**ALARM MANAGER**

**I. AndroidManifest.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools">  
  
 <application  
 android:allowBackup="true"  
 android:dataExtractionRules="@xml/data\_extraction\_rules"  
 android:fullBackupContent="@xml/backup\_rules"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.AlarmManager"  
 tools:targetApi="31">  
 <receiver  
 android:name=".MyReceiver"  
 android:enabled="true"  
 android:exported="true">  
 </receiver>  
  
 <activity  
 android:name=".MainActivity"  
 android:exported="true">  
   
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 </application>  
</manifest>

**II. Build.gradle (Module :app)**

buildFeatures **{** viewBinding true  
**}**

**III. Java**

1. **MainActivity**

package com.example.alarmmanager  
  
import android.app.AlarmManager  
import android.app.PendingIntent  
import android.content.Context  
import android.content.Intent  
import androidx.appcompat.app.AppCompatActivity  
import android.os.Bundle  
import com.example.alarmmanager.databinding.ActivityMainBinding  
import java.util.Date  
  
class MainActivity : AppCompatActivity() {  
 lateinit var alarmMng: AlarmManager  
 lateinit var binding: ActivityMainBinding  
 override fun onCreate(savedInstanceState: Bundle?) {  
 super.onCreate(savedInstanceState)  
 binding = ActivityMainBinding.inflate(*layoutInflater*)  
 setContentView(binding.*root*)  
  
 alarmMng = getSystemService(Context.*ALARM\_SERVICE*) as AlarmManager  
 binding.btnCreate.setOnClickListener **{** val seconds = binding.etSeconds.*text*.toString().*toInt*() \* 1000  
 val intent = Intent(this, MyReceiver::class.*java*)  
 val pendingIntent = PendingIntent.getBroadcast(this, 0, intent, PendingIntent.*FLAG\_UPDATE\_CURRENT*)  
 alarmMng.setExact(AlarmManager.*RTC\_WAKEUP*, System.currentTimeMillis() + seconds, pendingIntent)  
 binding.tvResult.append("\n"+Date().toString())  
 **}** binding.btnUpdate.setOnClickListener **{** val seconds = binding.etSeconds.*text*.toString().*toInt*() \* 1000  
 val intent = Intent(this, MyReceiver::class.*java*)  
 val pendingIntent = PendingIntent.getBroadcast(this, 0, intent, PendingIntent.*FLAG\_UPDATE\_CURRENT*)  
 alarmMng.setExact(AlarmManager.*RTC\_WAKEUP*, System.currentTimeMillis() + seconds, pendingIntent)  
 binding.tvResult.append("\n Update:"+Date().toString())  
 **}** binding.btnCancel.setOnClickListener **{** val intent = Intent(this, MyReceiver::class.*java*)  
 val pendingIntent = PendingIntent.getBroadcast(this, 0, intent, PendingIntent.*FLAG\_UPDATE\_CURRENT*)  
 alarmMng.cancel(pendingIntent)  
 binding.tvResult.append("\n Cancel:"+Date().toString())  
 **}** }  
}

1. **MyReceiver**

package com.example.alarmmanager  
  
import android.content.BroadcastReceiver  
import android.content.Context  
import android.content.Intent  
import android.widget.Toast  
  
class MyReceiver : BroadcastReceiver() {  
  
 override fun onReceive(context: Context?, intent: Intent?) {  
 Toast.makeText(context, "MyReceiver", Toast.*LENGTH\_SHORT*).show()  
 }  
}

**III. Res -> Layout**

1. **activity\_main.xml**

*<?*xml version="1.0" encoding="utf-8"*?>*<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:padding="20dp"  
 tools:context=".MainActivity">

<EditText  
 android:id="@+id/etSeconds"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"/>

<LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:weightSum="3">  
 <Button  
 android:id="@+id/btnCreate"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:layout\_margin="5dp"  
 android:text="Create"  
 android:textSize="16dp"  
 android:textStyle="bold"/>  
 <Button  
 android:id="@+id/btnUpdate"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:layout\_margin="5dp"  
 android:text="Update"  
 android:textSize="16dp"  
 android:textStyle="bold"/>  
 <Button  
 android:id="@+id/btnCancel"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:layout\_margin="5dp"  
 android:text="Cancel"  
 android:textSize="16dp"  
 android:textStyle="bold"/>  
 </LinearLayout>  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content">  
  
 <TextView  
 android:id="@+id/tvResult"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:textSize="18dp"  
 android:padding="10dp"  
 android:gravity="center"  
 android:text=""  
 android:textStyle="bold"/>  
 </LinearLayout>  
</LinearLayout>

