



디렉토리 파일 및 폴더 목록

프로젝트 생성

○ 프로젝트 정보

- Application Name: DirectoryRead
- Minimum SDK : API 18
- Add an activity to Mobile: Blank Activity
- Activity Name: MainActivity
- Layout Name: activity_main
- Title: MainActivity

```
activity_main.xml *  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent"  
    android:orientation="vertical"  
    tools:context=".MainActivity">  
  
    <Button  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:id="@+id/btn"  
        android:text="시스템 폴더 및 파일 목록 보기" />  
  
    <EditText  
        android:id="@+id/edt"  
        android:layout_width="match_parent"  
        android:layout_height="wrap_content"  
    />  
</LinearLayout>
```

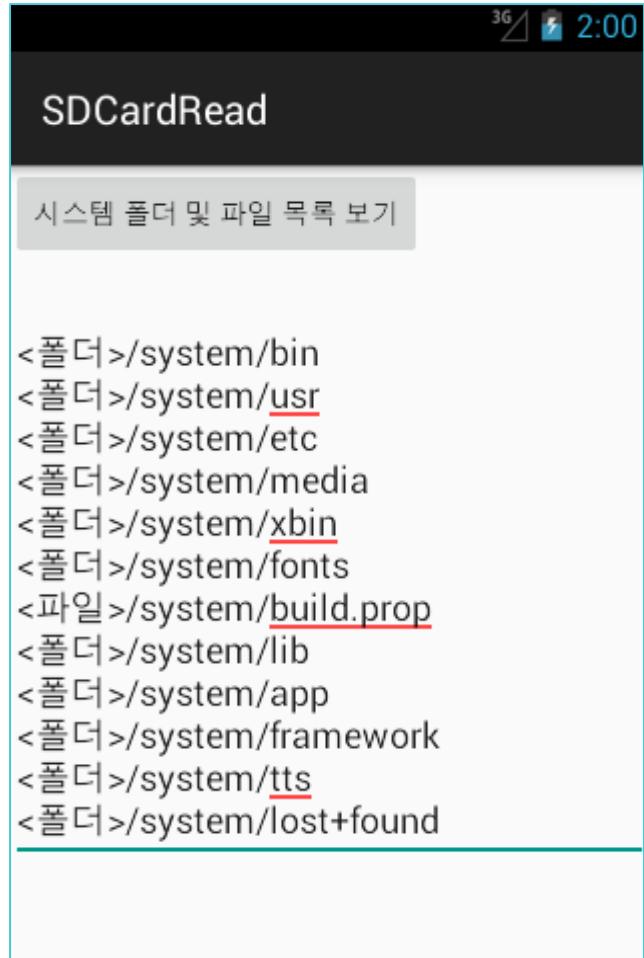
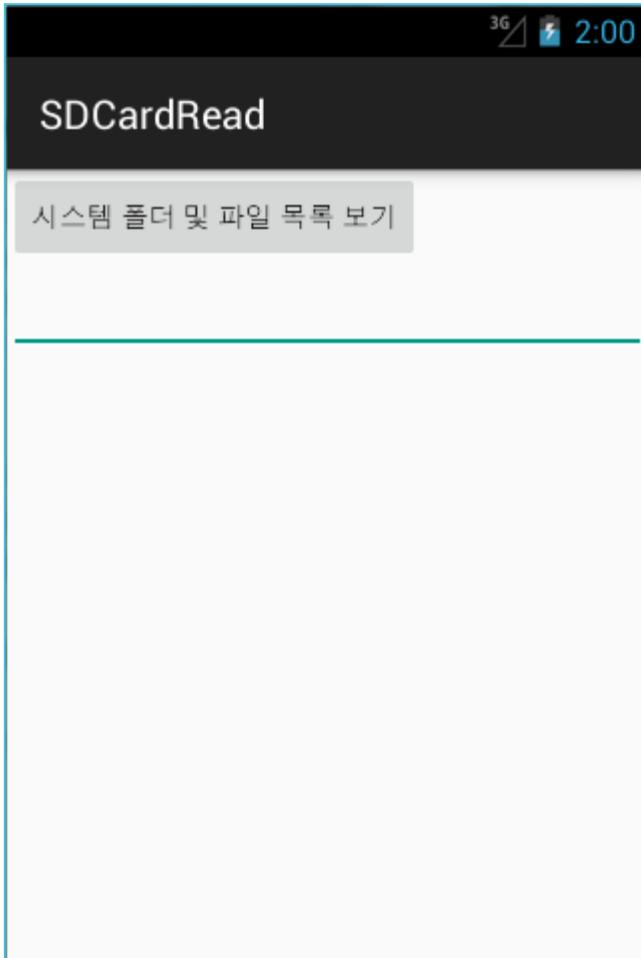


MainActivity.java X

```
1 package com.example.administrator.sdcardread;
2
3 +import ...
11
12  public class MainActivity extends AppCompatActivity {
13
14     @Override
15  protected void onCreate(Bundle savedInstanceState) {
16         super.onCreate(savedInstanceState);
17         setContentView(R.layout.activity_main);
18
19         Button btn;
20         final EditText edt;
21         btn = (Button) findViewById(R.id.btn);
22         edt = (EditText) findViewById(R.id.edt);
23 }
```

```
>MainActivity.java x

23
24     btn.setOnClickListener(new View.OnClickListener() {
25         @Override
26         public void onClick(View v) {
27             String sysDir = Environment.getExternalStorageDirectory()
28                 .getAbsolutePath();
29             File[] sysFiles = (new File(sysDir)).listFiles();
30
31             String strFname;
32             for(int i =0 ; i <sysFiles.length; i++){
33                 if(sysFiles[i].isDirectory() == true)
34                     strFname = "<폴더>" + sysFiles[i].toString();
35                 else
36                     strFname = "<파일>" + sysFiles[i].toString();
37
38                     edt.setText(edt.getText() + "\n" + strFname);
39             }
40         }
41     });
42 }
43 }
```



외부파일 입출력



○ 프로젝트 정보

- Application name: FileIOTest
- Minimum SDK : API 18
- Add an activity to Mobile : Empty Activity
- Activity Name: MainActivity
- Layout Name: activity_main



activity_main.xml

```
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     android:layout_width="match_parent"
4     android:layout_height="match_parent"
5     android:orientation="vertical">
6     <LinearLayout
7         android:layout_width="match_parent"
8         android:layout_height="match_parent"
9         android:layout_weight="1">
10        <EditText
11            android:id="@+id/EditText01"
12            android:layout_width="match_parent"
13            android:layout_height="match_parent"
14            android:singleLine="false" />
15    </LinearLayout>
16    <LinearLayout
17        android:id="@+id/Layout03"
18        android:layout_width="wrap_content"
19        android:layout_height="wrap_content"
20        android:orientation="horizontal">
21        <Button
22            android:id="@+id/read"
23            android:layout_width="wrap_content"
24            android:layout_height="wrap_content"
25            android:text="Read" />
26        <Button
27            android:id="@+id/write"
28            android:layout_width="wrap_content"
29            android:layout_height="wrap_content"
30            android:text="Write" />
31    </LinearLayout>
32 </LinearLayout>
```

화면설계

FileInOutputTest

READ WRITE

C MainActivity.java ×

```
1 package com.example.admin.fileiotest;
2
3 import android.os.Bundle;
4 import android.os.Environment;
5 import android.support.v7.app.AppCompatActivity;
6 import android.view.View;
7 import android.widget.Button;
8 import android.widget.EditText;
9 import android.widget.Toast;
10
11 import java.io.BufferedReader;
12 import java.io.File;
13 import java.io.FileReader;
14 import java.io.FileWriter;
15 import java.io.PrintWriter;
16
17 public class MainActivity extends AppCompatActivity {
```

추후 import 확인

```
C MainActivity.java x
16
17 public class MainActivity extends AppCompatActivity {
18     EditText edit;
19     File file;
20     File path;
21
22     @Override
23     protected void onCreate(Bundle savedInstanceState) {
24         super.onCreate(savedInstanceState);
25         setContentView(R.layout.activity_main);
26         path = Environment.getExternalStoragePublicDirectory(
27             Environment.DIRECTORY_DOWNLOADS);
28         file = new File(path, "test.txt");
29
30         String state = Environment.getExternalStorageState();
31         if (state.equals(Environment.MEDIA_MOUNTED) == false) {
32             Toast.makeText(getApplicationContext(), "외부 스토리지 실패",
33                 Toast.LENGTH_SHORT).show();
34         }
35         edit = (EditText) findViewById(R.id.EditText01);
36         final Button readButton = (Button) findViewById(R.id.read);
37         Button writeButton = (Button) findViewById(R.id.write);
38 }
```

외부 파일 경로

외부 파일 경로에 문제가 있는가?

```
>MainActivity.java x
37     Button writeButton = (Button) findViewById(R.id.write);
38
39     readButton.setOnClickListener(new View.OnClickListener() {
40         public void onClick(View v) {
41             try {
42                 FileReader in = new FileReader(file);
43                 StringBuffer buffer = new StringBuffer();
44                 BufferedReader reader = new BufferedReader(in);
45
46                 String str = reader.readLine();
47                 while (str != null) {
48                     buffer.append(str + "\n");
49                     str = reader.readLine();
50                 }
51                 edit.setText(new String(buffer));
52                 reader.close();
53                 Toast.makeText(getApplicationContext(), "Read",
54                     Toast.LENGTH_LONG).show();
55             } catch (Exception e) {
56                 e.printStackTrace();
57                 Toast.makeText(getApplicationContext(), "Read Field",
58                     Toast.LENGTH_LONG).show();
59             }
60         }
61     });
62
63 }
```

읽어온 파일에 내용이
없을 때까지 반복

```
>MainActivity.java x  
62  
63  
64  
65 ↑ writeButton.setOnClickListener(new View.OnClickListener() {  
66     public void onClick(View v) {  
67         try {  
68             FileWriter wr = new FileWriter(file, false);  
69             PrintWriter writer = new PrintWriter(wr);  
70             writer.print(edit.getText().toString());  
71             writer.close();  
72             Toast.makeText(getApplicationContext(), "Write",  
73                     Toast.LENGTH_LONG).show();  
74         } catch (Exception e) {  
75             e.printStackTrace();  
76             Toast.makeText(getApplicationContext(), "Write Field",  
77                     Toast.LENGTH_LONG).show();  
78         }  
79     }  
80 }  
81 }  
82 }
```

에디트 텍스트
의 내용을 파일
에 출력

FileWriter(file, true) ← "true"명 기존 파일에 추가 허용

```
<?xml version="1.0" encoding="utf-8" ?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.admin.fileiotest">

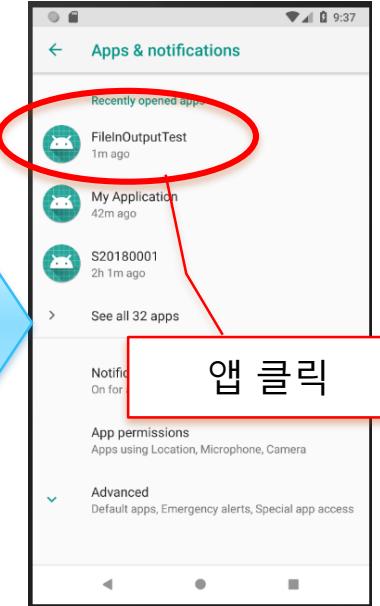
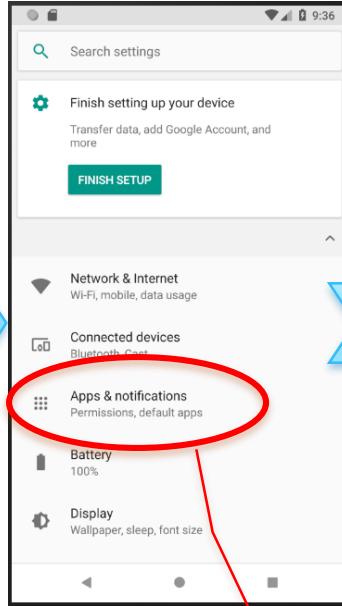
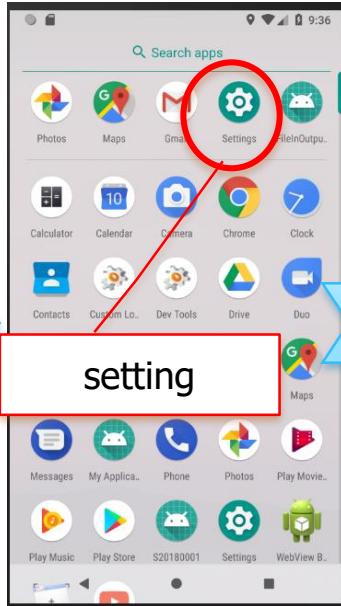
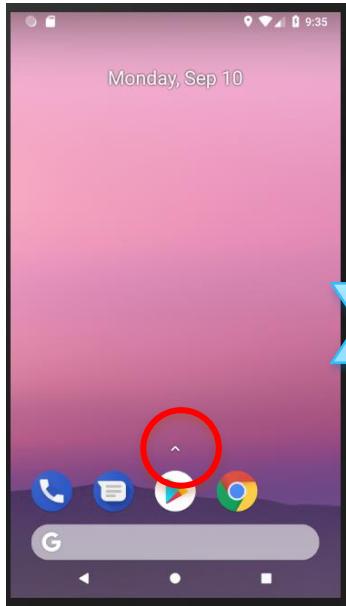
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="FileIOTest"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

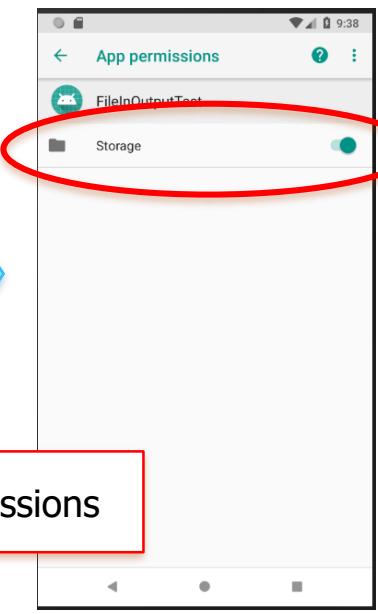
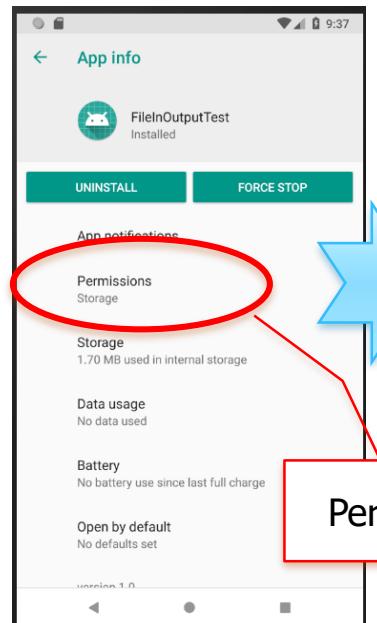
</manifest>
```

외부 저장매체 사용 권한



앱 클릭

Apps &
notifications



Permissions

권한 부여

앱 권한
부여하기

