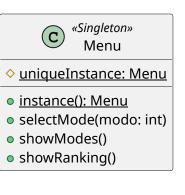
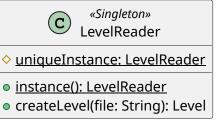
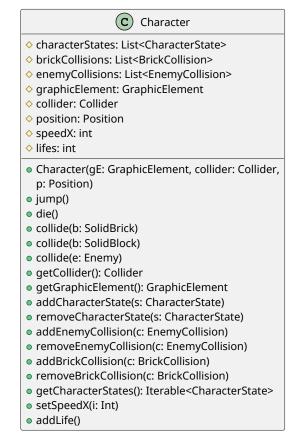


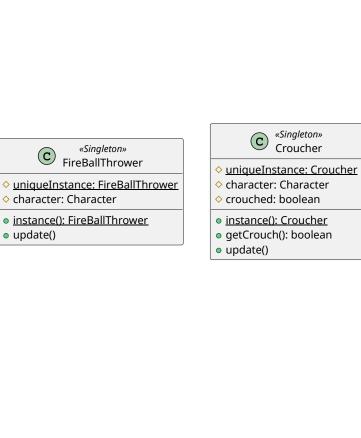
main()



















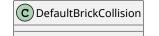














«Singleton»

Croucher



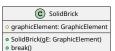


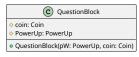






Pipe
 piranha: PiranhaPlant
 graphicElement: GraphicElement
 Pipe(p: PiranhaPlant, gE: GraphicElement)





© BuzzyBeattle

o graphicElement: GraphicElement
o pos: Position
o speedX: int

BuzzyBeattle(ge: GraphicElement, pos: Position)

© KoopaTroopa
o graphicElement: GraphicElement
o pos: Position
o speedX: int
o KoopaTroopa(ge: GraphicElement, pos: Position)

© Goomba

ographicElement: GraphicElement
pos: Position
speedX: int
Goomba(ge: GraphicElement, pos: Position)

© Spiny

• Spiny(ge: GraphicElement, pos: Position)

graphicElement: GraphicElement

pos: Position

speedX: int

GreenMushroom

ographicElement: GraphicElement
ographicElement: GraphicElement
GreenMushroom(gE: GraphicElement)
GreenMushroom(gE: GraphicElement)

C Lakitu

Lakitu(ge: GraphicElement, pos: Position)

graphicElement: GraphicElement

pos: Position

speedX: int



pos: Position

speedX: int

© PiranhaPlant

PiranhaPlant(ge: GraphicElement, pos: Position)

graphicElement: GraphicElement

© FireBall

pos: Position
praphicElement: GraphicElement
predictions
predictions

© Star

♦ graphicElement: GraphicElement

• Star(gE: GraphicElement)

Coin

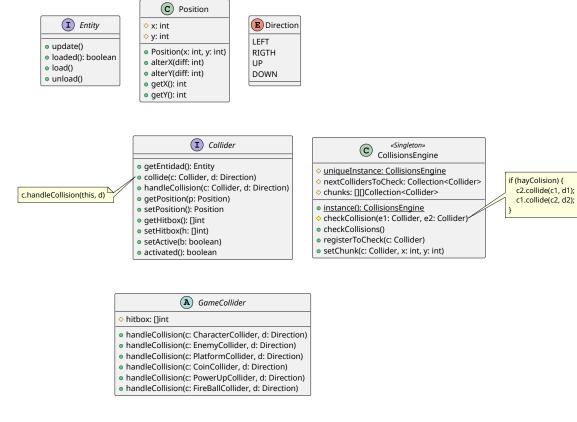
ographicElement: GraphicElement

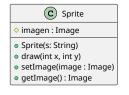
oCoin(gE: GraphicElement)

• graphicElement: GraphicElement
• FireFlower(gE: GraphicElement)

© SuperMushroom

 graphicElement: GraphicElement
 SuperMushroom(gE: GraphicElement)





«Singleton»

«Singleton»

GraphicEngine

elements: Collection<GraphicElement>

addElementoGrafico(e: GraphicElement)

uniqueInstance: GraphicEngine

instance(): GraphicEngine

o drawFrame()

© SpriteFactory

possibleSprites: Collection<String>

loadedSprites: Map<String, Sprite>

• getPossibleSprites(): Iterable<String>

uniqueInstance: SpriteFactory

instance(): SpriteFactory

getSprite(key: String)



(I) GraphicElement

• getPosition(): Position

setPosition(p: Position)

getSprite(): Sprite

setSprite(s: Sprite)

o draw()





