CTOOD - Project Abstract

Title: Java-Based Tic-Tac-Toe Game Construction

Abstract:

Tic-Tac-Toe, the timeless game for two, involves alternating turns to mark a 3x3 matrix with ‘X’ or ‘O’ symbols, aiming for a straight line of three identical symbols. This initiative seeks to craft a Tic-Tac-Toe application in Java, embracing the tenets of object-oriented design.

This endeavor will introduce a Graphical User Interface (GUI) crafted through Java Swing or JavaFX, enhancing player engagement with the game. The GUI will showcase the playing area and offer user-friendly controls for move execution. The initiative will also encompass algorithms to ascertain the victor or a tie.

Principal Features:-

Architecting game mechanics to oversee moves and adjudicate outcomes.

Engineering an accessible GUI to facilitate seamless play.

Embedding robust error management for uninterrupted interaction.

Providing options to reset the game or withdraw anytime.

Enabling matches against another player or a computerized opponent with varying levels of challenge.

This project exemplifies the application of object-oriented programming paradigms, GUI crafting, event management, and strategic logic in Java. It aims to deliver a delightful gaming encounter for novices and seasoned programmers alike, fostering an interest in Java game development.