

HumanPlayer
- playerName:String
+ getPlayerName(): String + setPlayerName(String): void + activateTurn(): void

AIPlayer
+ activateTurn(): void

Token
- colour: Colour - position: Position
+ getColour(): Colour + setColour(Colour): void + getPosition(): Position + setPosition(Position): void

«enumeration» GamePhase
PLACEMENT MOVEMENT GAMEOVER

«enumeration» Colour
WHITE BLACK

Abstract Player
- totalPiecesToPlace: int - totalPiecesOnBoard: int - colour: Colour - isTurn: boolean
+ isTurn(): boolean + setTurn(boolean turn): void + getTotalPiecesOnBoard(): int + setTotalPiecesOnBoard(int): void + getTotalPiecesToPlace(): int + setTotalPiecesToPlace(int): void + getColour(): Colour + setColour(Colour): void + removeToken(): void + tilePlaced(): void + activateTurn(): void + deactivateTurn(): void

Board
- boardPositions: Map<Position, Integer> - occupiedPosition: Map<Position, Token> - oldPosition: Position - newPosition: Position
+ getOldPosition(): Position + setOldPosition(Position): void + getNewPosition(): Position + setNewPosition(Position): void + getBoardPositions(): Map<Position, Integer> + setBoardPositions(Map<Position, Integer>): void + getOccupiedPosition(): Map<Position, Token> + setOccupiedPosition(Map<Position, Token>): void + getTokenPlacedPosition(): Position + setTokenPlacedPosition(Position): void + validateTokenPlacement(Position): boolean + placeNewToken(Position, Colour): void + moveToken(Position newPosition): void

Position
- x: int - y: int
+ getX(): int + setX(int): void + getY(): int + setY(int): void + toString(): String + equals(Object): boolean + hashCode(): int + getAllPositions(): Map<Position, Integer>

GameManager
- player1: Player - player2: Player - gamePhase: GamePhase - board: Board - totalTokenPlaced: int - MAXTOKEN: int
+ getBoard(): Board + setBoard(Board): void + getPlayer1(): Player + setPlayer1(Player): void + getPlayer2(): Player + setPlayer2(Player): void + startGame(): void + getGamePhase(): GamePhase + getTotalTokenPlaced(): int + setTotalTokenPlaced(int): void + changePlayerTurn(): void + colorOnTurn(): Colour + placeToken(Position): void + moveToken(Position): void + setSelectedTokenPosition(Position): void + validateTokenPlacement(Position): boolean

RootLayoutController
- leftPocketGrid: GridPane - rightPocketGrid: GridPane - gameBoardGrid: GridPane - stage: Stage - board: Board - boardGridChildren: List<ImageView> - gameManager: GameManager
- getTilePosition(ImageView): Position + setStage(Stage): void + setGameManager(GameManager): void - initTokenDrag(GridPane): void - initTokenDrop(GridPane): void - initGameManagerPropertyListeners(): void - initialize(): void

Game
- board: Board - gamePhase: GamePhase - player1: Player - player2: Player
+ getPlayer1(): Player + setPlayer1(Player): void + getPlayer2(): Player + setPlayer2(Player): void + getBoard(): Board + setBoard(Board): void

Main
- controller: RootLayoutController - gameManager: GameManager - GAME_NAME: String - GAME_VERSION: String - FULL_NAME: String
+ start(Stage): void + main(String[]): void