Tic Tac Toe User Guide for SWE 4203

Winter 2024

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1. Introduction

Purpose of the User Guide

The User Guide helps new users with how to play the game.

2. Getting Started

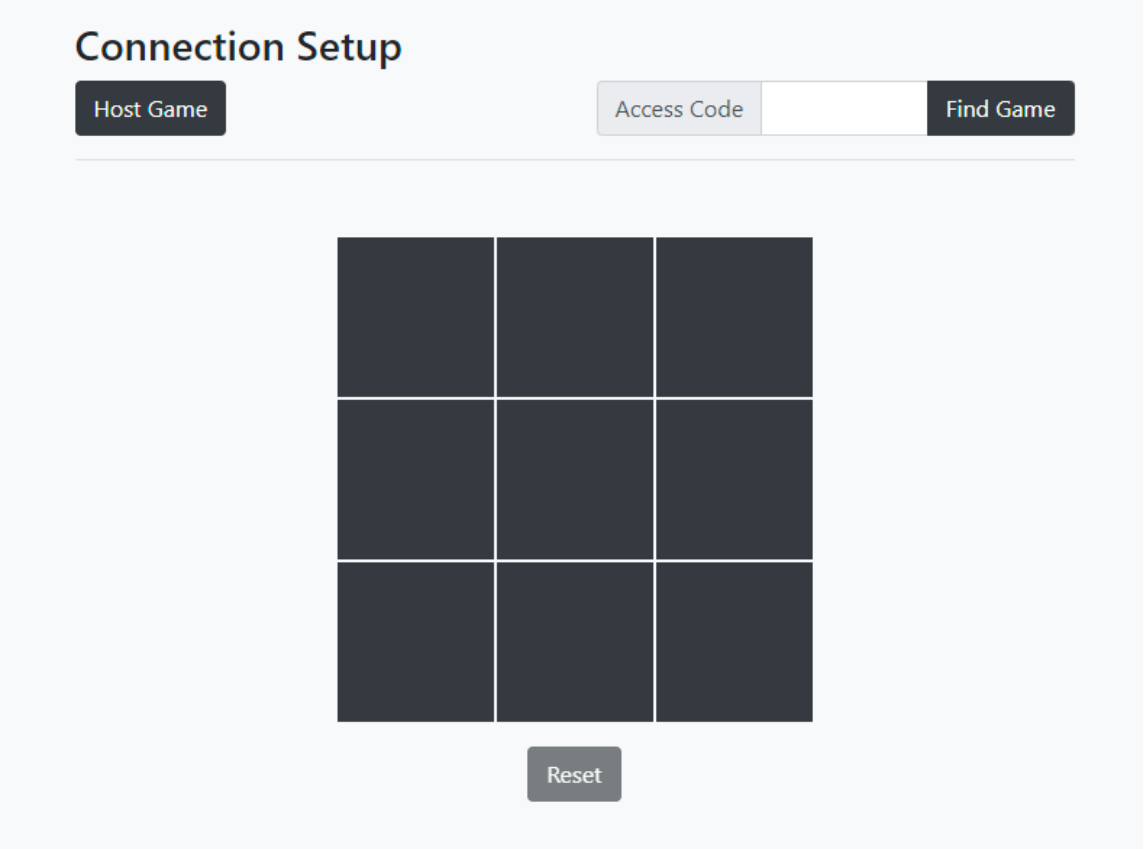

Figure 2.1 - Tic Tac Toe game interface

To make a new game, simply click “Host Game” option, this will generate a code (e.g. 3MAA) for the other player to access the game.

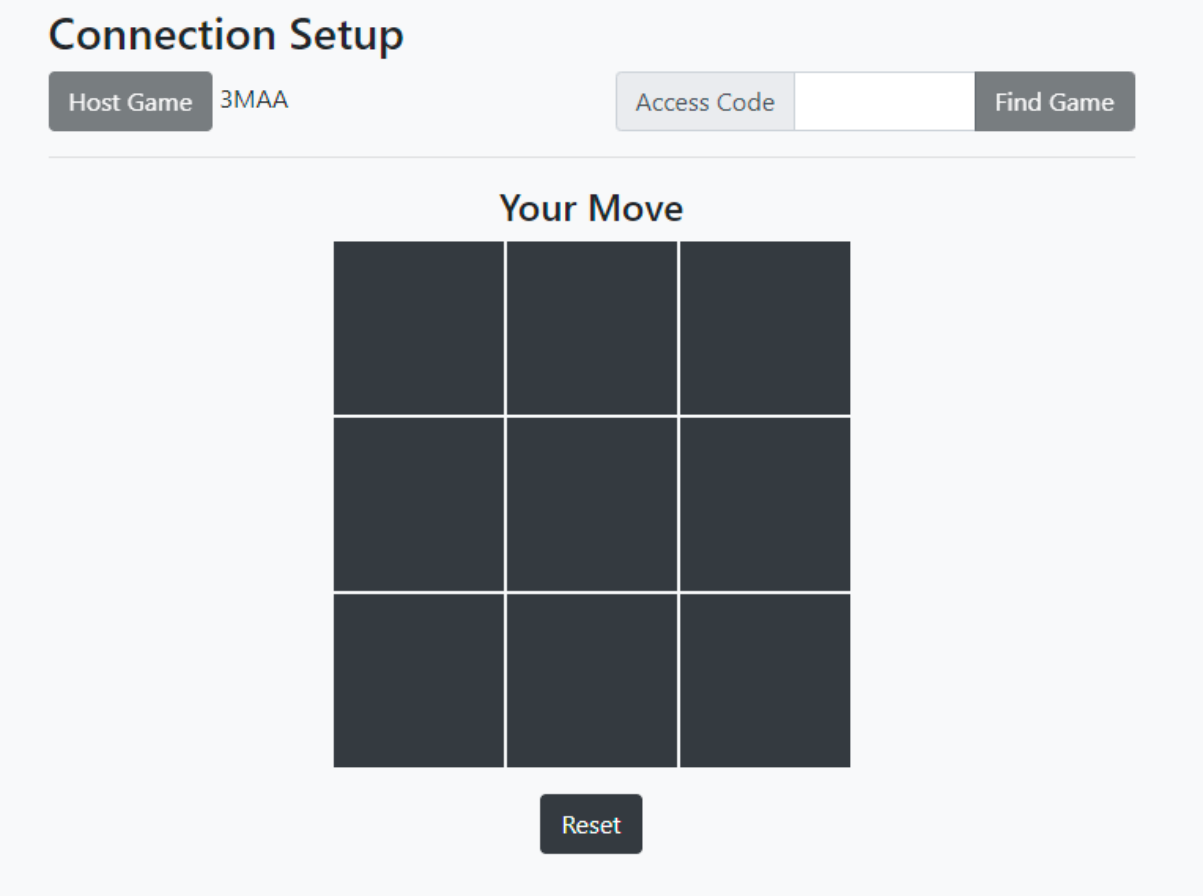

Figure 2.2 - Hosting a game

You can copy this code (3MAA in this example) then paste it in the Access code menu, then press “Find game”. This will give the 2nd player access to the game.

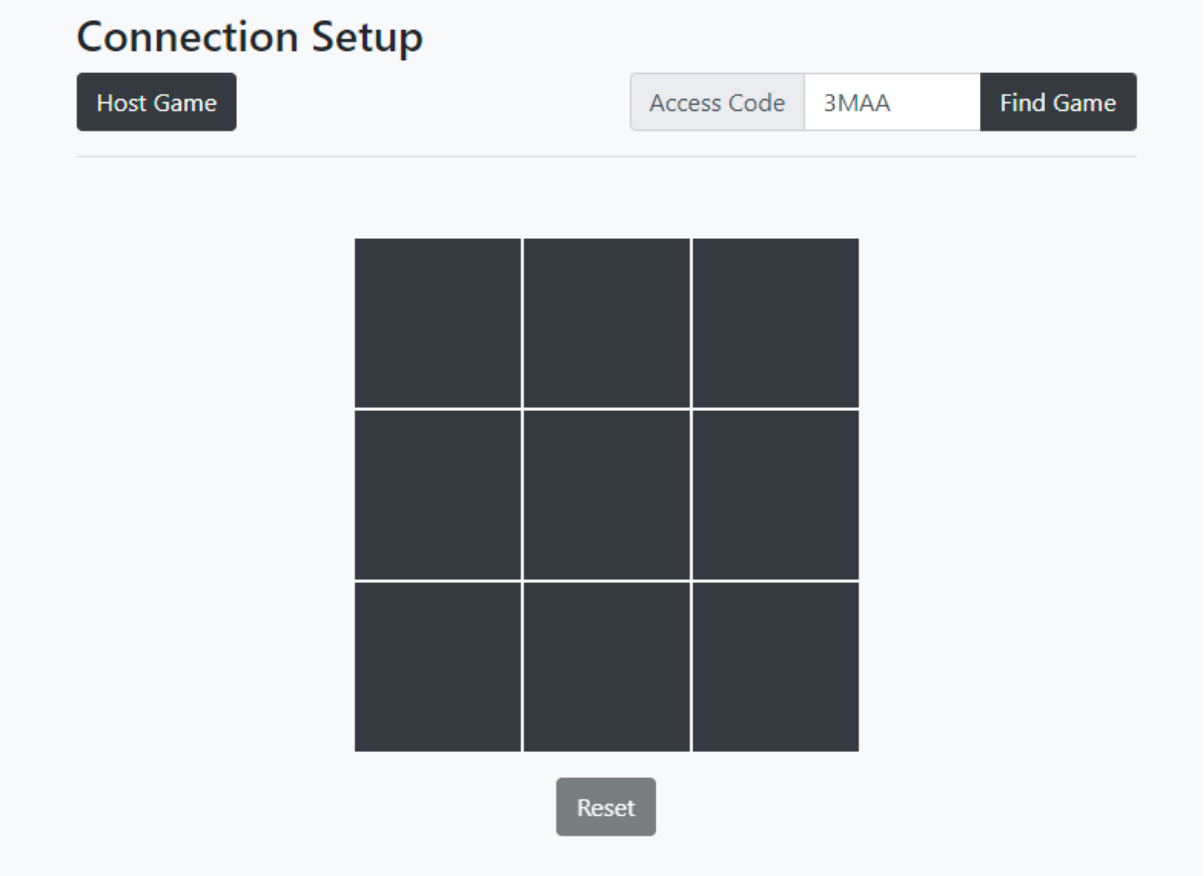

Figure 4.1.4 Joining a game

If the 2nd player successfully participates in the game, the notification “Your Move” will appear on the host screen, while “Opponent Move” will appear on the other side.

3. Game Interface

3.1 Board Layout

The game is being played on a 3x3 tile.

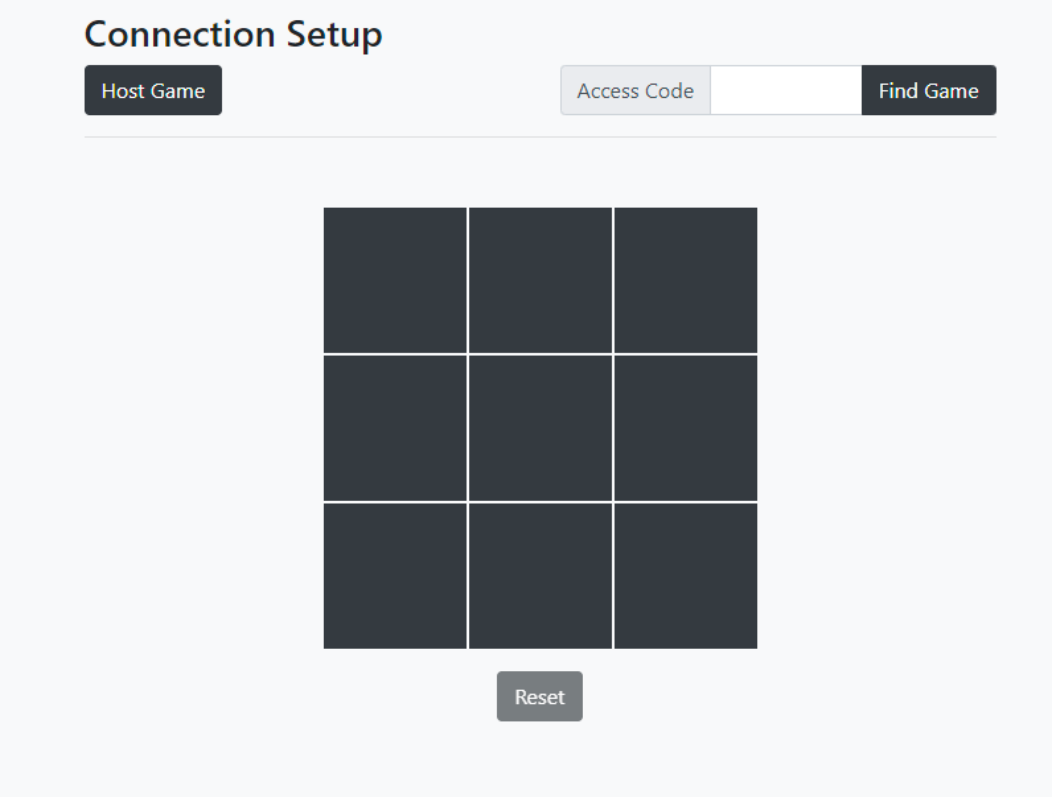

Figure 3.1 Initial startup

3.2 Player Markers

The host will always be “X,” which will be the one who goes first.

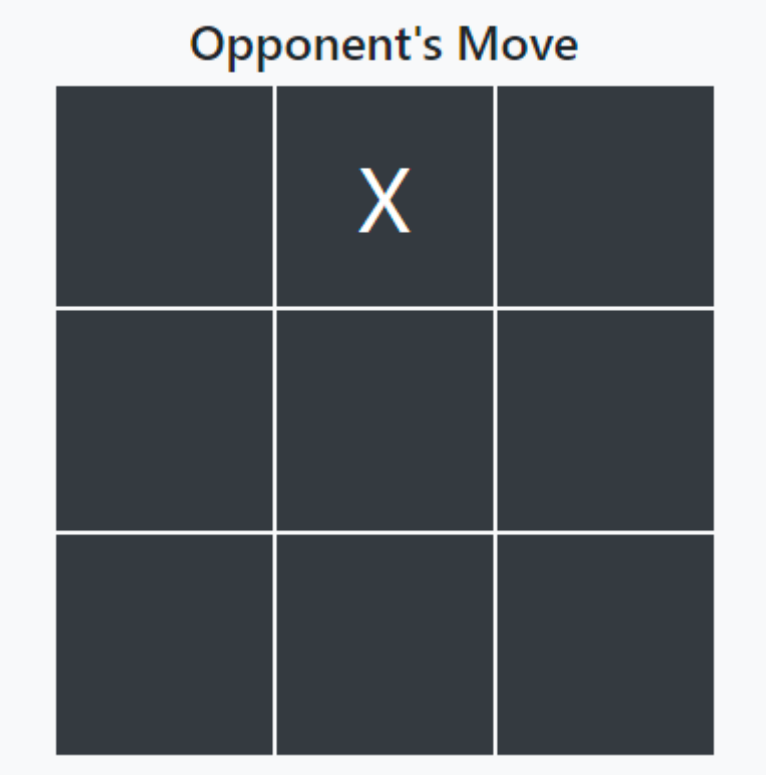

Figure 3.2.1 Host move

While the challenger is “O,” who will go after the “X.”

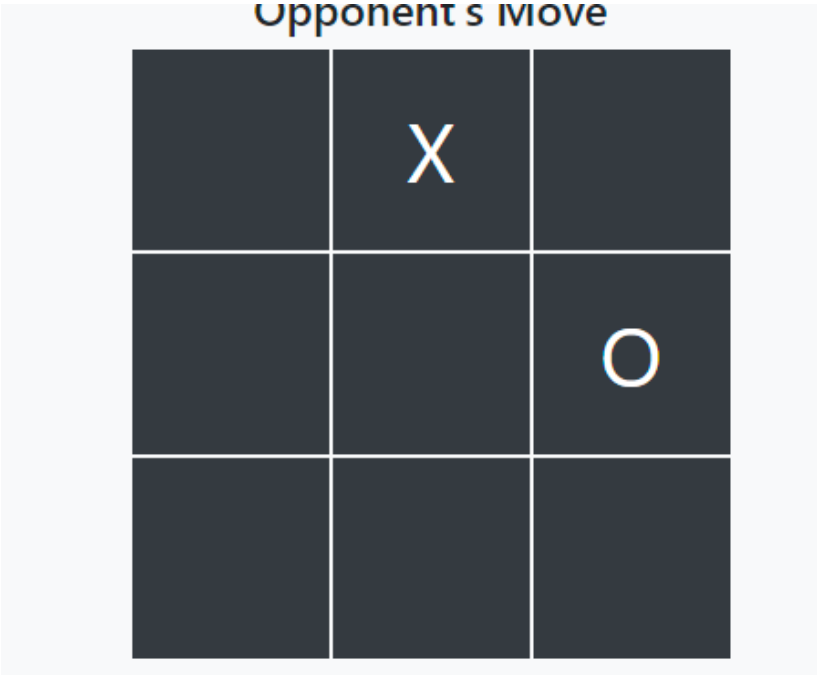

Figure 3.2.2 Opponent move

3.3 Game Controls

Host Game: This will generate a code which can be shared to the 2nd player to let them access the game.

Find Game: After receiving the code, the 2nd player can type in the code and find the game to start the game.

Reset: This will exit the current game, and reset the software, which now can be either join or host a new game.

Action: When it is your turn, the screen will have a notification which indicates who will be next.

4. How to Play

4.1 Making a Move

The software will announce whose move it is on screen. To make a move, click on the space in which you would like to make your move.

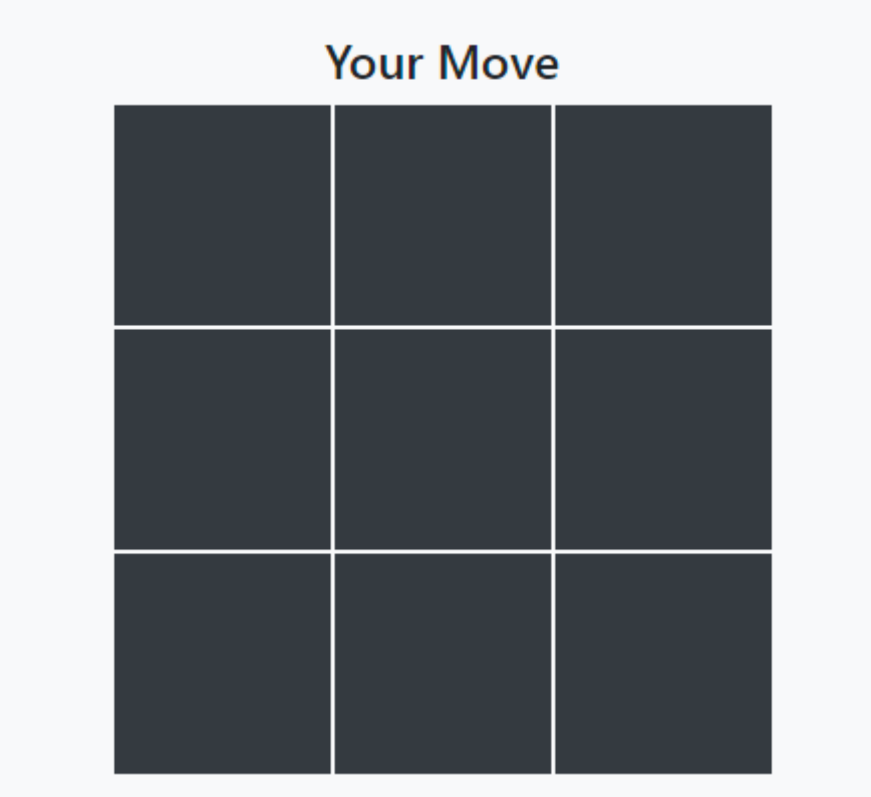

Figure 4.1.1 - Your move

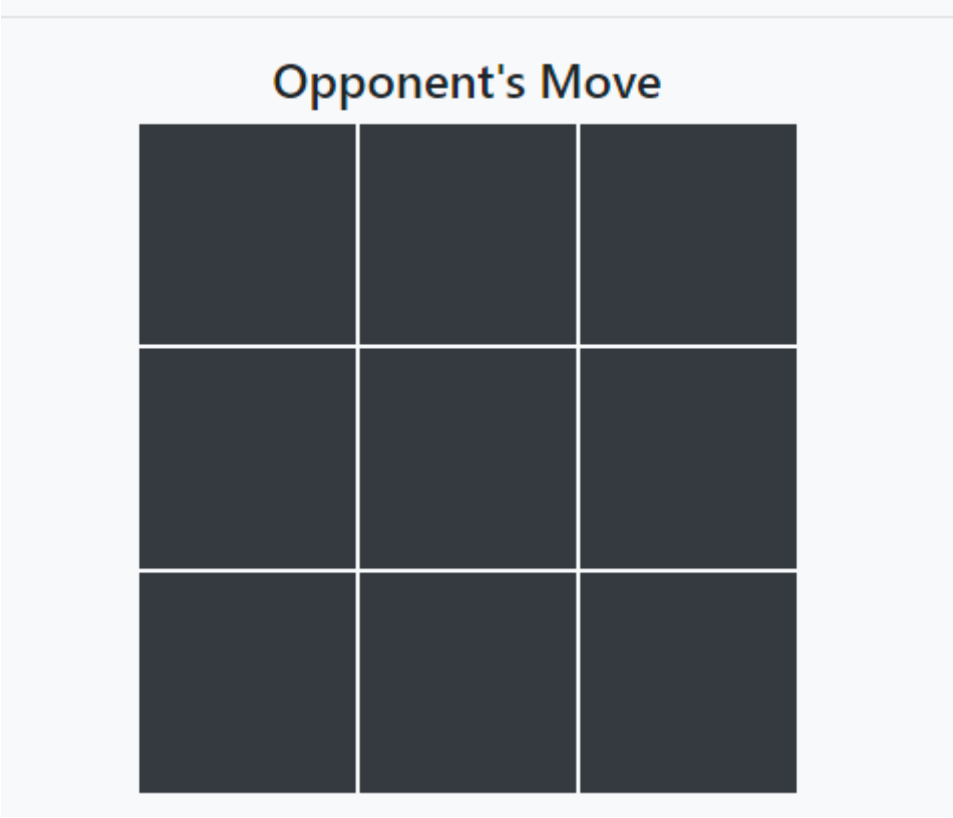

Figure 4.1.2 Opponent’s move

4.3 Winning Conditions

The winning condition in Tic-Tac-Toe is achieved when one player successfully places three of their own symbols (either "X" or "O") in a horizontal, vertical, or diagonal row on the game board. The game is played on a 3x3 grid, and each player takes turns placing their symbol in an empty cell. The first player to create a line of three of their symbols in a row wins the game.

There is a total of 8 combinations that will allow you to win the game:

Horizontal:

- Row 1: (1,1), (1,2), (1,3)
- Row 2: (2,1), (2,2), (2,3)
- Row 3: (3,1), (3,2), (3,3)

Vertical:

- Column 1: (1,1), (2,1), (3,1)
- Column 2: (1,2), (2,2), (3,2)
- Column 3: (1,3), (2,3), (3,3)

Diagonal:

- From top-left to bottom-right: (1,1), (2,2), (3,3)
- From top-right to bottom-left: (1,3), (2,2), (3,1)

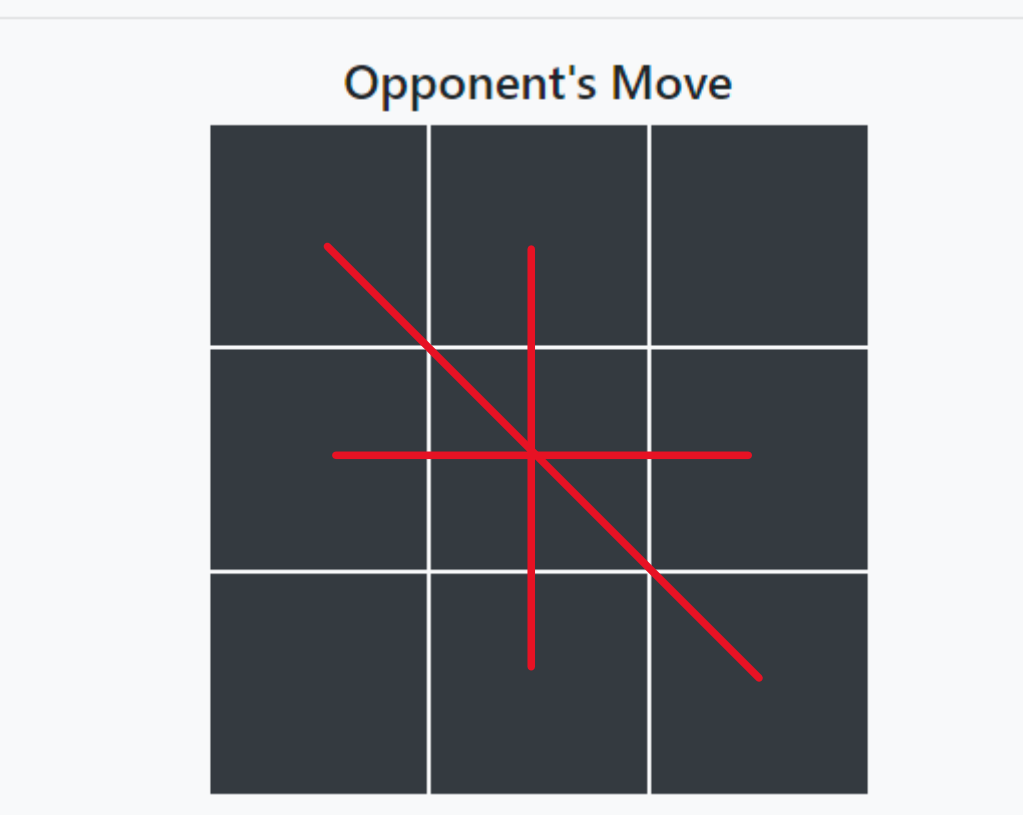

Figure 4.3.1 Winning condition

4.4 Ending the Game

Figure 4.4.1 Ending screen

5. Tips and Strategies

5.1 Winning Strategies

5.1.1 Corner Strategy

Start by placing your marker in a corner. This gives you multiple ways to create a winning line and can force your opponent into defensive positions.

5.1.2 Center Control

Occupying the center position early in the game provides the most opportunities for creating winning combinations. Aim to secure the center square when possible.

5.1.3 Block Opponent's Line

Pay attention to your opponent's moves and strategically place your marker to block potential winning lines. This can disrupt their strategy and give you the upper hand.

5.2 Defensive Moves

5.2.1 Fork Prevention

Be cautious of your opponent creating a fork (two potential winning lines). Place your marker strategically to block their attempts at creating multiple threats.

5.2.2 Center Defense

If your opponent occupies the center, prioritize placing your marker in a way that prevents them from creating a winning line through the center.

5.3 Best Practices

5.3.1 Plan Ahead

Anticipate your opponent's moves and plan your strategy several moves ahead. Consider potential winning combinations for both players.

5.3.2 Balance Defense and Offense

Strive for a balance between defensive moves to block your opponent and offensive moves to create your winning combinations.

5.3.3 Adapt to Your Opponent

Adjust your strategy based on your opponent's style of play. If they are aggressive, focus on defense; if they are cautious, exploit opportunities for offense.

6. Troubleshooting and FAQs

6.1 Common Issues

6.1.1 Unable to Start a New Game

In some rare cases, the software will not allow you to generate a link to the browser.

6.1.1.1 Solution

To solve this, just simply close the IDE then run the program again.

7. Visual Aids

7.1 Screenshots of the Game Interface

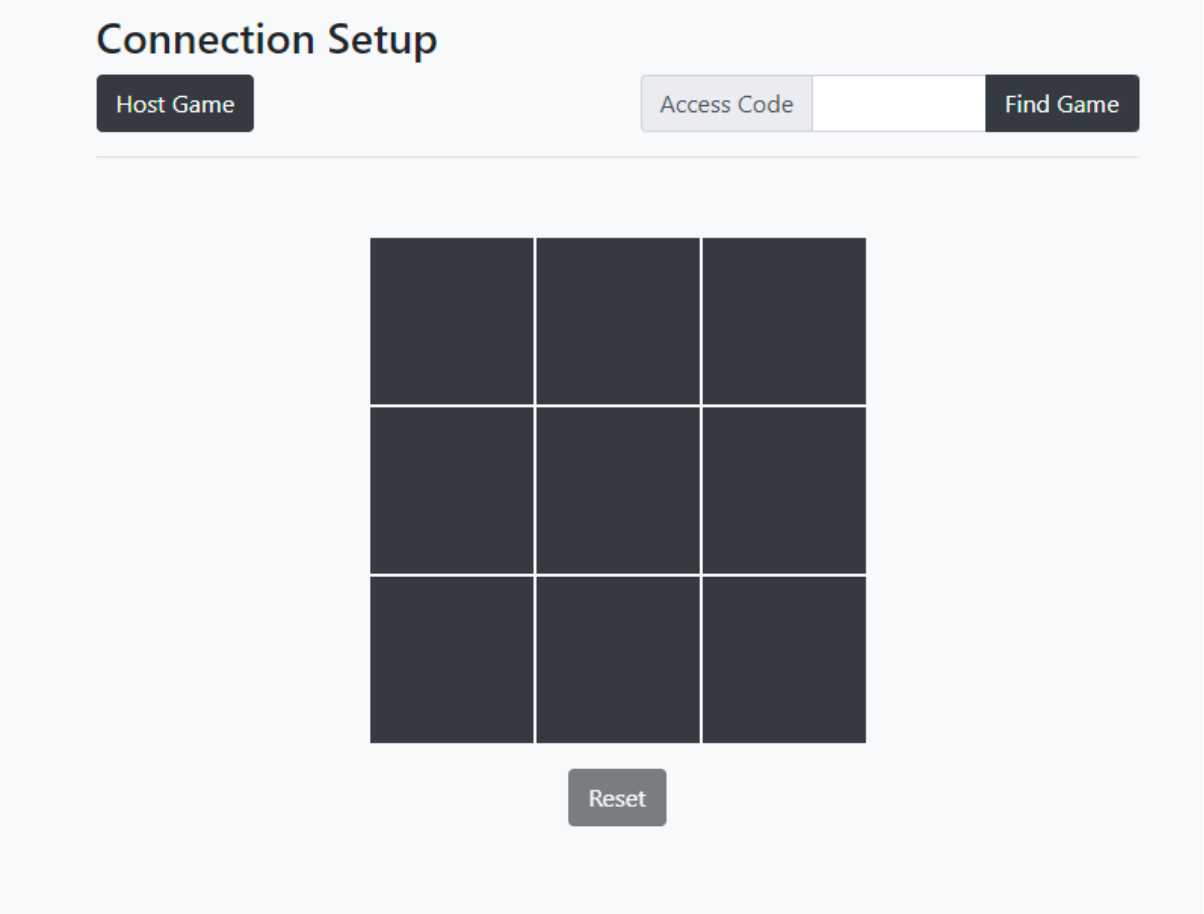

Figure 7.1 Game interface

7.2 Diagrams for Game Controls

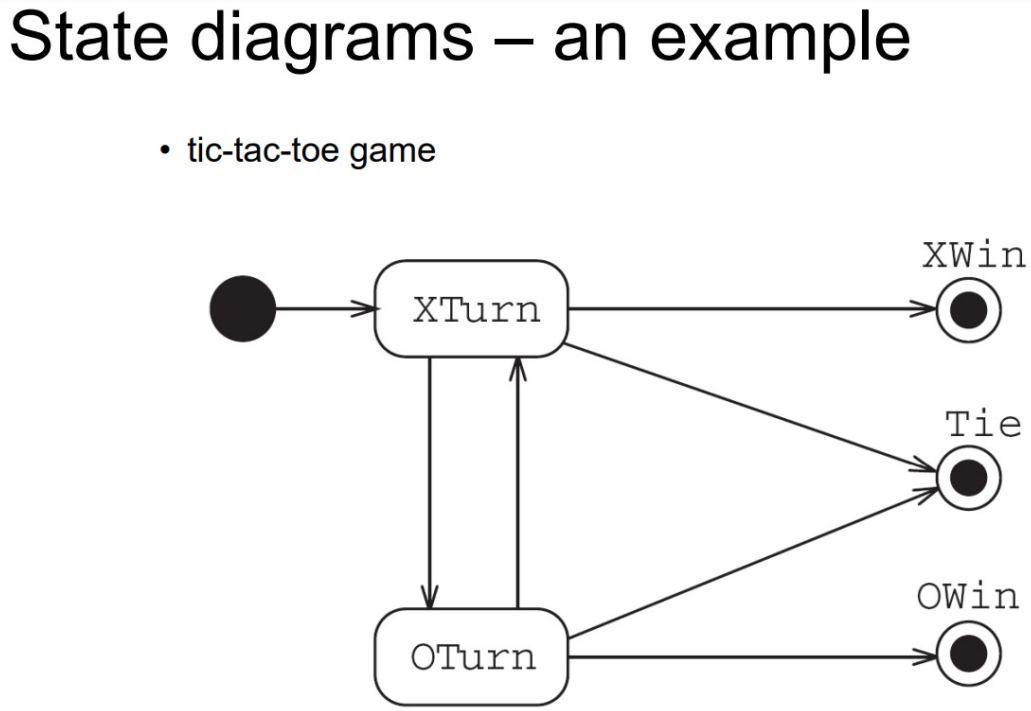

Figure 7.2 Tic Tac Toe game state

8. Legal and Safety Information

8.1 Terms of Use

Please read and adhere to the following terms of use:

- This software is provided "as is," without any warranty or guarantee of any kind.
- Users are responsible for their interactions with the software and any consequences that may arise.
- Unauthorized distribution or modification of the software is strictly prohibited.

8.2 Safety Guidelines

- Take regular breaks while playing to avoid eye strain.
- Ensure that the playing environment is well-lit to reduce the risk of discomfort.
- Adjust volume settings to a comfortable level.

9. Version History

9.1 Version 1.0 (2/8/2024)

Upload new user documentation

Upload new readme.md for better installation guide

Upload current bug for learning purpose

10. Conclusion

10.1 Thank You

Thank you for choosing our Tic Tac Toe Software. We hope you enjoy playing the game and find this user guide helpful.

10.2 Additional Support Resources

For further assistance or inquiries, please contact our support team at vhuynh@unb.ca.

Feel free to customize these examples to better fit the specifics of your Tic Tac Toe software and provide users with a comprehensive and informative user guide.