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clc
clear

playingGame = true;
while playingGame
    %Start Title Screen
    printTitlePage();
    response = strtrim(input('','s'));
    %1 - Print Instructions
    %2 - Play Single Player Game
    %3 - Play Multiplayer Game
    %4 - Exit Game
    switch response
        case '1'
            printInstructions();
            input('');
        case '2'
            %Single Player Game
            %Generate Boards
            masterBoard = zeros(3,3);
            mainBoard = zeros(9,9);
            %Start Game
            playingSinglePlayer = true;
            currentBoard = 5;
            playerTurn = 1;
            while playingSinglePlayer
                clc
                drawBoard(mainBoard);
                drawMasterBoard(masterBoard,currentBoard,
playerTurn);
                if playerTurn == 1
                    [playingSinglePlayer,playerTurn,
currentBoard,mainBoard,masterBoard]...
                    =
takeHumanTurn(mainBoard,masterBoard, currentBoard, 'o', 1)
                else
                    ai = ceil(rand*9);
                    if not(isTaken(currentBoard,
mainBoard, ai))
                        mainBoard =
updateBoard(currentBoard, mainBoard,...
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                ai, 'x');
            if calculateMinorWin(mainBoard,
currentBoard, 'x')
                masterBoard(currentBoard) =
                'x';
                if
calculateMajorWin(masterBoard , 'x')
                    clc
                    input('AI wins! Awww!');
                    playingSinglePlayer =
false;
                end
            end
            currentBoard = ai;
            if
isBoardFull(getSubBoard(currentBoard,mainBoard))
                clc
                fprintf('Board %i is full! A
draw!',currentBoard);
                input('');
                playingSinglePlayer = false;
            end
            playerTurn = 1;
        end
    end
end
case '3'
    %multiplayer game
    %Generate Boards
    masterBoard = zeros(3,3);
    mainBoard = zeros(9,9);
    %Start Game
    playingMultiPlayer = true;
    currentBoard = 5;
    playerTurn = 1;
    while playingMultiPlayer
        clc
        drawBoard(mainBoard);
        drawMasterBoard(masterBoard, currentBoard,
playerTurn);
        if playerTurn == 1
            [playingMultiPlayer,playerTurn,
currentBoard,mainBoard,masterBoard]...

```

