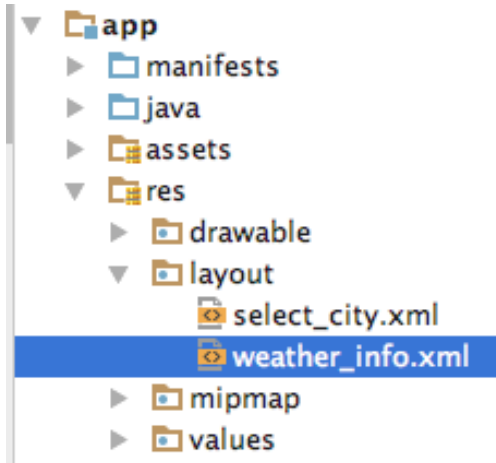


ProgressBar 完成更新旋转

使用 ProgressBar 可巧妙地完成更新按钮的旋转效果，实现在用户点击更新按钮后，更新按钮不可点击，而是显示更新旋转动画。

主要步骤

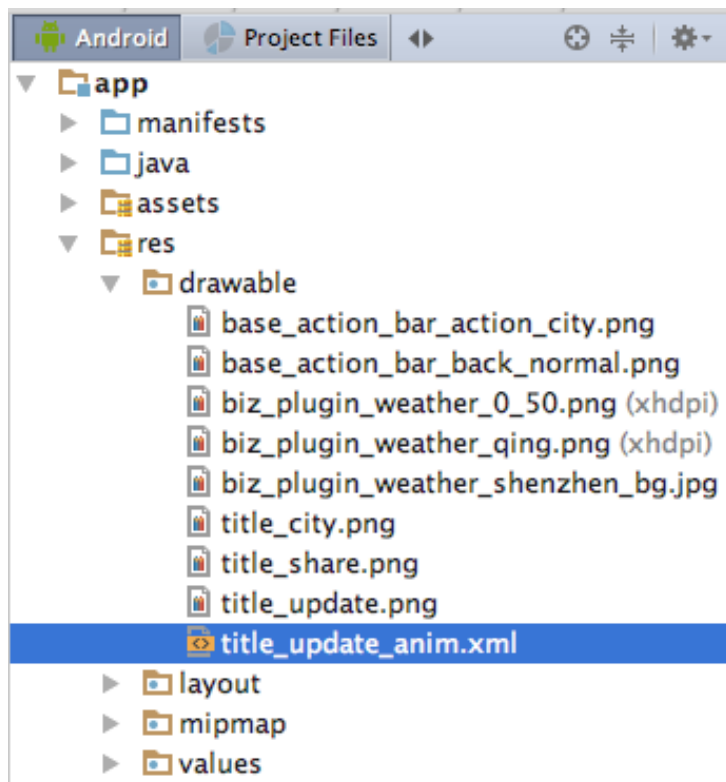
1. 布局文件中添加 ProgressBar
在 weather_info.xml 中添加 ProgressBar



在工具栏中添加 ProgressBar，位置应与更新按钮（title_update_btn）一致
其中，visibility 设置为 “gone” 表示当前不可见

```
<ProgressBar
    android:id="@+id/title_update_progress"
    android:visibility="gone"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:indeterminate="true"
    android:layout_alignParentRight="true"
    android:indeterminateDrawable="@drawable/title_update_anim" />
```

之后创建 title_update_anim.xml 文件



在其中添加



调整 toDegrees=" 360.0" 可以调整旋转速度，嫌转的慢的同学可以设置大一点，3600 都可以

2. 在更新时使用旋转动画

在 MainActivity.java 中创建 setUpdateProgress() 用于隐藏原更新代码，显示旋转动画，以达成用户无法继续点击更新按钮，以及显示旋转的效果。

```

/*
隐藏更新按钮
显示动画
*/
void setUpdateProgress(){
    mUpdateBtn=(ImageView) findViewById(R.id.title_update_btn);
    mUpdateProgress=(ProgressBar)findViewById(R.id.title_update_progress);
    mUpdateBtn.setVisibility(View.GONE);
    mUpdateProgress.setVisibility(View.VISIBLE);
}

```

之前的分享按钮是使用“layout_toLeftOf="@id/title_update_btn”属性，但由于更新按钮被隐藏，分享按钮就无法找到更新按钮，从而造成布局混乱，所以要在更新按钮隐藏后，将分享按钮的布局改成

“layout_toLeftOf="@id/title_update_progress”

因此添加

```

void setUpdateProgress(){
    mUpdateBtn=(ImageView) findViewById(R.id.title_update_btn);
    mUpdateProgress=(ProgressBar)findViewById(R.id.title_update_progress);
    mTitleShare=(ImageView)findViewById(R.id.title_share);

    mUpdateBtn.setVisibility(View.GONE);

    RelativeLayout.LayoutParams params=(RelativeLayout.LayoutParams)mTitleShare.getLayoutParams();
    params.addRule(RelativeLayout.LEFT_OF,R.id.title_update_progress);
    mTitleShare.setLayoutParams(params);

    mUpdateProgress.setVisibility(View.VISIBLE);
}

```

在更新按钮被点击时调用

```

@Override
public void onClick(View view){

    if(view.getId()==R.id.title_city_manager){
        Intent i=new Intent(this,SelectCity.class);
        //startActivity(i);
        startActivityForResult(i,1);
    }

    if (view.getId()==R.id.title_update_btn){
        setUpdateProgress();

        SharedPreferences sharedPreferences=getSharedPreferences("config",MODE_PRIVATE);
        String cityCode=sharedPreferences.getString("main_city_code","101010100");
        Log.d("myWeather",cityCode);

        if (NetUtil.getNetworkState(this)!=NetUtil.NETWORK_NONE){
            Log.d("myWeather","网络ok");
            queryWeatherCode(cityCode);
            // Toast.makeText(MainActivity.this,"网络ok! ",Toast.LENGTH_LONG).show();
        }else
        {
            Log.d("myWeather","网络挂了");
            Toast.makeText(MainActivity.this,"网络挂了! ",Toast.LENGTH_LONG).show();
        }
    }
}

```

当天气信息更新完成时，我们需要停止动画效果，显示更新按钮

```

/*
显示更新按钮
隐藏动画
*/
void setUpdateBtn(){
    mUpdateBtn=(ImageView) findViewById(R.id.title_update_btn);
    mUpdateProgress=(ProgressBar)findViewById(R.id.title_update_progress);
    mUpdateBtn.setVisibility(View.VISIBLE);
    mUpdateProgress.setVisibility(View.GONE);
}

```

分享按钮设置在更新按钮的左边

```

void setUpdateBtn(){
    mUpdateBtn=(ImageView) findViewById(R.id.title_update_btn);
    mUpdateProgress=(ProgressBar)findViewById(R.id.title_update_progress);
    mUpdateBtn.setVisibility(View.VISIBLE);

    mTitleShare=(ImageView)findViewById(R.id.title_share);

    RelativeLayout.LayoutParams params=(RelativeLayout.LayoutParams)mTitleShare.getLayoutParams();
    // params.addRule(RelativeLayout.ALIGN_PARENT_RIGHT);
    params.addRule(RelativeLayout.LEFT_OF,R.id.title_update_btn);
    mTitleShare.setLayoutParams(params);

    mUpdateProgress.setVisibility(View.GONE);
}

```

在 updateTodayWeather()结束时调用

```

void updateTodayWeather(TodayWeather todayWeather){
    city_name_Tv.setText(todayWeather.getCity()+"天气");
    cityTv.setText(todayWeather.getCity());
    timeTv.setText(todayWeather.getUpdatetime()+"发布");
    humidityTv.setText("湿度: "+todayWeather.getShidu());
    nowTv.setText("温度: "+todayWeather.getWendu());
    pmDataTv.setText(todayWeather.getPm25());
    pmQualityTv.setText(todayWeather.getQuality());
    weekTv.setText(todayWeather.getDate());
    temperatureTv.setText(todayWeather.getHigh()+"~"+todayWeather.getLow());
    climateTv.setText(todayWeather.getType());
    windTv.setText("风力: "+todayWeather.getFengli());
    Toast.makeText(MainActivity.this,"更新成功!",Toast.LENGTH_SHORT).show();

    SharedPreferences settings
    = (SharedPreferences)getSharedPreferences("config",MODE_PRIVATE);
    SharedPreferences.Editor editor = settings.edit();
    editor.putString("city",todayWeather.getCity());
    editor.putString("updatetime",todayWeather.getUpdatetime());
    editor.putString("wendu",todayWeather.getWendu());
    editor.putString("shidu",todayWeather.getShidu());
    editor.putString("pm25",todayWeather.getPm25());
    editor.putString("quality",todayWeather.getQuality());
    editor.putString("fengxiang",todayWeather.getFengxiang());
    editor.putString("fengli",todayWeather.getFengli());
    editor.putString("date",todayWeather.getDate());
    editor.putString("high",todayWeather.getHigh());
    editor.putString("low",todayWeather.getLow());
    editor.putString("type",todayWeather.getType());
    editor.commit();
    setUpdateBtn();
}

```

3. 展示

为方便测试，在 `setUpDateBtn()` 之前 `sleep 2 秒` 观察效果

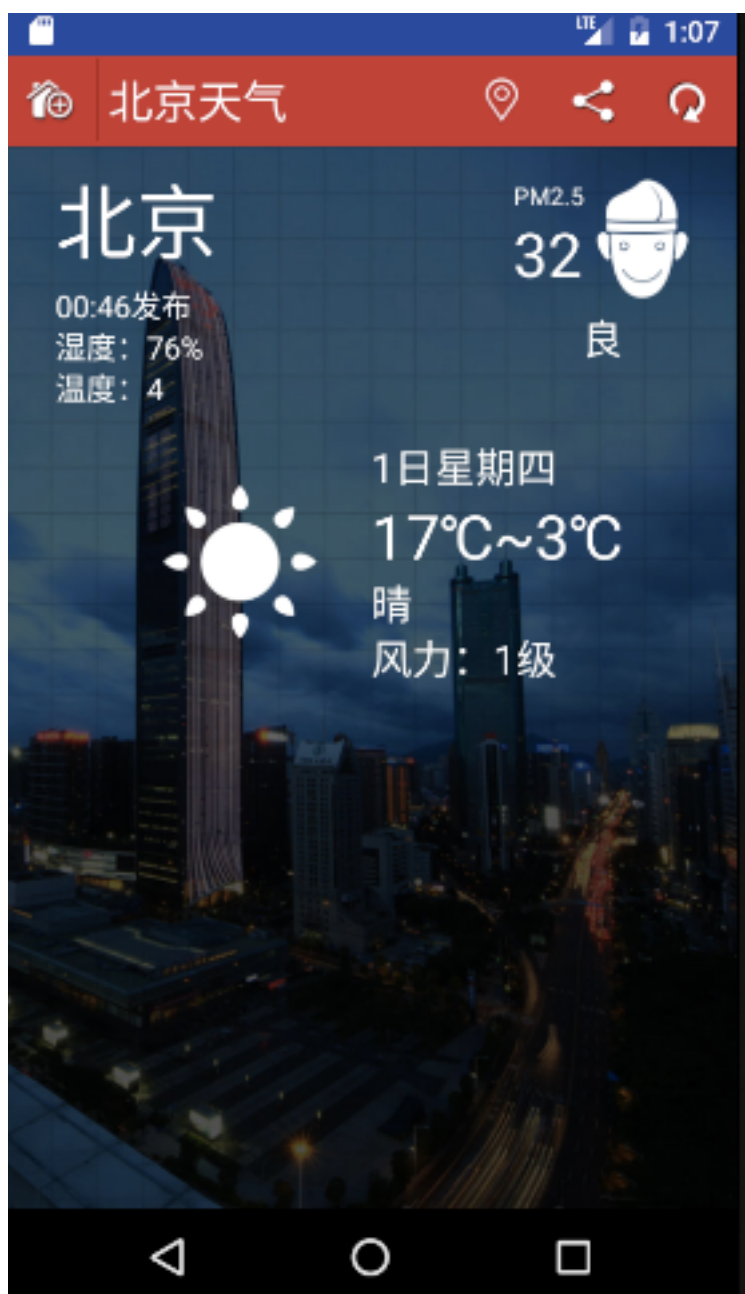
```
void updateTodayWeather(TodayWeather todayWeather){
    city_name_Tv.setText(todayWeather.getCity()+"天气");
    cityTv.setText(todayWeather.getCity());
    timeTv.setText(todayWeather.getUpdatetime()+"发布");
    humidityTv.setText("湿度: "+todayWeather.getShidu());
    nowTv.setText("温度: "+todayWeather.getWendu());
    pmDataTv.setText(todayWeather.getPm25());
    pmQualityTv.setText(todayWeather.getQuality());
    weekTv.setText(todayWeather.getDate());
    temperatureTv.setText(todayWeather.getHigh()+"~"+todayWeather.getLow());
    climateTv.setText(todayWeather.getType());
    windTv.setText("风力: "+todayWeather.getFengli());
    Toast.makeText(MainActivity.this,"更新成功!",Toast.LENGTH_SHORT).show();

    SharedPreferences settings
        = (SharedPreferences)getSharedPreferences("config",MODE_PRIVATE);
    SharedPreferences.Editor editor = settings.edit();
    editor.putString("city",todayWeather.getCity());
    editor.putString("updatetime",todayWeather.getUpdatetime());
    editor.putString("wendu",todayWeather.getWendu());
    editor.putString("shidu",todayWeather.getShidu());
    editor.putString("pm25",todayWeather.getPm25());
    editor.putString("quality",todayWeather.getQuality());
    editor.putString("fengxiang",todayWeather.getFengxiang());
    editor.putString("fengli",todayWeather.getFengli());
    editor.putString("date",todayWeather.getDate());
    editor.putString("high",todayWeather.getHigh());
    editor.putString("low",todayWeather.getLow());
    editor.putString("type",todayWeather.getType());
    editor.commit();

    try{
        Thread.sleep(2000);
    }catch (Exception e ){

    }

    setUpDateBtn();
}
```



可以看到真的旋转了