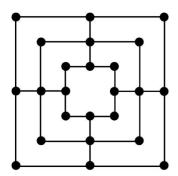
Criterion A: Planning

The Scenario

I am developing the two player game Nine Men's Morris for my sister, XX. She is the client, seeing as she thoroughly enjoys board games and would like to play this game on her own against the computer rather than other people because not many are at her level. This is what makes her a suitable client. I will act as the adviser however my sister will give feedback to me as to what could be improved about the game. I will act on her and my own constructive feedback about what more needs to be gained from the game. The rules of the game are as follows: The board is a grid with 24 intersecting points where the player's nine pieces are placed. The aim is to try to form a line of three of their pieces which allows the player to remove an opponent's piece from the game. Players alternate moves, this time moving a man to an adjacent point. A piece may not "jump" another piece. Players try and form 3-in-a-row lines and remove their opponent's pieces. A player has won when their opponent can no longer make a legal move or they have reduced their opponent to 2 pieces.

Nine Men's Morris Board:



Rationale:

This project aims to create a computerised version of the game so that the player can work on their skills and strategies even if there is not another player. If the player is of a high level, they will be playing against the computer rather than another person so it helps replicate to them playing against someone of their own level. I decided that a graphical interface would be best suited to develop this programme in. I chose to develop the game of Nine Men's Morris using Scratch. I chose Scratch due to the fact it's easier to use than other programming languages as I can dynamically make changes to the code and see the effects immediately. As the parts of the code are built in graphical blocks under different functions, the code is more readable and changeable. I also chose Scratch as it is sprite based and uses animation; this is important for the game as the board or counter may need to change depending on the stage of the game. I considered creating Nine Men's Morris in Java however soon decided against this as Java isn't animation based and this is an important factor to the game.

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Success Criteria:

- 1. Game interface shows a basic and clear representation of the game's layout.
- 2. At the beginning there are no pieces on the board.
- 3. Throughout the game as well as on the home screen there is an option to read simple instructions.
- 4. Player one or two based on turn can place counters.
- 5. Once all of the players have been placed, the player is able to move their piece by clicking on the piece they wish to move and then clicking on the place they wish to move to.
- 6. When a line of three is made, an opponent's piece can be taken.
- 7. A score of pieces taken is displayed in the corner of the screen.
- 8. An end screen appears once a player has won displaying that the game is over and which player has won.
- 9. There is an option to quit a game in progress.
- 10. Once a game is over an option to play again is displayed.

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