













# visualController: VisualGameController  # level: Level  # levelGenerator: LevelGenerator  # spriteFactory: SpriteFactory  # entityFactory: EntityFactory  # playerCharacterGameLoop: PlayerCharacterGameLoop # nonPlayerEntityGameLoop: NonPlayerEntityGameLoop	- myEntity: GameEntity  - visitor: CollisionVisitor  - isCollidingFromBelow: boolean  - isCollidingFromAbove: boolean  - isCollidingFromRight: boolean  - isCollidingFromLeft: boolean  - directions: String []
+ setVisualController(VisualController)  + startGame()  + startGameLoop()  - registerObservers()  + registerPlatformObservers()  + registerEnemyObservers()  + registerPowerUpObservers()  + registerProjectileObservers()  + registerPlayerObserver(PlayerCharacter)  + registerEntityObservers(GameEntity)  + getLevel(): Level  + startUpPlayerMovement()  + startDownPlayerMovement()  + startRightPlayerMovement()  + startLeftPlayerMovement()  + stopRightPlayerMovement()  + stopLeftPlayerMovement()  + resetPlayerPosition()	+ checkPlataformCollisions(Plataform [] [])  + doCollisionIfColliding(GameEntity,int,GameEntity)  + setCollisionDirection(int)  - getPlatformsToCheck(Platform[][], int, int): Platform []  - doCollision(GameEntity)  + getEntity(): GameEntity  + setEntity(GameEntity)  + getIsCollidingFromBelow(): boolean  + setCollidingFromBellow(boolean)  + getIsCollidingFromAbove(): boolean  + setCollidingFromAbove(boolean)  + getIsCollidingFromRight(): boolean  + setCollidingFromRight(boolean)  + getIsCollidingFromLeft(): boolean  + setCollidingFromLeft(boolean)  + resetCollisionDirections()

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+ setHeight(int)

+ getWidth(): int

+ setWidth(int)

+ getObserver(): Observer

+ getSprite(): Sprite

+ hitPlayerCharacter(PlayerCharacter)

+ hitPowerUp(PowerUp)

+ hitPlatform(Platform)

+ hitEnemy(Enemy)

+ getCollider():Collider

+updateXPosition()

+updateYPosition()
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Spiny

# setWalkingSprite() +  
+ getScoreForDestroying(): int +  
+ getScoreForDyingTo(): int +  
+ initializeImagePath() +

BuzzyBeetle

+ receiveHitFromAbove(PlayerCharacter)+  
# setWalkingSprite() +  
+ getScoreForDestroying(): int +  
+ getScoreForDyingTo(): int +  
+ initializeImagePath() +

Goomba

- squished : boolean  
  
+ receiveHitFromAbove(PlayerCharacter) +  
- setSquished()  
  
+ getDetroyTime(): double  
  
+ markForDestruction()  
  
# setWalkingSprite() +  
  
+ getScoreForDestroying(): int +  
  
+ getScoreForDyingTo(): int +  
  
+ initializeImagePath() +

Lakitu

- level: Level  
  
- entityFactory: EntityFactory  
  
- playerFollowTimer : PayerFollowTimer  
  
- spinyDropTimer : SpinyDropTimer  
  
+ receiveHitFromAbove(PlayerCharacter) +  
  
-setSpriteFromFacingDirection()  
+ startAutomaticMovement() +  
  
- isMovingAwayFromPlayer(PlayerCharacter): boolean  
  
# setWalkingSprite() +  
  
+ getScoreForDestroying(): int +  
  
+ getScoreForDyingTo(): int +  
  
+ initializeImagePath() +

PiranhaPlant

-emergeTimer: EmergeTimer  
  
- hideTimer: HideTimer  
  
+ receiveHitFromAbove(PlayerCharacter) +  
  
+ show()  
+ hide()  
# setWalkingSprite() +  
  
+ getScoreForDestroying(): int +  
  
+ getScoreForDyingTo(): int +  
  
+ initializeImagePath() +





