

GOVERNMENT POLYTECHNIC KOLHAPUR

शासकीय तंत्रिकी विद्यापीठ कोल्हापूर

(First Autonomous Institute Of Government Of Maharashtra)



Certificate

Sr No.	Name Of Student	Roll No
1.	Bhakti Sharad More	206039
2.	Diksha Narendra Parakhe	206044

of fifth Semester of Diploma in Information Technology of Institute, GOVT. POLYTECHNIC KOLHAPUR (Inst. Code: 6010) has completed the **Micro-Project** satisfactorily in the Subject **Advanced Java(ITG405)** for the academic year **2022-23** as prescribed in the curriculum.

Signature of Guide

Date : 03-10-2022

Place : Kolhapur

GOVERNMENT POLYTECHNIC KOLHAPUR

MICRO PROJECT

Academic Year : 2022 – 2023

TITLE OF THE PROJECT

Noughts And Crosses

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Course : Advanced Java

Course Code : ITG405

GROUP DETAILS

Sr No.	Name Of Student	Roll No
1.	Bhakti Sharad More	206039
2.	Diksha Narendra Parakhe	206044

GUIDE

Mr. M. B. Patil

1. Introduction Of The Project :

Our project name is The Tic-Tac-Toe game. This game is very popular and is fairly simple by itself. It is actually a two-player game. In this game, there is aboard with

$N \times n$ squares. In our game, it is 3×3 squares. The goal of Tic-Tac-Toe is to be one of the players to get three same symbols in a row - horizontally, vertically or diagonally - on a 3×3 grid.

2. Course Outcome :

ITG405-1: Develop programs using GUI framework. (AWT, Swing)

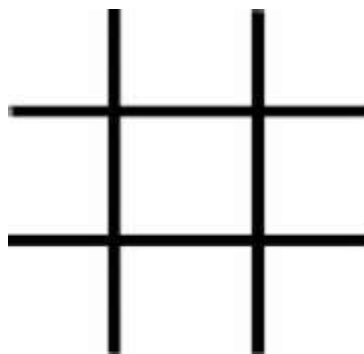
ITG405-2: Handle events of AWT and Swing components.

3. Proposed Methodaology :

This game can be played in a 3×3 grid (shown in the figure 2.1) .The gamecan be played by two players. There are two options for players.

2.1 Players:

both the players are humans. There are total 9 boxes in grid and players going to put either O or X in each box one by one



2.2 Theory of Game:

A player can choose between two symbols with his op ponent, usual games use “X” and “O”. If the first player chooses “X” then the second player has to play with “O” and vice versa. A player marks any of the 3×3 squares with his symbol (maybe “X” or “O”) and his aim is to create a straight line horizontally or vertically or diagonally with two intensions: a) Create a straight line before his opponent to win the game. b) Restrict his opponent from creating a straight line first. In case logically no one can create a straight

line with his own symbol, the game results in a tie. Hence there are only three possible results – a player wins, his opponent(human or computer) wins or it's a tie.

1 2 3 4 5 6 7 8 9

If any player is able to draw three Xs or three Os in the following combinations then that player wins. The combinations are:

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

4. Action Plan For The Project :

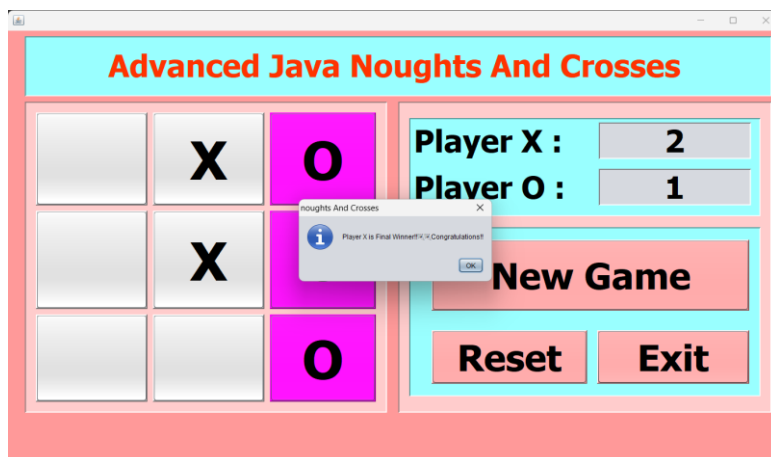
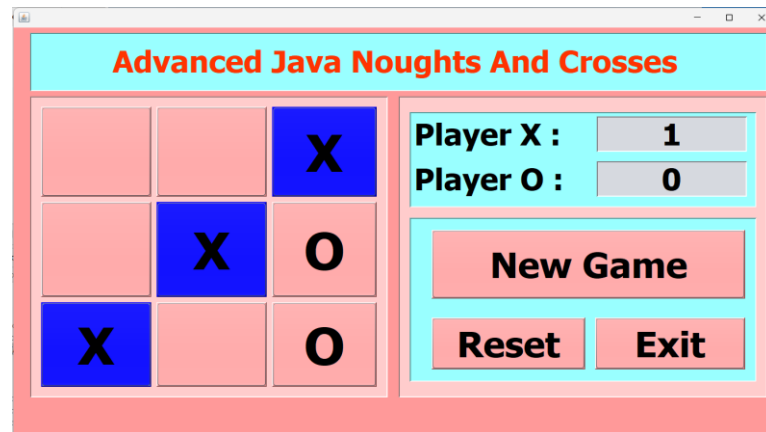
Sr No	Planned Start Date	Planned Finish Date	Details of Activity	Names Of All Responsible Team Members
1.	22-09-2022	23-09-2022	To Understand the work	All
2.	24-09-2022	26-09-2022	To make a short list of tasks we are going to perform.	All
3.	28-09-2022	30-09-2022	To make design of the game	All
4.	31-09-2022	01-10-2022	To code the functions behind the game.	All
5.	02-10-2022	03-10-2022	To check for mistakes and debug the code.	All

5. Resources Required :

Sr No	Name Of Resource/Material	Specifications	Qty	Purpose
1.	NetBeans IDE	Apache	1	For designing and coding
2.	Microsoft Word	MS Office 2021	1	For Making Report of the project

6. Snapshots Of Project :





7. Conclusion:

By performing Micro Project, we came to know about some of the new components of swing like JOptionpane, observed the behaviour of Swing components and various layouts, got a new experience.

...THANK YOU...