App

- + configPath: String
- + end: boolean = false
- - lives: PFont
- - endGame: PFont
- + countFire: int
- + countSlime: int
- - wizard: Wizard
- - fireball: Fireball
- - slime: Slime
- - gremlin: PImage
- - brickWall: PImage
- - stoneWall: PImage
- - wizardLives: PImage
- - tele: Teleport
- - powerup: Powerup
- - exit: Exit
- + gremlinList: ArrayList<Gremlins>
- + stoneList: ArrayList<Stonewall>
- + brickList : ArrayList<Brickwall>
- + gremlinListTwo: ArrayList<Gremlins>
- + stoneListTwo: ArrayList<Stonewall>
- + brickListTwo : ArrayList<Brickwall>
- + wallList: Boolean[][]
- + wallListTwo: Boolean[][]
- + levelOneArray: String[][]
- + levelTwoArray: String[][]
- + levelFileOne: File
- + levelFileTwo: File

- + App()
- + settings(): void
- + setup(): void
- + keyPressed(KeyEvent e): void
- + keyReleased(KeyEvent e): void
- + draw(PApplet app): void
- + loadLevelOne(): void
- + loadLevelTwo(): void
- + main(String[] args): static void

Wizard

- - spriteRight: PImage
- - spriteLeft: PImage
- - spriteUp: PImage
- - spriteDown: PImage
- - spriteDefault: PImage
- + x: int
- + y: int
- + lives: int = 3
- - dx: int
- - dy: int
- - speedX: double = 2.0
- - speedY: double = 2.0
- - gremlinListWiz: ArrayList<Gremlins>
- - wallListWiz: Boolean[][]
- - wallListWizTwo: Boolean[][]
- - telep: Teleport
- - exit: Exit
- - powerup: Powerup
- + changeLevel: boolean
- - firstTime: boolean = false
- - keyDown: boolean = false
- + wizDown: boolean
- + wizUp: boolean
- + wizRight: boolean
- + wizLeft: boolean
- + powerthere: boolean = true

- + tick(): void
- + draw(PApplet app): void
- + move(): void
- + pressed(boolean left, boolean right, boolean up, boolean down): void
- + released(boolean left, boolean right, boolean up, boolean down): void
- + checkCollisionGremlin(): boolean
- + checkCollisionTeleport(): boolean
- + checkCollisionDoor(): boolean
- + checkCollisionPowerUp(): boolean
- + teleport(): boolean

Gremlins

- - sprite: PImage
- - x: int
- - y: int
- - speedX: int = 1
- - speedY: int = 1
- - wallList: Boolean[][]
- - wallListTwo Boolean[][]
- + moveable: boolean = true
- + noRepeat: boolean = false
- + nothingThereUp: boolean
- + nothingThereDown: boolean
- + nothingThereRight: boolean
- + nothingThereLeft: boolean
- + nothingthere: boolean
- + changeLevelGremlin: false
- + gremlinUp: boolean = false
- + gremlinDown: boolean = false
- + gremlinLeft: boolean = false
- + gremlinRight: boolean = false

- + tick(): void
- + draw(PApplet app): void
- + move(int dx, int dy): void
- + movingability(int rnum): void
- + checkCollision(int rnum, Boolean[][] wallList): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Fireball

- + x: int
- + y: int
- - dx: int
- - dy: int
- + speedX: int = 4
- + speedY: int = 4
- + fired: boolean = false
- - brickWallWiz: ArrayList<Brickwall>
- + fireBallHit: boolean = false
- - sprite: PImage

- + tick(): void
- + draw(PApplet app): void
- + move(int dx, int dy): void
- + pressed(boolean space): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int
- + checkCollisionBrick(): boolean

<<interface>> Features

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

GameStatus

- - configuration: JSONObject
- - lives: int
- - array: JSONArray
- - first: JSONObject
- - second: JSONObject
- - levelOne: String
- - wCoolDownOne: Double
- - eCoolDownOne: Double
- - levelTwo: String
- - wCoolDownTwo: Double
- - eCoolDownTwo: Double

- + getLevelOne(): String
- + getWizardCoolDownOne(): double
- + getEnemyCoolDownOne(): double
- + getLevelTwo(): String
- + getWizardCoolDownTwo(): double
- + getEnemyCoolDownTwo(): double
- + getlives(): int
- + checkLives(): void
- + reduceLives(): void

Walls

- - sprite: PImage
- - x: int
- - y: int

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Teleport

- - sprite: PImage
- - x: int
- - y: int

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Exit

- - sprite: PImage
- - x: int
- - y: int

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Slime

- + x: int
- + y: int
- - dx: int
- - dy: int
- + up: boolean
- + down: boolean
- + right: boolean
- + left: boolean
- + speedX: int = 4
- + speedY: int = 4
- - sprite: PImage

- + move(): void
- + tick(): void
- + draw(PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int
- + checkCollisionBrick(): boolean

Powerup

- + x: int
- + y: int
- - sprite: PImage

- + draw(PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Brickwall

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int

Stonewall

- + draw (PApplet app): void
- + getx(): int
- + gety(): int
- + getWidth(): int
- + getHeight(): int