

## TIC TAC TOE – DOWN THE MEMORY LANE 04

Alright guys in the previous video we had seen how to code for this game so we had a play method which alternates the turn between the players, even number turns are for X, odd number turns for O. During his turn he has to place symbol in a vacant position so here we take care that his input is proper within the range as well as the position is vacant. So based on this, this functionality works and for checking the winning moves we have a functionality one, it checks the rows with their any of the rows three consecutive cells has been occupied by this player or along the columns or along the diagonals so since we are using or operator works in the fashion that if one of the value is true then final answer would be true so if all three ways the player has not occupied only then it will say it is false that is this person has not won, only then it will say something like this, this is how the functionalities works. I hope you had passed, i had asked you to dry runner i hope you had dry run and you have a clear idea of how the code works how the flow is, please do that make sure that you are very very clear in it then you run the code alright? I hope you are now very clear, let us proceed towards running the code. Ok let me run it see it is extend and i have in a matrix format so it is asking me to enter the row, let as i had said two comma two is the smartest move because you have four winning possibilities in which that particular cell is intersecting so let me say two column is also two, see it has place the cell X here let me now you could see initially the board was empty now i said two comma two has to be occupied so it has occupied. So now if i would give again two comma two see its saying invalid input because it is not a vacant position so let me give some other input one comma two so this position has been occupied, so this is X turn so let me give some input two comma one this is x turn so for the player O this is the optimal placement what if he chooses some other position, why this is an optimal thing because if he leaves this opportunity here in the next turn X may win so he shouldn't leave this so let me say if he didn't predict the next move what could be and he has chosen something else he wants to maximise his winning chance now this is X turn so he may win here, X has won, it displays the message that X has won so if as you would have as you would have seen it is important that both players are equally smart, try that variant as well, try playing in that way, you would definitely see a draw if both players are equally smart alright guys thanks for watching till now please do try different variant and also for tic tac toe there are many more variants you can browse online please do try a different kind of variant and discuss in the discussion form of what are the variants you have discussed, how did you implement? What are your strategies? What are the new things you came across? Please do discuss everything as clear learning is the best way to learn, please do discuss with your Ta's and i wish you a happy learning. Have a nice day.