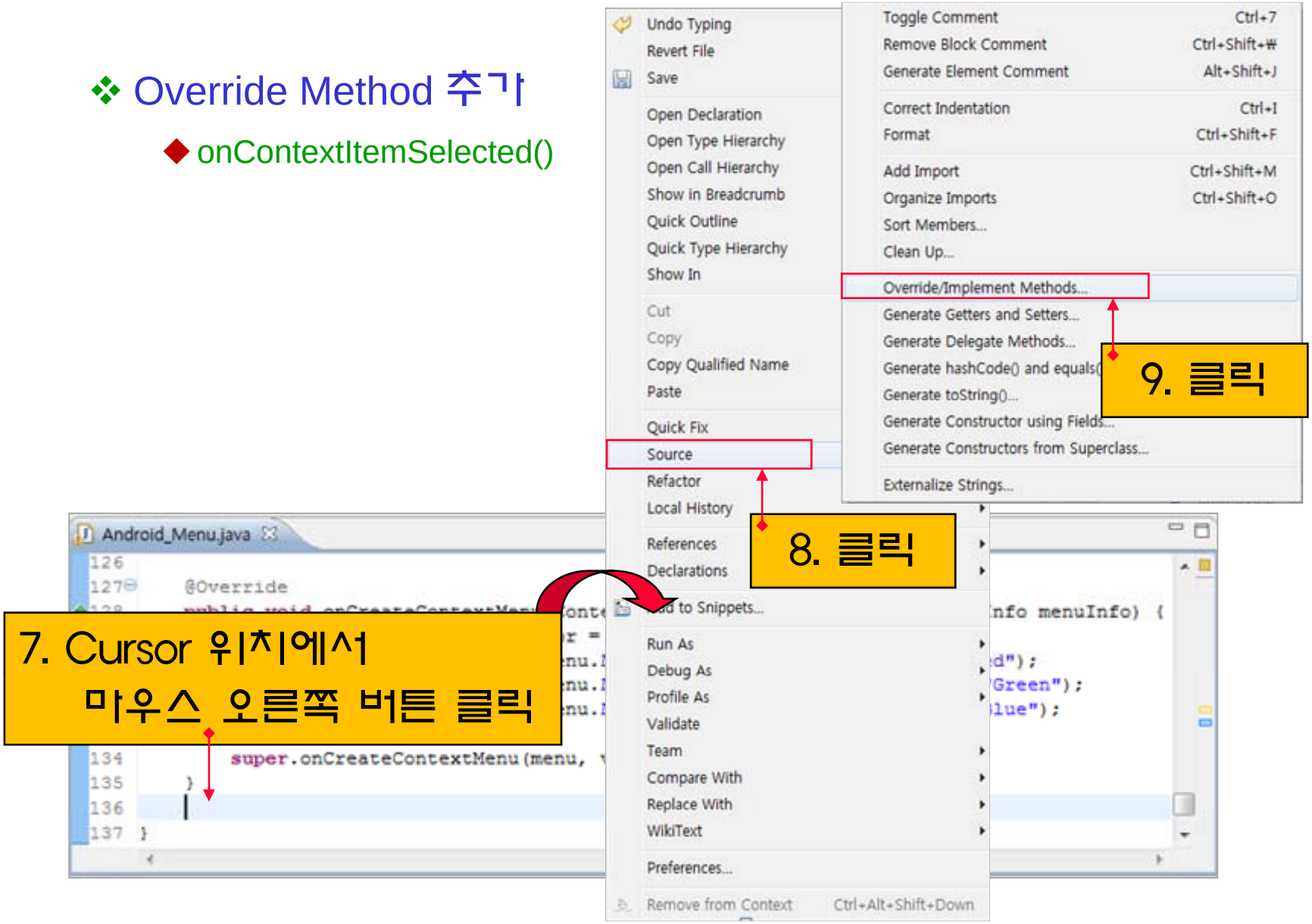
Android_Menu.java

```
127     @Override
128     public void onCreateContextMenu(ContextMenu menu, View v, ContextMenuInfo menuInfo) {
129         SubMenu mnuTextBackGroundColor = menu.addSubMenu("Text 배경색");
130         mnuTextBackGroundColor.add(Menu.NONE, ID_COLOR_RED, Menu.NONE, "Red");
131         mnuTextBackGroundColor.add(Menu.NONE, ID_COLOR_GREEN, Menu.NONE, "Green");
132         mnuTextBackGroundColor.add(Menu.NONE, ID_COLOR_BLUE, Menu.NONE, "Blue");
133
134         super.onCreateContextMenu(menu, v, menuInfo);
135     }
136
137 }
```

6. Coding

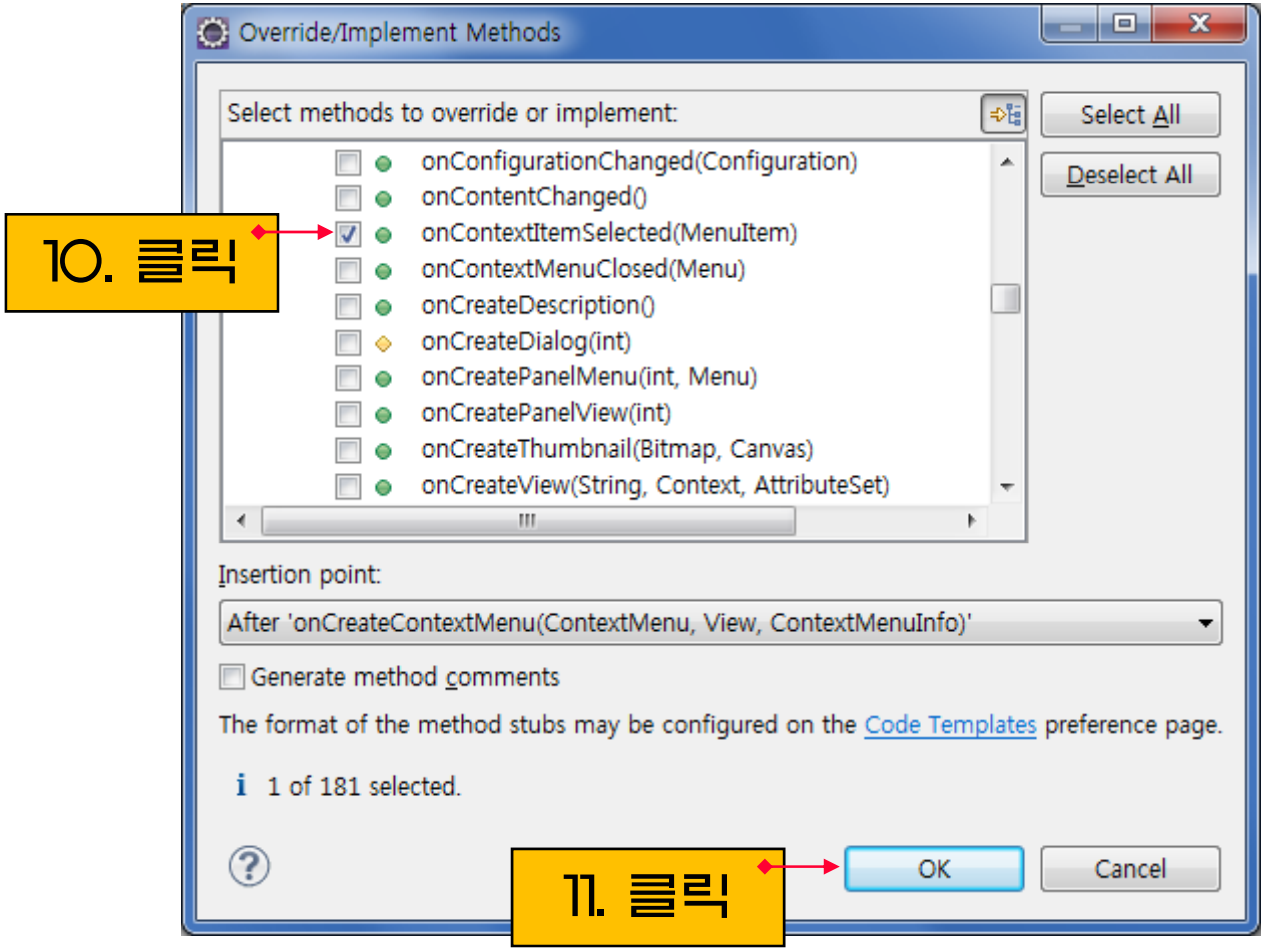
Context Menu 구현 (4)

- Override Method 추가
  - onContextItemSelected()



Context Menu 구현 (5)

❖ Override / Implement Methods 추가



Context Menu 구현 (6)

onContextItemSelected() Method 구현

❖ Text 배경색

- RED
- GREEN
- BLUE

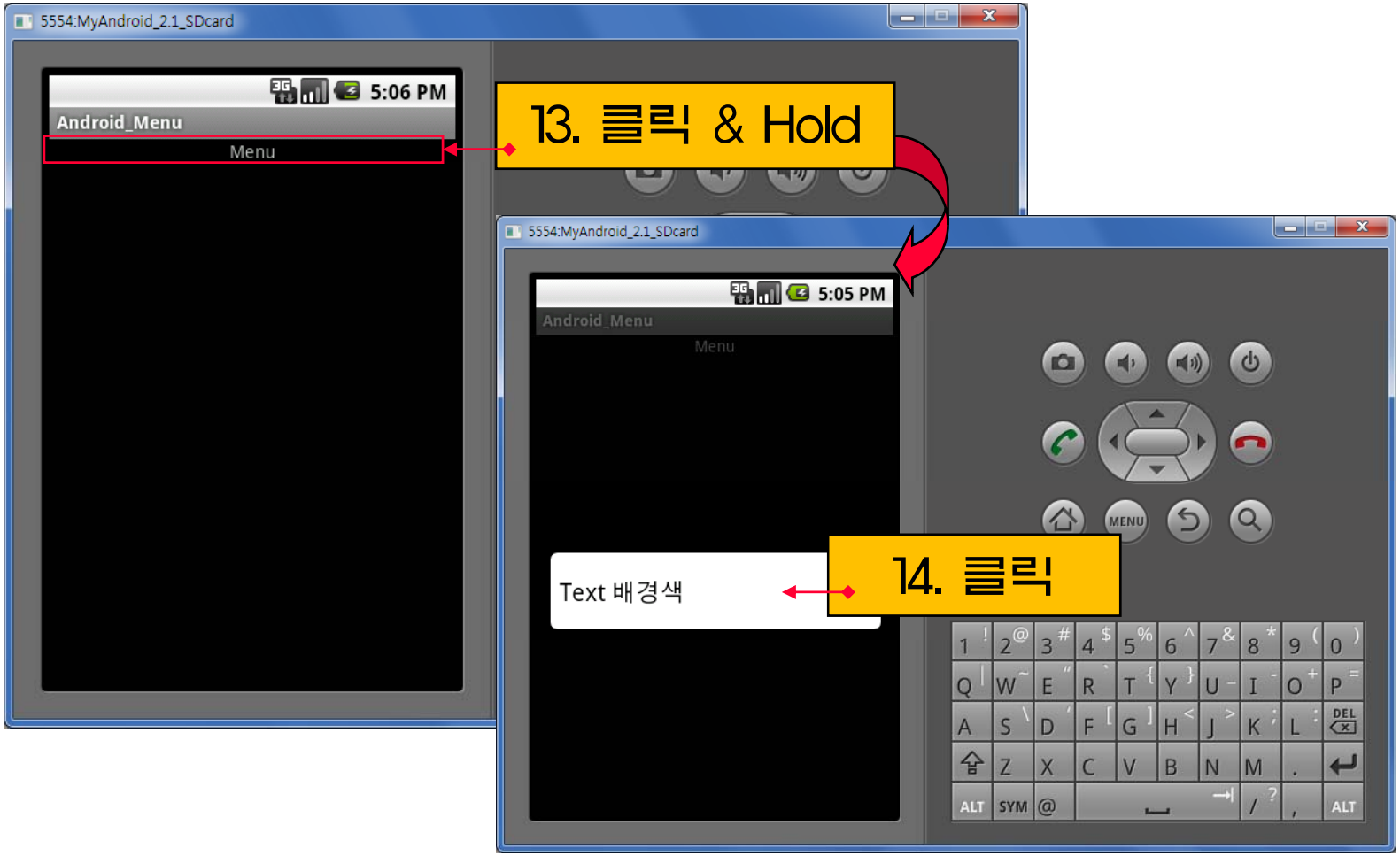
Android_Menu.java

```
136
137     @Override
138     public boolean onContextItemSelected(MenuItem item) {
139         switch (item.getItemId()) {
140         case ID_COLOR_RED:
141             objTxtView.setBackgroundColor(Color.RED);
142             return true;
143         case ID_COLOR_GREEN:
144             objTxtView.setBackgroundColor(Color.GREEN);
145             return true;
146         case ID_COLOR_BLUE:
147             objTxtView.setBackgroundColor(Color.BLUE);
148             return true;
149         }
150         return super.onContextItemSelected(item);
151     }
152
153 }
```

12. Coding

Context Menu 구현 (6)

❖ 실행 결과



Context Menu 구현 (7)

학습 요약

- Menu
- Options Menu
  - Icon Menu
  - Expanded Menu
- Context Menu