程式作品

APP 打怪遊戲
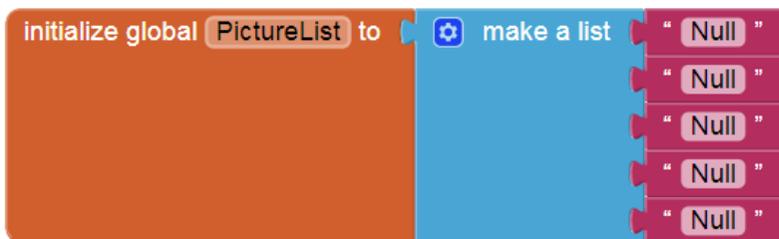

此遊戲是使用 App Inventor2 所製作設計
主要透過畫布、動畫元件、音效元件及音訊播放器，
來設計打魔鬼遊戲，類似打地鼠，並使用音效設計，
讓手機遊戲更充滿動感效果。

程式設計共分為五大部份：
「自訂程序宣告」 「遊戲開始」
「遊戲倒數」 「顯示天使或惡魔」 「打擊計分」

程式碼:

```
initialize global PictureList to  ✪ make a list  " Null "
                                                   " Null "
                                                   " Null "
                                                   " Null "
                                                   " Null "

initialize global Sprite1Show to  false      initialize global Sprite4Show to  false
initialize global Sprite2Show to  false      initialize global Sprite5Show to  false
initialize global Sprite3Show to  false
```

使用軟體
APP Inventor 2

```
to PictureVisibleOff
do  set ImageSprite1 . Visible to    false
    set ImageSprite2 . Visible to    false
    set ImageSprite3 . Visible to    false
    set ImageSprite4 . Visible to    false
    set ImageSprite5 . Visible to    false
```

```
to ClockControl status
do  set ClockGameTime . TimerEnabled to    get status
    set Clock1 . TimerEnabled to    get status
    set Clock2 . TimerEnabled to    get status
    set Clock3 . TimerEnabled to    get status
    set Clock4 . TimerEnabled to    get status
    set Clock5 . TimerEnabled to    get status
```

```
to TimeAndScore
do  call Canvas1 .Clear
    set Canvas1 . FontSize to    20
    set Canvas1 . PaintColor to    [ ]
    call Canvas1 .DrawText
                    text    join  " Time: "
                                  get global RemainderTime
                    x    10
                    y    390
    call Canvas1 .DrawText
                    text    join  " Score: "
                                  get global Score
                    x    10
                    y    410
```

```
initialize global [BestScore] to [ 0

to [BestScoreRecord] [currenScore]
do   if      is empty [ call [TinyDB1 ▾] .GetValue
                                           tag [ " record "
                                   valueIfTagNotThere [ " ▢ "
     then    call [TinyDB1 ▾] .StoreValue
                            tag [ " record "
                     valueToStore [ 0

     set [global BestScore ▾] to [ call [TinyDB1 ▾] .GetValue
                                                    tag [ " record "
                                         valueIfTagNotThere [ " ▢ "
     if      [ get [global BestScore ▾] [ < ▾] [ get [currenScore ▾]
     then    set [global BestScore ▾] to [ get [currenScore ▾]
             call [TinyDB1 ▾] .StoreValue
                            tag [ " record "
                     valueToStore [ get [global BestScore ▾]

     call [Canvas1 ▾] .Clear
     set [Canvas1 ▾] . [FontSize ▾] to [ 30
     call [Canvas1 ▾] .DrawText
                         text [ " Time Up!! "
                            x [ 100
                            y [ 250
     call [Canvas1 ▾] .DrawText
                         text [ join [ " The best score: "
                                       get [global BestScore ▾]
                            x [ 30
                            y [ 300
```

```
when  ImageSprite1  .Touched
  x   y
do    call  CalculateScore
                    index   1
```

```
when  ImageSprite2  .Touched
  x   y
do    call  CalculateScore
                    index   2
```

```
when  ImageSprite3  .Touched
  x   y
do    call  CalculateScore
                    index   3
```

```
when  ImageSprite4  .Touched
  x   y
do    call  CalculateScore
                    index   4
```

```
when  ImageSprite5  .Touched
  x   y
do    call  CalculateScore
                    index   5
```

```
when  ClockGameTime  .Timer
do    set global RemainderTime to    get global RemainderTime  -  1
      call  TimeAndScore
      if    get global RemainderTime  =  0
      then  set global GameFlag to  false
            call  ClockControl
                        status  false
            call  PictureVisibleOff
            set ImageSpriteStart . Visible to  true
            call  BestScoreRecord
                        currenScore    get global Score
            call  Player1  .Stop
```

```
when Clock1 .Timer
do  set Clock1 . TimerInterval to   random integer from 1000 to 1200
    if   get global Sprite1Show = false
    then
         if   random integer from 0 to 1 > 0
         then set ImageSprite1 . Picture to " Angle02.png "
         else set ImageSprite1 . Picture to " Devil02.png "
         replace list item list  get global PictureList
                        index  1
                  replacement  ImageSprite1 . Picture
         set ImageSprite1 . Visible to true
         set global Sprite1Show to true
    else
         replace list item list  get global PictureList
                        index  1
                  replacement  " Null "
         set ImageSprite1 . Visible to false
         set global Sprite1Show to false
```

```
when Clock2 .Timer
do  set Clock2 . TimerInterval to   random integer from 1000 to 1200
    if   get global Sprite2Show = false
    then
         if   random integer from 0 to 1 > 0
         then set ImageSprite2 . Picture to " Angle02.png "
         else set ImageSprite2 . Picture to " Devil02.png "
         replace list item list  get global PictureList
                        index  2
                  replacement  ImageSprite2 . Picture
         set ImageSprite2 . Visible to true
         set global Sprite2Show to true
    else
         replace list item list  get global PictureList
                        index  2
                  replacement  " Null "
         set ImageSprite2 . Visible to false
         set global Sprite2Show to false
```

```
when Clock5 .Timer
do  set Clock5 . TimerInterval to    random integer from  1000  to  1200
    if    get global Sprite5Show  =  false
    then    if    random integer from  1  to  2  >  0
            then  set ImageSprite5 . Picture  to  " Angle02.png "
            else  set ImageSprite5 . Picture  to  " Devil02.png "
            replace list item  list   get global PictureList
                           index  5
                     replacement  ImageSprite5 . Picture
            set ImageSprite5 . Visible  to  true
            set global Sprite5Show  to  true
    else    replace list item  list   get global PictureList
                           index  5
                     replacement  " Null "
            set ImageSprite5 . Visible  to  false
            set global Sprite5Show  to  false
```

```
to CalculateScore  index
do  set global NowPicture  to   select list item  list   get global PictureList
                                              index   get index
    if    get global GameFlag  =  true
    then    if    compare texts   get global NowPicture  =  " Devil02.png "
            then  set global Score  to    get global Score  +  10
            if    compare texts   get global NowPicture  =  " Angle02.png "
            then  call Sound1 .Vibrate
                          millisecs  200
                  set global Score  to    get global Score  -  20
            if    get global Score  <  0
            then  set global Score  to  0
```

```
when  ImageSprite1 ▾ .Touched
 x   y
do   call  CalculateScore ▾
              index   1
```

```
when  ImageSprite2 ▾ .Touched
 x   y
do   call  CalculateScore ▾
              index   2
```

```
when  ImageSprite3 ▾ .Touched
 x   y
do   call  CalculateScore ▾
              index   3
```

```
when  ImageSprite4 ▾ .Touched
 x   y
do   call  CalculateScore ▾
              index   4
```

```
when  ImageSprite5 ▾ .Touched
 x   y
do   call  CalculateScore ▾
              index   5
```