

TD07 Correction

Matière : ATELIER DEVELOPPEMENT MOBILE AVANCE

Classes : SEM31

```
public class MainActivity extends Activity {
    private TextView tvLuminance;
    private BroadcastReceiver br;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        init();
    }
    private void init() {
        tvLuminance = (TextView) findViewById(R.id.tvLuminance);
        ajouterEcouteur();
    }
    private void reglerEclairage(float eclaireage) {
        LayoutParams lp = getWindow().getAttributes();
        lp.screenBrightness = eclaireage; // 0.0 - 1.0
        getWindow().setAttributes(lp);
    }

    private void ajouterEcouteur() {
        br = new BroadcastReceiver() {
            @Override
            public void onReceive(Context context, Intent intent) {
                actualiser(intent);
            }
        };
    }
    private void demarrerService() {
        Intent i = new Intent(this, LightService.class);
        startService(i);
    }
    private void arreterService() {
        Intent i = new Intent(this, LightService.class);
        stopService(i);
    }
    @Override
    protected void onResume() {
        demarrerService();
        registerReceiver(br, new IntentFilter(LightService.LUMINANCE));
        super.onResume();
    }
    @Override
    protected void onPause() {
        arreterService();
        unregisterReceiver(br);
        super.onPause();
    }
}
```

```

protected void actualiser(Intent intent) {
    double luminance = intent.getDoubleExtra("luminance", 0);
    DecimalFormat df = new DecimalFormat("0.000");
    String LuminanceF = df.format(luminance);
    tvLuminance.setText(LuminanceF);
    float eclairage = 0.2f;
    if (luminance < 100)
        eclairage = 0.5f;
    else if (luminance < 400)
        eclairage = 0.75f;
    else
        eclairage = 1;
    reglerEclairage(eclairage);
}
}

public class LightService extends Service implements SensorEventListener {
    public static final String LUMINANCE = "com.lum.luminance";
    private SensorManager smg;
    private Sensor lum;
    @Override
    public IBinder onBind(Intent intent) {
        return null;
    }
    @Override
    public void onCreate() {
        super.onCreate();
        init();
    }
    private void init() {
        smg = (SensorManager) getSystemService(SENSOR_SERVICE);
        lum = smg.getDefaultSensor(Sensor.TYPE_LIGHT);
        smg.registerListener(this, lum, SensorManager.SENSOR_DELAY_UI);
    }
    @Override
    public void onDestroy() {
        smg.unregisterListener(this, lum);
        super.onDestroy();
    }

    @Override
    public void onSensorChanged(SensorEvent event) {
        if (event.sensor.getType() == Sensor.TYPE_LIGHT) {
            double lum = event.values[0];
            Intent i = new Intent();
            i.setAction(LUMINANCE);
            i.putExtra("luminance", lum);
            sendBroadcast(i);
        }
    }

    @Override
    public void onAccuracyChanged(Sensor sensor, int accuracy) {
    }
}

```