



4장 : 실습교재

옥 상 훈

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File 관리



My XML Pref (환경설정파일)

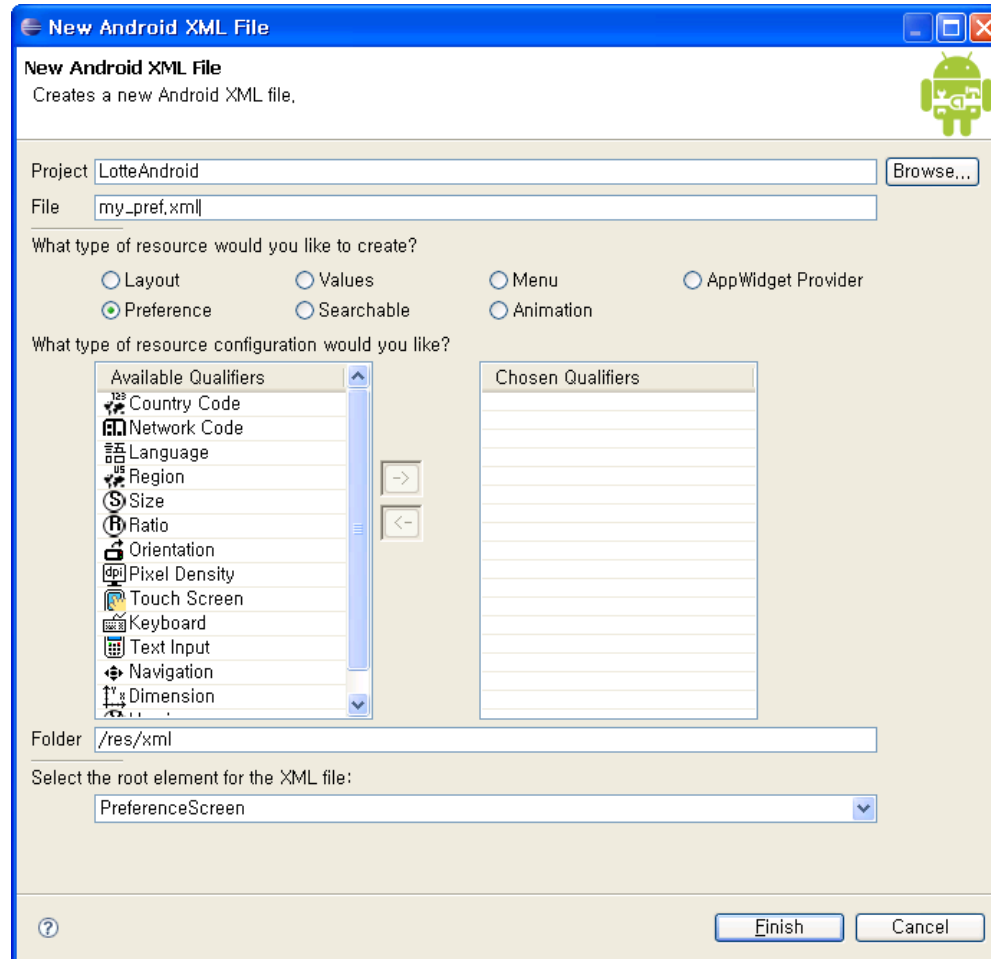
- ❑ 역할
 - ❑ XML을 이용한 환경설정 방법

- ❑ 작성할 파일
 - ❑ layout : 없음
 - ❑ xml환경설정파일: my_pref.xml
 - ❑ Activity : MyXMLPref.java



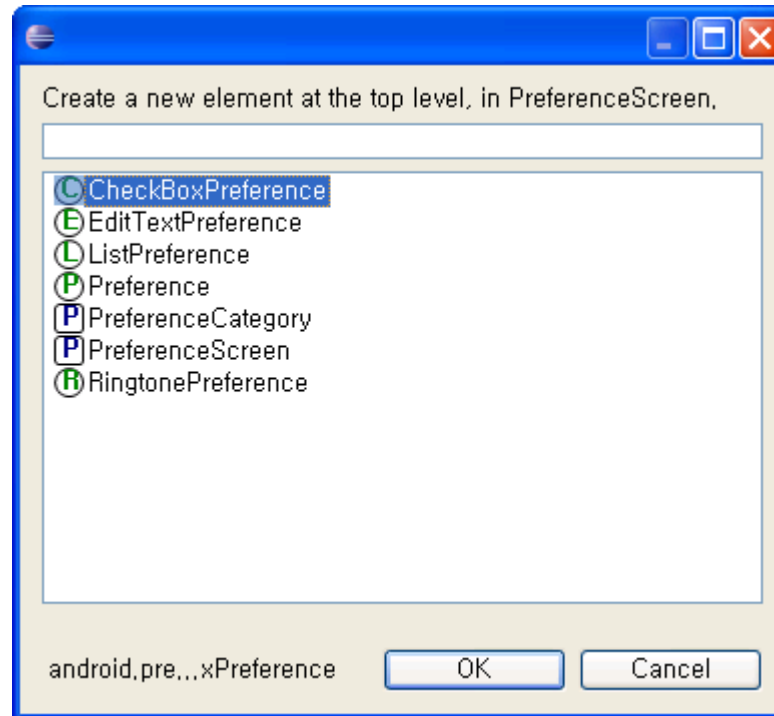
My XML Pref 1 단계 – 대상 : my_pref.xml

□ File – New – Android XML File



My XML Pref 2 단계 – 대상 : my_pref.xml

☐ Element 추가



My XML Pref 3 단계 – 대상 : my_pref.xml

❑ 체크박스 엘리먼트의 Key, Title, Summary 설정

The screenshot shows the Android XML editor interface. On the left, the 'Xml Elements' tree shows a 'PreferenceScreen' containing a 'my_pref_cb (CheckBoxPreference)' element. In the center, there are buttons for 'Add...', 'Remove...', 'Up', and 'Down'. On the right, the 'Attributes for CheckBoxPreference' panel is displayed. It includes a section for 'Base attributes available to CheckBoxPreference' and two expandable sections: 'Attributes from CheckBoxPreference' and 'Attributes from Preference'. The 'Attributes from Preference' section is currently expanded, showing fields for 'Key', 'Title', 'Summary', 'Order', 'Layout', 'Widget layout', 'Enabled', 'Selectable', 'Dependency', 'Persistent', 'Default value', and 'Should disable view'. The 'Key' field is set to 'my_pref_cb', the 'Title' field is set to '체크1', and the 'Summary' field is set to '체크박스형태 설정입니다.'.

Android Xml

Xml Elements

PreferenceScreen

my_pref_cb (CheckBoxPreference)

Add...

Remove...

Up

Down

Attributes for CheckBoxPreference

Base attributes available to CheckBoxPreference.

Attributes from CheckBoxPreference

Summary on

Summary off

Disable dependents state

Attributes from Preference

Key

Title

Summary

Order

Layout

Widget layout

Enabled

Selectable

Dependency

Persistent

Default value

Should disable view

Structure | my_pref.xml



My XML Pref 4 단계 – 대상 : MyXMLPref.java

- ❑ MyXMLPref 액티비티 생성
 - ❑ **public class** MyXMLPref **extends** PreferenceActivity
- ❑ onCreate() 함수 오버라이딩
 - ❑ addPreferencesFromResource(R.xml.my_pref);



My XML Pref 5 단계 – 대상 : my_pref.xml

- ❑ EditTextPreference : 텍스트형식
- ❑ ListPreference : 리스트형식

```
<ListPreference
    android:key="list_preference"
    android:title="배경색 변경"
    android:summary="List 형태 환경설정"
    android:entries="@array/colors"
    android:entryValues="@array/color_data"
    android:dialogTitle="배경색을 고르시오"
/>
```



My XML Pref 6 단계 – 대상 : res/values/arrays.xml

□ 배열 xml 생성

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string-array name="colors">
        <item>red</item>
        <item>yellow</item>
        <item>green</item>
        <item>blue</item>
        <item>orange</item>
    </string-array>

    <string-array name="color_data">
        <item>#FFFF0000</item>
        <item>#FFFFFFF0</item>
        <item>#FF00FF00</item>
        <item>#FF0000FF</item>
        <item>#FFCCCCCC</item>
    </string-array>
</resources>
```



My XML Pref 7 단계 – 대상 : my_pref.xml

- ❑ PreferenceCategory : 설정에 카테고리 추가
- ❑ RingtonePreference : 벨소리 형식
- ❑ 부모와 자식관계 설정

```
<CheckBoxPreference
    android:key="parent_checkbox_preference"
    android:title="환경설정 (부모)"
    android:summary="Dependency 환경설정" />
<CheckBoxPreference
    android:key="child_checkbox_preference"
    android:dependency="parent_checkbox_preference"
    android:layout="?android:attr/preferenceLayoutChild"
    android:title="환경설정(자식)"
    android:summary="Dependency 환경설정" />
```



My XML Pref 8 단계 – 대상 : my_pref.xml

□ 인텐트 호출

```
<PreferenceScreen
    android:title="MyActivityCycle Intent 호출"
    android:summary="MyActivityCycle">
    <intent android:action="android.intent.action.MAIN"
        android:targetPackage="okgosu.net"
        android:targetClass="okgosu.net.MyActivityCycle" />
</PreferenceScreen>
```

```
<PreferenceScreen
    android:title="ACTION DIAL 111"
    android:summary="okgosu.net.MyViewFlipper">
    <intent
        android:action="android.intent.action.DIAL"
        android:data="tel:111-1111" />
</PreferenceScreen>
```



My XML Pref 9 단계 – 대상 : my xml pref view.xml

❑ xml 레이아웃 생성

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/my_layout"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent">
    <TextView android:text="환경설정값 읽어오기:" android:id="@+id/txt_pref"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"> </TextView>
</LinearLayout>
```



My XML Pref 10 단계 – 대상 : MyXMLPrefView.java

- ❑ MyXMLPrefView 액티비티 생성
 - ❑ **public class** MyXMLPrefView **extends** Activity
- ❑ onCreate() 함수 오버라이딩

```
setContentView(R.layout.my_xml_pref_view);
```

```
SharedPreferences sp =
```

```
PreferenceManager.getDefaultSharedPreferences(this);
```

```
TextView txt_pref = (TextView)findViewById(R.id.txt_pref);
```

```
String value = sp.getString("my_pref_ed", "설정안됨");
```

```
value = new Boolean(sp.getBoolean("my_pref_cb", false)).toString();
```

```
txt_pref.setText("my_pref_cb의 설정값: " + value);
```



My XML Pref 11 단계 – 대상 : MyXMLPrefView.java

❑ onCreate() 함수 오버라이딩

```
LinearLayout mylayout =  
(LinearLayout)findViewById(R.id.my_layout);  
value = sp.getString("my_pref_list", "#CCCCCC");  
int color = Color.parseColor(value);  
mylayout.setBackgroundColor(color);
```



My Raw XML

☐ 목표

- ☐ getResources().openRawResource를 이용한 XML 사용
- ☐ DOM 파서 사용

☐ 작성할 파일

- ☐ MyRawXML.java
- ☐ res/raw/word.xml



1단계 : 작업 파일 - res/raw/word.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<words>
<word value="a"/>
<word value="b"/>
<word value="c"/>
</words>
```



2단계 : 작업파일 – MyRawXML.java

- ❑ MyRawXML 클래스 생성
 - ❑ MyRawXML **extends** ListActivity

- ❑ 멤버변수 선언
 - ❑ `ArrayList<String> items = new ArrayList<String>();`



3단계 : 작업파일 – MyRawXML.java

□ onCreate 오버라이딩

```
DocumentBuilder builder =  
    DocumentBuilderFactory.newInstance().newDocumentBuilder();  
InputStream in = getResources().openRawResource(R.raw.word);  
Document doc = builder.parse(in);  
NodeList words = doc.getElementsByTagName("word");  
for (int i=0; i<words.getLength(); i++) {  
    items.add(((Element)words.item(i)).getAttribute("value"));  
}  
setListAdapter(new ArrayAdapter<String>(this,  
    android.R.layout.simple_list_item_1, items));
```



My Res XML

☐ 목표

- ☐ getResources().getXml를 이용한 XML 사용
- ☐ SAX 파서 사용

☐ 작성할 파일

- ☐ MyResXML.java
- ☐ res/xml/word.xml



1단계 : 작업 파일 - res/xml/word.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<words>
<word value="aaa"/>
<word value="bbb"/>
<word value="cccc"/>
</words>
```



2단계 : 작업파일 – MyResXML.java

- ❑ MyResXML 클래스 생성
 - ❑ MyResXML **extends** ListActivity

- ❑ 멤버변수 선언
 - ❑ `ArrayList<String> items = new ArrayList<String>();`



3단계 : 작업파일 – MyResXML.java

□ onCreate 오버라이딩

```
XmlPullParser xpp = getResources().getXml(R.xml.word);  
while(xpp.getEventType() != XmlPullParser.END_DOCUMENT) {  
    if(xpp.getEventType() == XmlPullParser.START_TAG) {  
        if(xpp.getName().equals("word")) {  
            items.add(xpp.getAttributeValue(0));  
        }  
    }  
    xpp.next();  
}  
setListAdapter(new ArrayAdapter<String>(this,  
    android.R.layout.simple_list_item_1, items));
```



My Read Bin

- ❑ 목표
 - ❑ 이진파일 읽고 쓰기

- ❑ 작성할 파일
 - ❑ my_read_bin.xml
 - ❑ MyReadBin.java



1단계 : 작업파일 – my_read_bin.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
  xmlns:android="http://schemas.android.com/apk/res/android"
  android:layout_width="fill_parent" android:layout_height="fill_parent"
  android:orientation="vertical">

  <EditText android:id="@+id/edit_text"
    android:layout_width="fill_parent"
    android:layout_height="wrap_content"
    android:gravity="center_horizontal"
    android:textStyle="normal"/>
    <Button android:text="닫기" android:id="@+id/btn_close"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"/>
</LinearLayout>
```



2단계 : 작업파일 – MyReadBin.java

- ❑ MyReadBin 클래스 생성
 - ❑ MyReadBin **extends** Activity

- ❑ 멤버변수 선언
 - ❑ `final static String BIN_FILE_NAME = "my_bin.txt";`
 - ❑ `EditText edit_text;`



3단계 : 작업파일 – MyReadBin.java

- ❑ onCreate 오버라이딩
 - ❑ setContentView(R.layout.my_read_bin);
 - ❑ edit_text = (EditText)findViewById(R.id.edit_text);



4단계 : 작업파일 – MyReadBin.java

□ onResume 오버라이딩

```
super.onResume();
try {
    InputStream in = openFileInput(BIN_FILE_NAME);
    InputStreamReader ins = new InputStreamReader(in);
    BufferedReader reader = new BufferedReader(ins);
    String str;
    StringBuffer buf = new StringBuffer();
    while((str=reader.readLine())!=null) {
        buf.append(str+"\n");
    }
    in.close();
    edit_text.setText(buf.toString());
} catch (IOException e) {
    throw new RuntimeException(e);
}
```



5단계 : 작업파일 – MyReadBin.java

```
super.onPause();
try {
    OutputStreamWriter out = new
    OutputStreamWriter(openFileOutput(BIN_FILE_NAME,0));
    out.write(edit_text.getText().toString());
    out.close();
} catch (Throwable e) {
    throw new RuntimeException(e);
}
```



수고하셨습니다 ^^/

