## ULTIMATE TICTACTOE GAME UML

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## GameRunner

- userEntry: static Scanner
- humanPlayer: Player
- AiPlaver: Plaver
- ultimateTTTBoard: MasterBoard
- gameStatus: MasterGameStatus
- lastMove: PreviousMove
- validQuadrantForNextMove: int[]
- + main(String args[]): static void
- + GameRunner()
- + takeHumanTurn(Player currentPlayer): void
- + takeAiTurn(Player currentPlayer): void
- + getValidCoordinatesInQuadrant(int masterRow, int masterColumn): int[]
- + getIndividualBoardCoordinates(int masterBoardRow, int masterBoardColumn): int[]
- + getMasterBoardCoordinates(int masterBoardRow, int

masterBoardColumn, int individualRow, int individualColumn): int[]

- + printRules(): void
- + getLastMove():PreviousMove
- + setLastMove(PreviousMove lastMove):void
- + determineValidQuadrant(): int[]
- $+ input Validator (int[]\ validQuadrantForNextMove,\ int[]\ userInput):\ boolean$
- + getValidQuadrantForNextMove(): int[]
- + setValidQuadrantForNextMove(int[] validQuadrantForNextMove): void
- + updateStatusForBoards(): void

## Player

- playerMark: CellConstant
- winningBoardStatus: IndividualBoardStatus
- + Player(String mark)
- + getPlayerMark(): CellConstant
- + getWinningBoardStatus: IndividualBoardStatus
- + swap: void
- + GetPlayerInput: int[]

