MINI PROJECT REVIEW 1

TIC TAC TOE(UI)

# AIM:

# The goal of this project is to develop a game called Tic Tac Toe that has a simple user interface, challenging gameplay, and detailed instructions while also enhancing the user's understanding of C++ programming.

# REQUIREMENT:

# System type : 32/64-bit operating system, x32/x64-based processor

# OS : Windows/Mac

# SOFTWARE : RADStudio 11( C++ BUILDER)

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# UML DIAGRAM:

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# | TicTacToe |

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# | - board: char[][] |

# | - player: char |

# | - computer: char |

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# | + play(): void |

# | + makeMove(): void|

# | + displayBoard(): void |

# | - checkWin(): bool |

# | - checkTie(): bool |

# | - switchPlayer(): void |

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# REPORT:

Introduction:

The Tic Tac Toe game is a simple yet entertaining game played by two players. It is a two-player game, where each player takes turns marking a space in a 3×3 grid. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row is the winner.

In this project, we have implemented a user interface Tic Tac Toe game using C++ programming language. The game is played between two players where the first player is X and the second player is O. The game is designed in such a way that the players can use the cursor pointer to select the position on the board where they want to place their mark. The game will continue until one of the players wins or the game is a draw.

Features:

User-friendly Interface: The game is designed with a user-friendly interface that allows the user to easily navigate and play the game.

Two-Player Game: The game can be played between two players. The first player is X, and the second player is O.

Keyboard Input: The players can use the cursor pointer to select the position on the board where they want to place their mark.

Win/Lose Conditions: The game is designed to check for the win/lose conditions after each turn. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row is the winner.

Implementation:

The implementation of the game is done in C++ programming language. The game is divided into three parts: the user interface, the game logic, and the main function.

User Interface: The user interface of the game is designed using RAD studio. This application window is used to display the game board and the messages to the user.

Game Logic: The game logic is implemented using functions. The functions are used to check for the win/lose conditions and to update the game board after each turn.

Main Function: The main function is the entry point of the program. It is used to initialize the game board, start the game, and check for the win/lose conditions.