Final Project- Milestone 1

Team:
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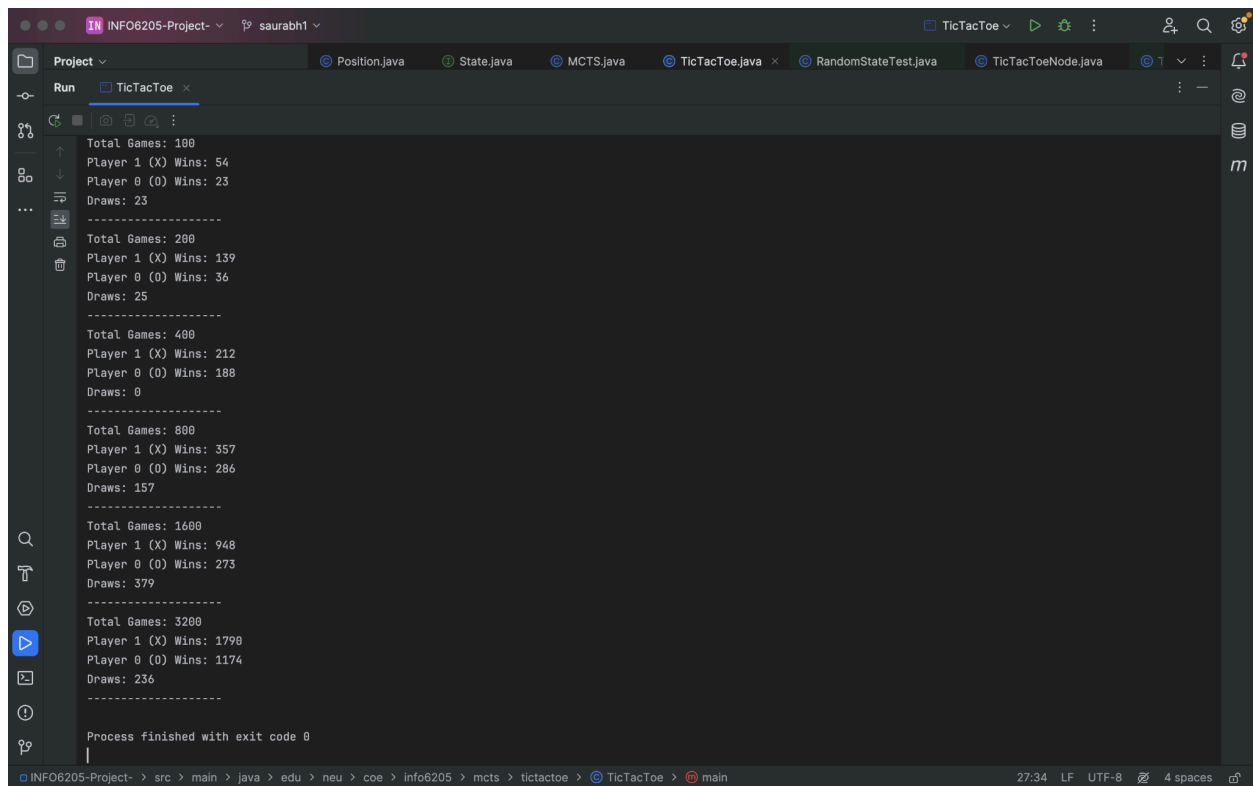Basavaraj Patil
Stafny Velitia Karkada
Github Repo Link:https://github.com/ssaurabh760/INFO6205-FinalProject

Implementing code in Tic-tac-toe:

After writing the required code in the *To be implemented* section and running the main program, we get the output as specified in the screenshot below

Running Unit Test cases
We ran the unit test cases in the TicTacToeTest file(runGame unit test case), the PositionTest file and TicTacToeNodeTest)
Below are the screenshots of the successful passing of all the test cases

Project ⌄   t.java   ◎ TicTacToeNode.java   ◎ TicTacToeTest.java ✕   ◎ MCTSTest.java   ◎ PositionTest.java   ◎ TicTacToeNodeTest.java   ⌄ ⋮

```
                    RandomStateTest          1    package edu.neu.coe.info6205.mcts.tictactoe;
             ⌄ 📁 tictactoe                  2
                 ◎ MCTSTest                  3  > import ...
                 ◎ PositionTest             10
                 ◎ TicTacToeNodeTes
                 ◎ TicTacToeTest           11    public class TicTacToeTest {
             > 📁 pq                         12
             > 📁 randomwalk                13        /**
             > 📁 reduction                 14         *
             > 📁 sort                      15         */
```

Run   🔵 TicTacToeTest ✕   ⋮   —

```
⟳  ▷  ⎌  ⬛  ✓  ⊘  ⤸  ⤶  🕐  📷  ⏏  ⟲  ⋮
```

✓ TicTacToeTest (edu.neu.co 11 ms   ✓ Tests passed: 1 of 1 test – 11 ms
  ✓ runGame   11 ms   /Users/saurabhsrivastava/Library/Java/JavaVirtualMachines/openjdk-22/Contents/Home/bin/java ...

                                         Process finished with exit code 0

TicTacToeNode.java　TicTacToeTest.java　MCTSTest.java　PositionTest.java　TicTacToeNodeTest.java

```
13              TicTacToeNode node = new TicTacToeNode(state);
14              assertTrue(node.isLeaf());
15              assertEquals( expected: 2, node.wins());
16              assertEquals( expected: 1, node.playouts());
17      }
18
```
⊥ Saurabh Srivastava

Run 　TicTacToeNodeTest ✕

✓ TicTacToeNodeTest (edu.n 15 ms　✓ Tests passed: 6 of 6 tests – 15 ms
　✓ addChild　　　　7 ms　/Users/saurabhsrivastava/Library/Java/JavaVirtualMachines/openjdk-22/Contents/Home/bin/java ...
　✓ state　　　　　6 ms
　✓ white　　　　　1 ms　Process finished with exit code 0
　✓ backPropagate　1 ms
　✓ children　　　　0 ms
　✓ winsAndPlayouts　0 ms

Toe.java　RandomStateTest.java　TicTacToeNode.java　TicTacToeTest.java　MCTSTest.java　PositionTest.java

```
1       package edu.neu.coe.info6205.mcts.tictactoe;
2
3   >   import ...
9
        ⊥Saurabh Srivastava
10  ⊙   public class PositionTest {
11
```

Run 　PositionTest ✕

✓ PositionTest (edu.neu.coe.i 10 ms　✓ Tests passed: 18 of 18 tests – 10 ms
　✓ testProjectDiag　5 ms　/Users/saurabhsrivastava/Library/Java/JavaVirtualMachines/openjdk-22/Contents/Home/bin/java ...
　✓ testMove0　　　4 ms
　✓ testMove1　　　0 ms　Process finished with exit code 0
　✓ testMoves　　　0 ms
　✓ testParseCell　　0 ms
　✓ testFull　　　　0 ms
　✓ testToString　　0 ms
　✓ testThreeInARow　0 ms
　✓ testReflect　　　0 ms
　✓ testWinner0　　0 ms
　✓ testWinner1　　0 ms
　✓ testWinner2　　0 ms
　✓ testMove_1　　　1 ms
　✓ testMove_2　　　0 ms
　✓ testProjectCol　　0 ms
　✓ testProjectRow　0 ms
　✓ testRender　　　0 ms
　✓ testRotate　　　0 ms