

Tetris - Basic Implementation Practice for Android

deepwaterooo

March 23, 2016

Contents

1	Debugging, Better version	1
1.1	TODO:	1
2	其它类似游戏参考	1
2.1	iTetris 俄罗斯方块	1
3	References	2
3.1	eventQueue vs SurfaceView threads	2
3.2	SurfaceView	2
3.3	gestures	2

1 Debugging, Better version

1.1 TODO:

- apply MotionEvent queue, use either SurfaceView with multiple threads (if possible) or GLSurfaceView.
- apply sound effects to make the game more fun.
- The above 2, either one goes first.
- One more "Hold" choice besides the Next Rect for peek, lower priority.
- Noticed more bugs, but I am currently focusing on make the game super.
- Fixed minor mindless codes when I coded with headache.
-
- Fixed all the noticed carelessly-produced flying bugsss.... A basic game is in good shape now, will work on "polish" for viewing, sounds, efficiency during following days when I have time.
- Has good chance/potential to make it a great game with Event Queue for motion events.
- Recently sick, and last night got very bad sleep for about 4 hours (6am - 10am), not in very good condition now.
- Because used SurfaceView threading, the game is much more smoother than the previous version, ideas are pretty straight forward, but still debugging...
- Android threading is something that I have barely tried before, but I will work on this one this time, hopefully will make this TTetris a fully functional game for major functionality.
- Debugging, and production is on the way.

2 其它类似游戏参考

2.1 iTetris 俄罗斯方块

这是一款针对手机触屏的经典俄罗斯方块，可以选择传统及酷炫模式，用户可根据各自喜好自定义游戏背景。人性化的操作体验，让您重温儿时经典。该款游戏特征：

1. 尽量大的利用屏幕空间显示游戏，加大了游戏的可玩性
2. 支持触屏手势，同时支持虚拟按键
3. 虚拟方向按键盘初始化在右上角，用户可长按按键盘中心提起按键盘，拖动到自己任意觉得顺手的地方
4. 长按游戏空间任何地方可以隐藏、显示方向按键盘
5. 长按虚拟键盘中左中下键将发送连续按键信息，达到加速效果
6. 触摸游戏规则：点击屏幕改变方块形状；左右滑动改变方块左右位置，位置改变幅度与手指滑动速度与幅度有关，例如幅度较小滑动，方块将运行一格的位置，稍大滑动将运行两格位置，等等。向下加速也是这样。
7. 支持自定义游戏背景，如果有好的背景图片，用户可自行进入“菜单-游戏背景”里选择图片进行设置

3 References

3.1 eventQueue vs SurfaceView threads

- Deeper summary, android graphics architecture: <http://hukai.me/android-deeper-graphics-architecture>
-
-
-
-
-
-
-

3.2 SurfaceView

- Example: <http://technicalsearch.iteye.com/blog/1967616>
- <http://www.jcodecraeer.com/a/anzhuokaifa/androidkaifa/2012/1201/656.html>
- Event Queue: <http://www.leestorm.com/post/17.html>
- lockCanvas(Rect 小区) http://blog.csdn.net/alexander_xfl/article/details/13000347
- example: <http://fanli7.net/a/JAVAbiancheng/ANT/20120424/160203.html>
- MotionEvent: <http://android.jobbole.com/82072/>
- surfaceview 双缓冲: <http://blog.csdn.net/cnblogger/article/details/7404485>
- sth worth try: <http://www.lxway.com/969295592.htm>
- Dont Understand: http://blog.sina.com.cn/s/blog_5a6f39cf01012rtv.html
- tried: <http://bbs.csdn.net/topics/370074255> drawBitmap 2 canvas
- slightly complicated: <http://www.lxway.com/148606691.htm>
- slightly complicated: <http://www.lxway.com/186948856.htm>

3.3 gestures

- <http://www.cnblogs.com/akira90/archive/2013/03/10/2952886.html>
- Android 触摸手势基础官方文档概览: <http://www.lxway.com/445554926.htm>
- 手势: <http://wiki.jikexueyuan.com/project/material-design/patterns/gestures.html>
- <http://www.lxway.com/601620614.htm>
- <http://www.lxway.com/282219004.htm>
- <http://www.lxway.com/906451412.htm>
- <http://www.lxway.com/146619692.htm>
- <http://www.lxway.com/4420294641.htm>
- <http://www.lxway.com/155059816.htm>
- <http://www.lxway.com/4019928952.htm>
- 例子: <http://bbs.chinaunix.net/thread-3634477-1-1.html>
- 例子: <http://www.bestappsmarket.com/p/app?appId=1192877&title=tetris-%E4%BF%84%E7%BD%97%E6%96%AF%E6%96%B9%E5%9D%97>
- 例子: <http://bbs.chinaunix.net/thread-3634477-1-1.html>
- iTetris: <http://searchapp.soft4fun.net/article/information/iTetris%20%E4%BF%84%E7%BD%97%E6%96%AF%E6%96%B9%E5%9D%97/313319>
- left right: <http://www.jb51.net/article/77028.htm>
- AI: <http://www.cnblogs.com/youngshall/archive/2009/03/24/1420682.html>
-
- 3/11/2016 Friday
- <https://github.com/Almeros/android-gesture-detectors> mac
- <http://www.jcodecraeer.com/a/anzhuokaifa/androidkaifa/2015/0211/2467.html>
- <http://www.hejun.biz/81.html>
- <http://www.jb51.net/article/38166.htm>
- <http://www.jb51.net/article/37717.htm>
- <http://mobile.51cto.com/aprogram-394841.htm>
-
-
-
-
-
-
- TetrisBattle 特殊轉入教學 (Z S J L I)
 - https://www.youtube.com/watch?v=zW6Gp_7jl9I
- 推箱子: 第 11 章 Android 游戏开发视频教程益智游戏——推箱子
 - <https://www.youtube.com/watch?v=glzxII1-P0A> 2.5D
- 祖码游戏的设计与实现