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import java.io.*;

/**
 *
 * @author James Spargo
 * This class controls the game play for the Max Connect-Four game.
 * To compile the program, use the following command from the maxConnectFour directory:
 * javac *.java
 *
 * the usage to run the program is as follows:
 * ( again, from the maxConnectFour directory )
 *
 * -- for interactive mode:
 * java MaxConnectFour interactive [ input_file ] [ computer-next / human-next ] [ search
depth]
 *
 * -- for one move mode
 * java maxConnectFour.MaxConnectFour one-move [ input_file ] [ output_file ] [ search
depth]
 *
 * description of arguments:
 * [ input_file ]
 * -- the path and filename of the input file for the game
 *
 * [ computer-next / human-next ]
 * -- the entity to make the next move. either computer or human. can be abbreviated to
either C or H. This is only used in interactive mode
 *
 * [ output_file ]
 * -- the path and filename of the output file for the game. this is only used in one-
move mode
 *
 * [ search depth ]
 * -- the depth of the minimax search algorithm
 *
 */

public class maxconnect4
{
    public static void main(String[] args)
    {
        // check for the correct number of arguments
        if( args.length != 4 )
        {
            System.out.println("Four command-line arguments are needed:\n"
                + "Usage: java [program name] interactive [input_file] [computer-
next / human-next] [depth]\n"
                + " or:  java [program name] one-move [input_file] [output_file]
[depth]\n");

            exit_function( 0 );
        }

        // parse the input arguments
        String game_mode = args[0].toString(); // the game mode
        String input = args[1].toString(); // the input game
file
        int depthLevel = Integer.parseInt( args[3] ); // the depth level of the
ai search

        // create and initialize the game board
        GameBoard currentGame = new GameBoard( input );

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// create the Ai Player
AiPlayer calculon = new AiPlayer();

// variables to keep up with the game
int playColumn = 99; // the players choice of column
to play
boolean playMade = false; // set to true once a play has been made

if( game_mode.equalsIgnoreCase( "interactive" ) )
{
    System.out.println("interactive mode is currently not implemented\n");
    return;
}

else if( !game_mode.equalsIgnoreCase( "one-move" ) )
{
    System.out.println( "\n" + game_mode + " is an unrecognized game mode \n try again.
\n" );
    return;
}

////////// one-move mode //////////
// get the output file name
String output = args[2].toString(); // the output game file

System.out.print("\nMaxConnect-4 game\n");
System.out.print("game state before move:\n");

//print the current game board
currentGame.printGameBoard();
// print the current scores
System.out.println( "Score: Player 1 = " + currentGame.getScore( 1 ) +
    ", Player2 = " + currentGame.getScore( 2 ) + "\n " );

// ***** this chunk of code makes the computer play
if( currentGame.getPieceCount() < 42 )
{
    int current_player = currentGame.getCurrentTurn();
    // AI play - random play
    playColumn = calculon.findBestPlay( currentGame );

    // play the piece
    currentGame.playPiece( playColumn );

    // display the current game board
    System.out.println("move " + currentGame.getPieceCount()
        + ": Player " + current_player
        + ", column " + playColumn);
    System.out.print("game state after move:\n");
    currentGame.printGameBoard();

    // print the current scores
    System.out.println( "Score: Player 1 = " + currentGame.getScore( 1 ) +
        ", Player2 = " + currentGame.getScore( 2 ) + "\n " );

    currentGame.printGameBoardToFile( output );
}
else
{
    System.out.println("\nI can't play.\nThe Board is Full\n\nGame Over");
}

//***** end computer play

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        return;
    } // end of main()

    /**
     * This method is used when to exit the program prematurely.
     * @param value an integer that is returned to the system when the program exits.
     */
    private static void exit_function( int value )
    {
        System.out.println("exiting from MaxConnectFour.java!\n\n");
        System.exit( value );
    }
} // end of class connectFour
```