Main Menu

Yes

The user is told their input is invalid

Yes

Yes

Option 1 is displayed for the user

Did the user choose option 2?

Did the user choose option 1?

User is asked to choose option 1 or option 2

Main menu is displayed

No

GAMEPLAY

No

Yes

Yes

The user is told their input is invalid

No

Player one is told the input is invalid

‘Player two’ selects their grid space

Player one’s icon is placed on the grid

Did ‘Player one’ choose a valid space?

‘Player one’ selects their grid space

The grid is displayed and the program uses “random” to decide who goes first

Did the user choose ‘X’ or ‘O’?

The user is asked to choose ‘X’ or ‘O’?

The user is asked if they want to play again

+1 to the losers lose score

+1 to the winners win score

Has anyone won?

Is the grid filled?

Player two’s icon is placed

Did player two choose a valid space?

No

Yes

Has anyone won?

No

Yes

The game ends as a draw

No

Yes

+1 to the draw score

Yes

NO

Does the user want to play again?