

# Time results for setting up and processing $n \times n$ tic tac toe games

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### **Abstract**

Figuring out measuring time in haskell using criterion for setting up and processing  $n \times n$  tic tac toe matrices for a 2 player game.

## **1 Program Summary**

My program creates a new data type called Player which takes values of O,X or B.

Upon receiving the size of the grid from the user it creates a list which contains the data for each row as separate list elements. The function gameloop prints the Playgrid and calls another function which checks for win/draw conditons and continues the game if none of the conditions are true. My program then replaces the blank player value with the Player type when it receives the position from the user.

## **2 Program processing time**

Using timeIt module to measure function run-time. It measures the CPU time required for the game from start to finish.