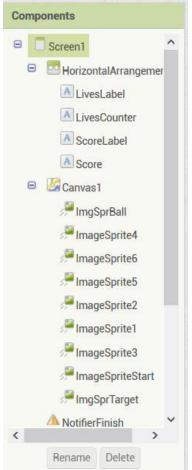
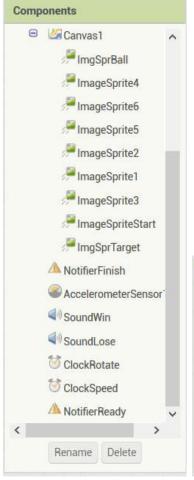
Lesson 7 – App Inventor – Rollball Layout



SHAU KEI WAN ALLIANCE CHURCH SUMMER PROGRAM - APP INVENTOR







Blocks

Variables

```
initialize global GameLives to 6

initialize global HoleList to create empty list

initialize global radius to 120

initialize global RunningAngle to 0

initialize global HolesAngle to 0

initialize global RotateInterval to 1000
```

Rotate Holes

```
to RotateHoles
do set global HolesAngle v to get global RunningAngle v
    for each Hole in list get global HoleList
    do set ImageSprite. X
              of component
                            get Hole
                            ImgSprTarget X V
                                                              get global radius
                                                                                    cos y get global HolesAngle y
        set ImageSprite.
                            get Hole
              of component
                       to
                            ImgSprTarget Y Y +
                                                               get global radius *
                                                                                    sin get global HolesAngle
        set global HolesAngle v to get global HolesAngle v
                                                               60
    set global RunningAngle to
                                    get global RunningAngle *
                                                               5
              get global RunningAngle > 360
         set global RunningAngle v to
                                      get global RunningAngle *
```

Rotate Holes every ? milliseconds

```
when ClockRotate .Timer
do call RotateHoles ...
```

Initialization

```
when Screen1 Initialize
do set global HoleList v to a make a list I ImageSprite1 v
                                          ImageSprite2 *
                                          ImageSprite3 *
                                          ImageSprite4 *
                                          ImageSprite5 *
                                          ImageSprite6 *
    set AccelerometerSensor1 . Enabled
                                         to false
    set ClockRotate . TimerEnabled to
                                         false *
    set ClockSpeed TimerEnabled
                                     to
                                         false *
    set LivesCounter . Text . to get global GameLives .
    set Score . Text to 0
    call RotateHoles
```

Game Start

```
when ImageSpriteStart v Touched

x y

do call NewGame v
```

Ball Move

```
when AccelerometerSensor1 AccelerationChanged

xAccel yAccel zAccel

do call ImgSprBall MoveTo

x ImgSprBall X X get xAccel

y get xAccel

y get yAccel
```

Ball Collide

```
when ImgSprBall .CollidedWith
 other
    if if
               get other = = =
                               ImgSprTarget *
    then call SoundWin .Play
         call ImgSprBall .MoveTo
                                 10
                                 10
         set Score . Text to Co
                                     Score Text +
         set ClockRotate . TimerInterval to
                                            ClockRotate *
                                                              TimerInterval *
                                                                                0.8
        call SoundLose .Play
         call ImgSprBall .MoveTo
                                 10
                                 10
         set LivesCounter . Text to
                                        LivesCounter Text 1
          if
                     LivesCounter ▼ Text ▼ ≤ ▼
                set AccelerometerSensor1 v . Enabled v to false v
                set ClockRotate . TimerEnabled to false
                set ClockSpeed . TimerEnabled to
                                                     false
                call SoundLose .Vibrate
                               millisecs
                                         300
                call NotifierFinish . ShowChooseDialog
                                          message
                                                      Game Over!!!
                                               title
                                                      Game Over
                                        button1Text
                                                      Try Again
                                                     " Finish "
                                        button2Text
                                                    false *
                                         cancelable
                set ImageSpriteStart . Visible to
                                                   true *
               set AccelerometerSensor1 . Enabled
                                                    to false
                call NotifierReady .ShowChooseDialog
                                                      Missed!
                                           message
                                         button1Text
                                                     Ready
                                         button2Text
                                         cancelable
                                                     false *
```

Make rotate faster

```
when ClockSpeed .Timer

do set ClockRotate . TimerInterval to ClockRotate . TimerInterval . Ti
```

Game Over after choice

```
when NotifierFinish .AfterChoosing

choice

do get choice = Try Again *

then call NewGame *
```

Turn on the ball moving after every ball failure

```
when NotifierReady .AfterChoosing
choice
do set AccelerometerSensor1 . Enabled to true
```