

2 Players Tic Tac Toe in C++ by Luu Minh Duc

Purpose of my program:

Build a simple 2 player game
in C++ for entertainment

Features:

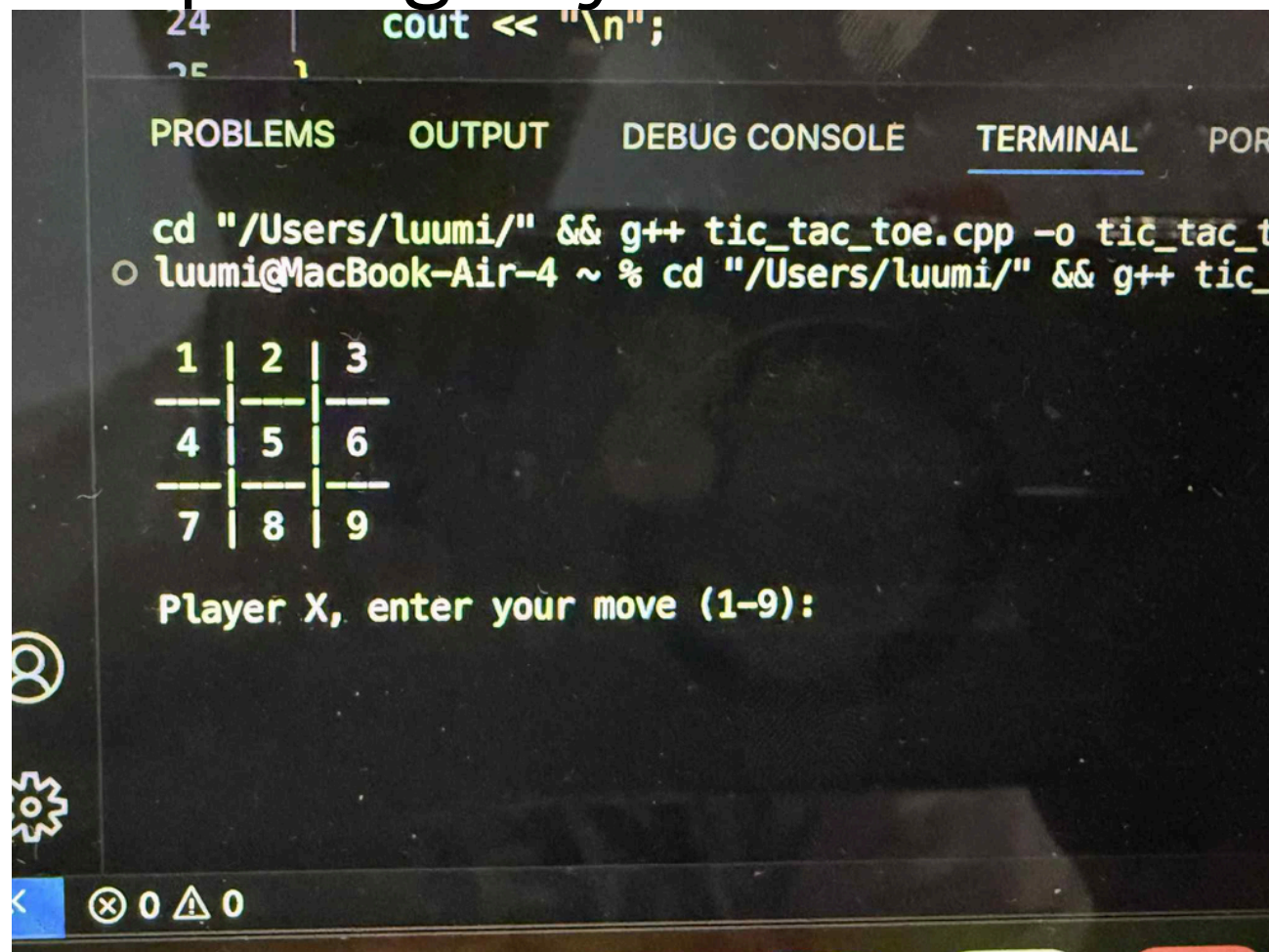
- Console UI with text based grid
- Input validation
- Turn-based logic
- Win/lose/draw detection
- Easy to use, understand and play

GUI:

3x3 board

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- Each cell showing numbers initially
- Players enter number to replace with X or O
- Board updates and detects the winner after each move

Example: The code before inputting any numbers:

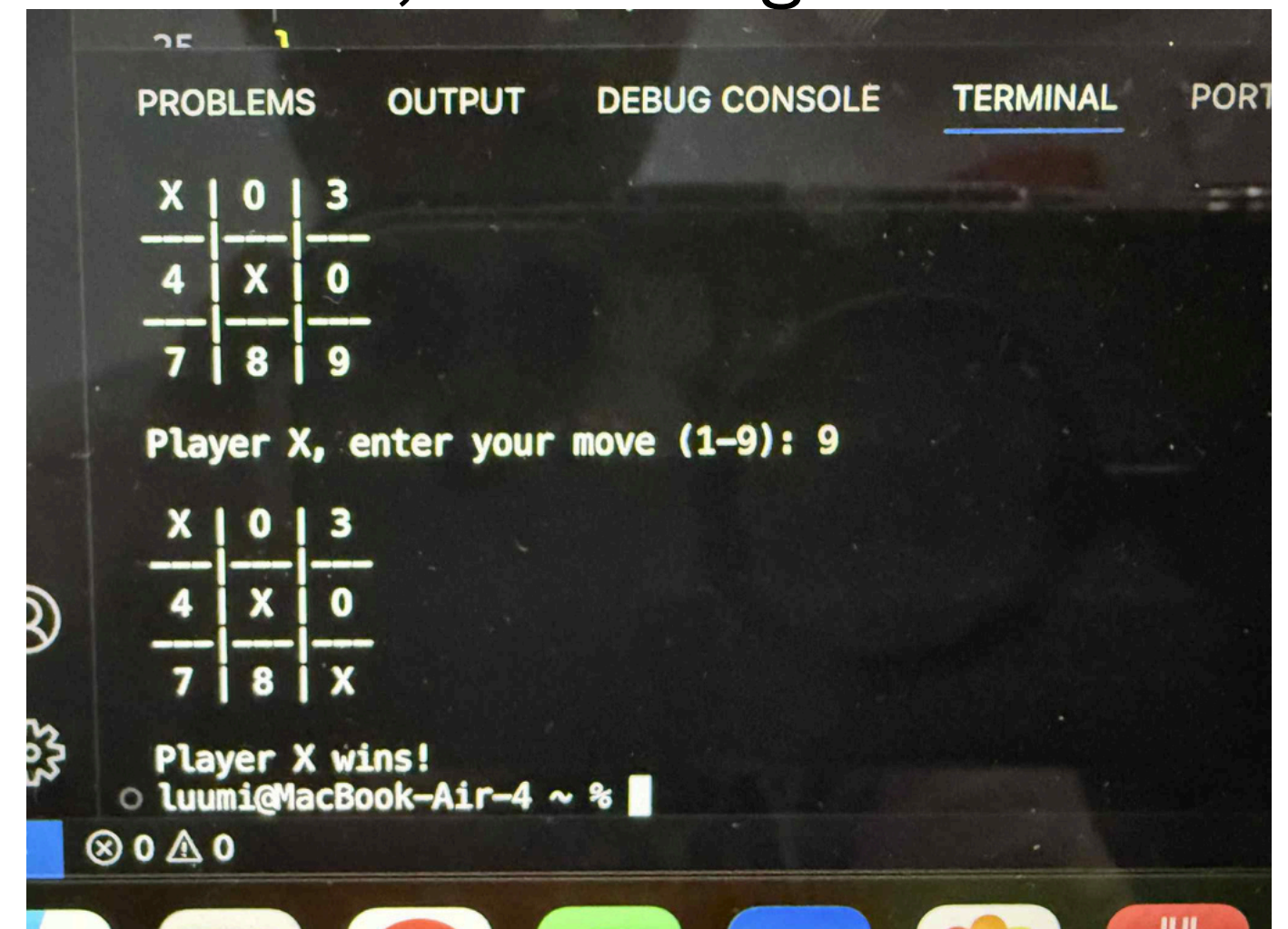


```
24 cout << "\n";
25
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORT
cd "/Users/luumi/" && g++ tic_tac_toe.cpp -o tic_tac_t
luumi@MacBook-Air-4 ~ % cd "/Users/luumi/" && g++ tic_

 1 | 2 | 3
---|---|---
 4 | 5 | 6
---|---|---
 7 | 8 | 9

Player X, enter your move (1-9):
```

The code after inputting a few numbers, detecting the winner:



```
25
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORT
X | O | 3
---|---|---
 4 | X | 0
---|---|---
 7 | 8 | 9

Player X, enter your move (1-9): 9

X | O | 3
---|---|---
 4 | X | 0
---|---|---
 7 | 8 | X

Player X wins!
luumi@MacBook-Air-4 ~ %
```

Program Flow:

1. Fill board with numbers 1-9
2. Print board
3. Prompt the current player for a move
4. Validate and update the board
5. Check for win or draw
6. Switch turns
7. A player wins → display winner
A player loses → display loser
Draw → display draw message

Data structure:

- 2D array for board
- Variables: currentPlayer, row, col, move
- Functions used: initializeBoard(), printboard(), makeMove(int), checkWin(), isDraw(), switchPlayer()

