

- +Xi:int[]
- +Yi:int[]
- +Mposition:int[]
- +endPoint:int[]
- +m:Point
- -MAX:int
- -MIN:int
- +delay:int
- +timePlus:int
- #getRandomInt():int
- +getPatternX():int[]
- +setPatternX():int[]
- +getPatternY():int[]
- +setPatternY():int[]
- +resetdataSystem():void



+PatternGenerate

Pattern: int[]
PatternX: int[]

PatternY : int[]

- +PatternIndex: int
- +index : int
- #indexLength: int
- +R:int
- +PatternC: Color
- +pressPattern : Color

point: int

- +Patternfuction(Graphics):void checkPost(post:int):int
- +patternCalculate(stagePattern:int):int[]
- +getAnsAlley(stagePattern:int,PatternZ:int[]):int[]
- +resetPatternGenerate():void

+GameCalculator

- +Lifecount:int
- +Stagecount:int
- +stagePattern:int
- +Score:int
- +Gameover:boolean
- +GameFin:boolean
- +GameStart:boolean
- +displayEnd:boolean
- -show:boolean

i:int

- -ansX:int[]
- -ansY:int[]

PaGen:PatternGenerate

- +StageChange():int
- +CheckScore(x:int, y:int):int
- +GetPatternXY(stagePattern:int):void
- +StagePatternGenerate(g:Graphics):void
- +getIndexLength():int
- +resetGameCalculator():void
- +getAnsX():int[]
- +setAnsX(ansX:int[]):void
- +getAnsY():int[]
- +setAnsY(ansY:int[]):void
- +getI():int
- +setI(i:int):void

UML of all Class in Package System

| Javax.swing.JFrame |
|--------------------|
| |
| |

| Ja | vax.swing.JPanel | |
|----|------------------|--|
| | | |
| | | |
| | | |

| < <interface>></interface> |
|--------------------------------------|
| ActionListener |
| |
| +actionPerformed(e:ActionEvent):void |

| < <interface>></interface> | |
|-------------------------------------|--|
| ItemListener | |
| | |
| +itemStateChanged(e:ItemEvent):void | |

<<interface>> Mouse Listener

+mousePressed(e:MouseEvent):void +mouseReleased(e:MouseEvent):void +mouseClicked(e:MouseEvent):void +mouseExited(e:MouseEvent):void +mouseEntered(e:MouseEvent):void

CheckCondition

+actionPerformed(e:ActionEvent):void

+Checkstart

stageNum: int +isRun: boolean +isReset: boolean Gc: GameCalculator Pg: PatternGenerate

+actionPerformed(e:ActionEvent):void

+InfoPanel

-myfont : Font

lifePanel: LifePanel

Stage : JPanel Score : JPanel +ScoreLB : JLabel +StageLB : JLabel

InfoPanel()

+Color panel

+colorChange: boolean

-myfont : Font colourLB : JLabel PinkRT : JRadioButton YellowRT : JRadioButton BlueRT : JradioButton

Color panel()

+actionPerformed(e:ActionEvent):void

+PatternPanel

PatL: PatternListenrr <u>ShowPattern: Timer</u> -checkColor: Timer gCal: GameCalculator ds: dataSystem

ds : dataSystem Cp : clickPattern patternc : Color

PatternPanel()

+paintComponent(g:Graphics):void
+actionPerformed(e:ActionEvent):void

-PatternListenrr

+actionPerformed(e:ActionEvent):void

+LifePanel

+LifeChange: boolean

Lifecontrol: CheckCondition

checkLife : Timer
LifeRepaint : Timer
-show : boolean
-myfont : Font
 xHeart : int[]
 xHeart2 : int[]
 xHeart3 : int[]
 yHeart : int[]

LifePanel()

+paintComponent(g:Graphics):void +actionPerformed(e:ActionEvent):void

+ModePanel

checkReset: Timer checkstart: Checkstart startBT: JButton resetBT: JButton modeLB: JLabel easyCB: JCheckBox normalCB: JCheckBox hardCb: JCheckBox +EndlessCb: JcheckBox

checkRun: Timer

ModePanel()

+itemStateChanged(e:ItemEvent):void +actionPerformed(e:ActionEvent):void

-clickPattern

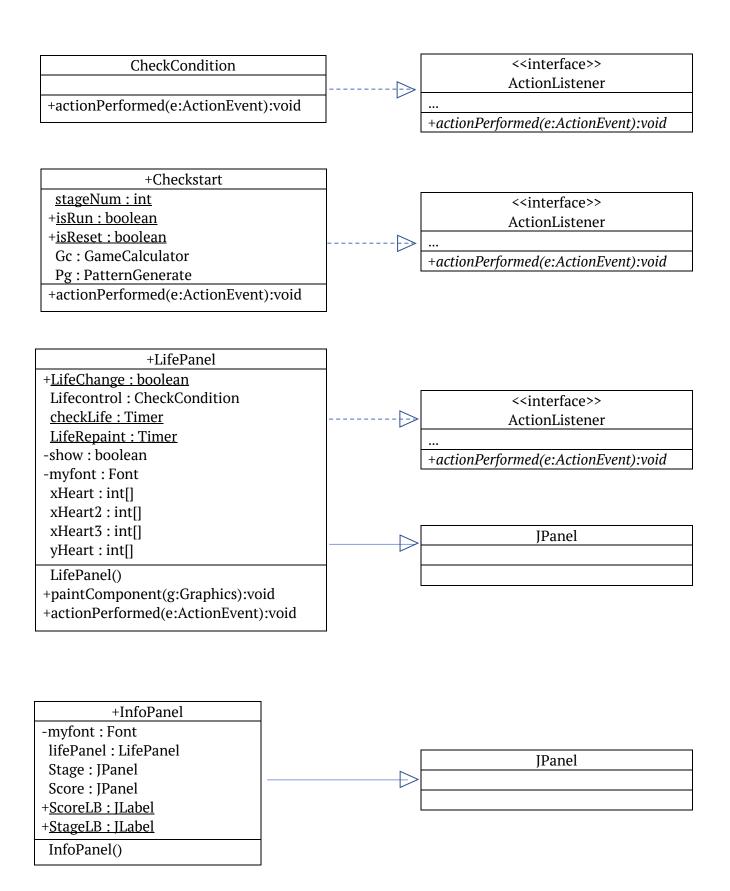
+mousePressed(e:MouseEvent):void +mouseReleased(e:MouseEvent):void +mouseClicked(e:MouseEvent):void +mouseExited(e:MouseEvent):void +mouseEntered(e:MouseEvent):void

RepeatAfterme

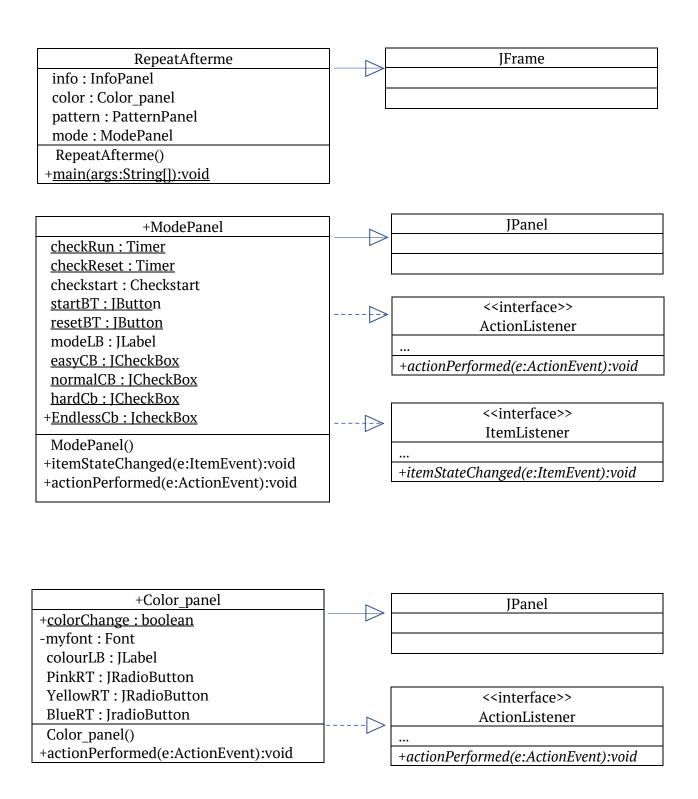
info: InfoPanel color: Color_panel pattern: PatternPanel mode: ModePanel RepeatAfterme()

+main(args:String[]):void

UML of all Class in Package Graphics



UML of all Class in Package Graphics(con.)



UML of all Class in Package Graphics(con.)

