# Dot

+ isActive: boolean + captured: boolean + isDead: boolean + dotNumber: int

+ coordonnes: Coordonnes

+ isActive : type + setActive: void

+ isCaptured: boolean + setCaptured: void

+ isDead: boolean + setDead: void

+ getDotNumber: int + setDotNumber: void

+ getCoordonnes : Coordonnes

## Coordonnes

+ x : int + y: int

+ getX: int + getY: int

+ closeTo(Coordonnes): boolean

## **DotGame**

+ dgs : DotGameSimulation

PlayerNumber: int

+ play : void

+ getDotGameSimulation: DotGameSimulation

+ getPlayerNumber : int

## Player

+ number: int

+ graph: HashMap<Dot, ArrayList<Dot>>

+ pointsCapture: HashSet<Dot>

+ nombreDotCapture: int

+ getPointsCapture: HashSet<Dot>

+ getNombreDotCapture: int

+ getMap: HashMap<Dot, ArrayList<Dot>>

#### Grille

+ longeur: int + largeur: int + tab [] [] : T

+ coordCorrectes: boolean

+ getLongeur: int + getLargeur: int

+ setCellule : void + getCellule : T

#### **DotGameSimulation**

+ player1: Player + player2: Player + coup: int

+ arcDirections: HashSet<Coordonnes>+ cycleTemporaire: ArrayList<Dot>+ pointsCapture: ArrayList<Dot>

+ cycle: boolean + endGame: boolean

+ canPlay: boolean

+ play: void

+ setDotNumber: void + updateParams: void + insertDot: void

+ createArc: void + insertSetDots: void + getPlayer: Player + trouverCycle: void

+ pointsCoteAcote: boolean + removeDot: boolean

+ cycleValide: boolean + cycleCapture: boolean + capture: boolean

+ deadDots: void+ removeDotCaptured+ dotIncludeInCycle: boolean+ rightDirection: boolean

+ leftDirection: boolean + downDirection: boolean + upDirection: boolean

+ isCycle: boolean

+ getPointsCapture: ArrayList<Dot> + getCycleTemporaire: ArrayList<Dot>

+ isEndGame: boolean

+ getCoup: int