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import java.util.Scanner;

public class XOGame {

    char[][] board;
    int size;
    char PlayerX;
    char PlayerO;
    int row;
    int col;

    public XOGame() {
        size = 3;
        board = new char[size][size];
        PlayerX = 'X';
        PlayerO = 'O';
        row = 0;
        col = 0;
    }

    public void PrintBoard() {
        for (int i = 0; i < size; i++) {
            System.out.println("-----");
            for (int j = 0; j < size; j++)
                System.out.print("|" + board[i][j] + "|" + (" \t"));
            System.out.println();
        }
        System.out.println("-----");
    }

    public boolean checkRowCol(char c1, char c2, char c3) {
        return ((c1 != '\u0000') && (c1 == c2) && (c2 == c3));
    }

    public boolean RowsWinnerCheck() {
        for (int i = 0; i < 3; i++) {
            if (checkRowCol(board[i][0], board[i][1], board[i][2]) == true) {
                return true;
            }
        }
        return false;
    }

    public boolean ColumnsWinnerCheck() {
        for (int i = 0; i < 3; i++) {
            if (checkRowCol(board[0][i], board[1][i], board[2][i]) == true) {
                return true;
            }
        }
        return false;
    }
}
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public boolean DiagonalWinnerCheck() {
    return ((checkRowCol(board[0][0], board[1][1], board[2][2]) == true) || (checkRowCol(board[0][2], board[1][1],
board[2][0]) == true));
}

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public boolean WinnerCheck() {
    return (RowsWinnerCheck() || ColumnsWinnerCheck() || DiagonalWinnerCheck());
}

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public boolean isDraw() {
    boolean IsDraw = true;
    for (int i = 0; i < 3; i++) {
        for (int j = 0; j < 3; j++) {
            if (board[i][j] == '\u0000') {
                IsDraw = false;
            }
        }
    }
    return IsDraw;
}

```

```

public void PlayersEntry() {
    System.out.println("PlayerX Enter position to play row and column");
    Scanner input = new Scanner(System.in);
    row = input.nextInt() - 1;
    col = input.nextInt() - 1;
    board[row][col] = PlayerX;
    PrintBoard();
    if (isDraw() && !WinnerCheck()) {
        return;
    } else if (WinnerCheck()) {
        System.out.println("The Winner is PlayerX");
        return;
    }
}

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    System.out.println("PlayerO Enter position to play row and column");
    row = input.nextInt() - 1;
    col = input.nextInt() - 1;
    board[row][col] = PlayerO;
    PrintBoard();
    if (WinnerCheck()) {
        System.out.println("The Winner is PlayerO");
        return;
    }
}

```

```

public static void main(String[] args) {
    boolean PlayAgain=false;
    Scanner input=new Scanner(System.in);
    do {
        System.out.println("New Game Starting");
        XOGame G1 = new XOGame();
        G1.PrintBoard();
    }
}

```

```
do {
    G1.PlayersEntry();
} while (!G1.WinnerCheck() && !G1.isDraw());
if (G1.isDraw() && !G1.WinnerCheck()) {
    System.out.println("The game was a tie!");
}
System.out.println("If you want to play again enter 1 or Enter any number to Exit");
int Again=input.nextInt();
if (Again==1) {
    PlayAgain = true;
}else {PlayAgain=false;
break;}
}while (PlayAgain=true);
}
```