

Nose

- color: Color
- width: int
- height: int

+ Mouth(Color color, int width, int height)
+ drawAt(int x, int y)

Month

- color: Color
- width: int
- height: int

+ Mouth(Color color, int width, int height)
+ drawAt(int x, int y)

Torso

- color: Color
- width: int
- height: int
- nipples: Nipples

+ Torso(Color color, int width, int height)
+ drawAt(int x, int y)

Nipples

- count: int
- width: int
- height: int

+ Nipples(int count, int width, int height)
+ drawAt(int x, int y)

Hair

- color: Color
- width: int
- height: int

+ Hair(Color color, int width, int height)
+ drawAt(int x, int y)

Head

- color: Color
- width: int
- height: int
- earLeft: Ear
- earRight: Ear
- eyeLeft: Eye
- eyeRight: Eye
- nose: Nose
- mouth: Month
- hornLeft: Horn
- hornRight: Horn

+ Head(Color color, int width, int height)
+ drawAt(int x, int y) + changeEyesColor()
+ getEyesColor()

Ear

- color: Color
- width: int
- height: int

+ Ear(Color color, int width, int height)
+ drawAt(int x, int y)

Eye

- color: Color
- width: int
- height: int

+ Eye(Color color, int width, int height)
+ drawAt(int x, int y) + getcolor()

Bull

- color: Color
- location: Point
- width: int
- height: int
- torso: Torso
- head: Head
- tail: Tail
- legBack: Leg
- legFront: Leg

+ Bull(Color color, int width, int height)
+ drawAt(int x, int y)
+ getAddress()
+ getWidth()
+ getHeight()
+ draw()
+ getHead8()
+ changePosture()

Left Horn

Right Horn

Horn

- color: Color
- width: int
- height: int

+ Horn(Color color, int width, int height)
+ drawAt(int x, int y)

LocatedRectangle

- + address: Point
- + width: int
- + height: int
- + draw()
- + intersects(LocatedRectangle other): boolean
- + intersects(LocatedRectangle other, int margin): boolean
- + doNotIntersect(LocatedRectangle other, int margin): boolean
- + left(LocatedRectangle other, int margin): boolean
- + right(LocatedRectangle other, int margin): boolean
- + above(LocatedRectangle other, int margin): boolean
- + below(LocatedRectangle other, int margin): boolean

Tail

- color: Color
- width: int
- height: int
- hair: Hair

+ Tail(Color color, int width, int height)
+ drawAt(int x, int y)

Scene

- bulls: ArrayList<Bull>
- final int: BULLS NUMBER
- x,y,ini,backgroundColor: Color
- static State: graphicState
- + Scene(Color color, int width, int height, int x, int y)
- + addBull(Bull newBull)
- + vacantSpace(Bull newBull)
- + draw()
- + useStateButton()
- + eyeColorButton()
- + fullState()
- + drawFull()
- + headState()
- + drawHead()
- + greenState()
- + setBg()

Buttons

```
- addButton : JButton  
- postureButton : JButton  
- colourButton : JButton  
-> cool : JTextField  
-> cool : JTextField  
-> msg : JLabel  
  
+ addActionListeners (ActionListener listener)  
+ addButtonsToAPanel (JFrame frame)  
+ getAddButton()  
+ getPostureButton()  
+ getColourButton()  
+ getXc()  
+ getYc()  
+ getHng()
```

State

Context

```
+ RndDraw () : State  
+ HeadOnly () : State  
+ GreenBg () : State
```

Head Only

```
- Instance  
+ getInstance (Scene context) : HeadOnly  
@ Override  
- fullBull () : State  
@ Override  
+ headOnly () : State  
@ Override  
+ greenBg () : State
```

Green Bg

- Instance

```
+ getInstance (Scene context) : GreenBg  
@ Override  
- fullBull () : State  
@ Override  
+ headOnly () : State  
@ Override  
+ greenBg () : State
```

FullBull

- Instance

```
+ getInstance (Scene context) : FullBull  
@ Override  
- fullBull () : State  
@ Override  
+ headOnly () : State  
@ Override  
+ greenBg () : State
```