I am working alone on this project.

I am building a maze game. The game will display a window with the maze in the center and a header and footer containing information about the game. The header will have a timer, moves count, and the score. The footer will tell the user how to move in the maze using the arrow keys. The user will have a game piece that they can control with the keys. They will start at the start position and finish at the finish position. The timer will start when the player makes the first move and will continue to count down to 0 until the user solves the maze. If the user does not solve the maze by the time the timer reaches 0, the game will reset. The score will be calculated based on the number of moves made. It will start as a fixed number and will change only after the user has made more than the ideal number of moves (ideal number of moves is the number of moves it takes to solve the maze correctly on the first try). If the user solves the maze before the time runs out, they will get a time bonus added to their score based upon the remaining time.

Model-view-control is an appropriate pattern for my project because the user will see the view (the maze) and use the arrow keys to play the game. The controller will update the model based upon the key pressed, and the view will update based upon the changes to the model. The controller will handle key presses and update the game information at the top of the maze view. The controller will send the key presses to the model to move the piece around and the piece's location would be updated in the view.

List of classes:
-Main
-MazeModel
-Controller
-MazeView