## ComputerPlayer + randomNumber(range: int): int + selectRowValue(range: int): int + selectColValue(range: int): int + selectBoard(range: int): int + selectMove(b: int): int **APlayer**

- name: String

- mark: String

+ getName(): String

+ getMark(): String

- board: Board

- name: String

- gameRowSize: int

- gameColSize: int

+ getBoard(): Board

+ getName(): String

+ getGameRowSize(): int

+ getGameColSize(): int

+ getWinner(player1: String, player2: String): String

- setBoard(): void

- currentPlayerIndex: int

+ setMark(mark: String): void

+ selectBoard(range: int): int

+ selectMove(range: int): int

# + setName(name: String): void **SmallTTTGame** + setBoard(board: Board): void + setName(board: Board): void + getCurrentPlayerIndex(): int + setCurrentPlayerIndex(currentPlayerIndex: int): void + setGameRowSize(gameRowSize: int): void + setGameColSize(gameColSize: int): void + isWinner(mark: String): boolean + checkDiagLR(mark : String): boolean + checkDiagRL(mark: String): boolean + checkCol(mark: String): boolean + checkRow(mark: String): boolean

HumanPlayer

+selectBoard(range: int): int

+ selectMove(range: int): int

### **UltimateTicTacToe**

+ main(args: String[]): void

#### **BigTTTGame**

- players: APlayer[]

- games: SmallTTTGame[]

- board: otherBoardWrapper

- name: String

- gameColSize: int

- gameRowSize: int

- currentPlayerIndex: int

+ getGameRowSize(): int

+ setGameRowSize(gameRowSize: int): void

+ setGameRowSize(gameRowSize: int): void

+ getGameColSize(): int

+ setGameColSize(gameColSize: int): void

- setGames(): void

- setBoard(): void

+ setPlayers(player1: APlayer, player2: APlayer): void

+ playGame(): void

- makeMove(b: int): int

- printPossibleMoves(b: int): void

setRASpots(c: Boolean[]): void

- printGameWinner(): void

- RASpots(b: int): void

- ifWinner(b: int): boolean

- printWinners(): void

- switchPlayers(): void

- getWinner(b : int): String

- gameOver(): boolean

- isWinner(mark: String): boolean

- checkCol(mark: String): boolean

- checkRow(mark: String): boolean

- checkDiagLR(mark: String): boolean

- checkDiagRL(mark: String): boolean

#### OtherBoardWrapper

- + printUltimateBoard(): void
- + getMark(row: int, col: int, b: int): String
- + getColSize(): int
- + getRowSize(): int
- + isFull(): boolean
- + isFull(b: int): boolean
- + setBoardWinner(b: int, mark: String): void
- + setBoardWinner(b: int): String
- + setBoard(b: int): Board
- + RASpots(b: int): void
- + printASpots(b: int): void

#### lboard

isFull(): boolean

makeMove(player: String, row: int, col: int): boolean

getRowSize(): int

getColSize(): int

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#### **Board**

- boxes: Box[]
- name: String
- boardRowSize: int
- boardColSize: int
- winner: String
- + getBox(): Box[]
- setBoxes(boxes: Box[]): void
- + getRowSize(): int
- + getColSize(): int
- + getName(): String
- setName(name: String): void
- + getWinner(): String
- + setWinner(winner: String): void
- init(): void
- + isFull(): boolean
- + makeMove(mark: String, row: int, col: int): boolean
- + makeMove(mark: String, a: int): boolean
- + getMark(row: int, col: int): String
- + print(a: int, b: int): void
- + setSize(row: int, col: int): void
- + RASpots(): void
- + printASpots(): void

#### **OtherBoard**

- boardRowSize: int
- boardColSize: int
- board: Board[]
- + getBoard(): Board[]
- + getBoard(b: int): Board
- + setBoard(board: Board[]): void
- + getBoardRowSize(): int
- + setBoardRowSize(boardRowSize: int): void
- + getBoardColSize(): int
- + setBoardColSize(boardColSize: int): void
- init(): void
- + isFull(): boolean
- + makeMove(player: String, row: int, col: int, b: int): boolean
- + makeMove(player: String, a: int, b: int): boolean
- + getMark(row: int, col: int, b: int): String
- + printUltimateBoard(): void
- + isFull(b: int): boolean
- + setBoardWinner(b: int, mark: String): void
- + getBoardWinner(b: int): String
- + RASpots(b: int): void
- + printASpots(b: int): void

#### Box

- placeHolder: String
- + getPlaceHolder(): String
- + setPlaceHolder(placeHolder: String): boolean
- + print(): void
- + isAvailable(): boolean