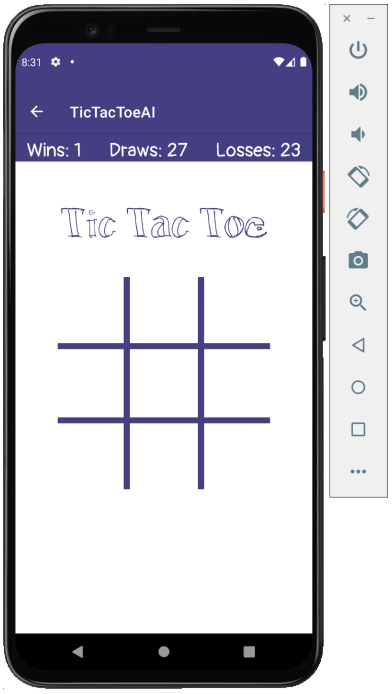
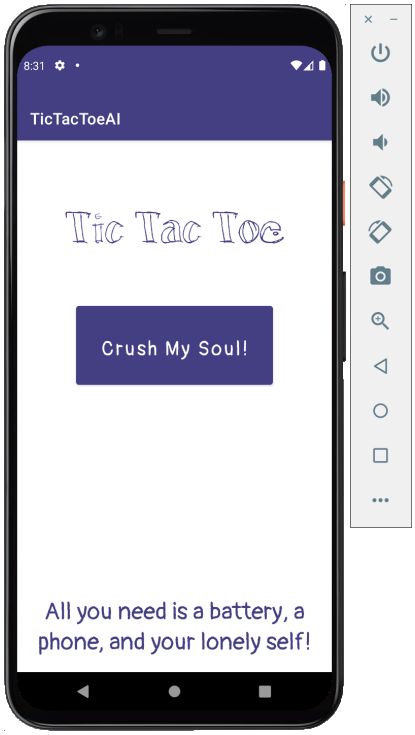
Our project allows the user to play a game of tic tac toe with an unbeatable API. Essentially, they will only ever be able to draw or lose. The win/draw/loss record is saved using shared preferences, so that the user will have a local record of how much their soul has been crushed. This main game page is shown below before any moves are made:




Each time the user clicks on a tile, an x is displayed where they clicked. Our AI then runs and determines the best tile to place an o in order to ensure the game ends in a draw or loss for the player. Once the tile is determined, it's displayed on the board along with the x. When the game finishes, the user is provided with one of two messages: "cat's game" to indicate a draw or "you lost!" to indicate a loss, the win/loss/draw record is updated up top, and a button is displayed asking if the user would like to retry. If this button is clicked, the game board is cleared along with the message and button and the game proceeds as normal. A view of our screen after the game finishes is displayed on the next page:


We also created a launch page to welcome the user. It displays our game title, slogan, and a button the user can click that will take them to our main page to play tic tac toe as many times as they choose:



We learned a lot about AI search algorithms while completing this project. George is currently taking an AI class, so we thought it would be fun to use some of the knowledge he's learned to try and make our own unbeatable tic tac toe AI. The most significant takeaway from the AI course was using a search algorithm called the Minimax search algorithm. This algorithm allows the computer to determine what the best move would be for the computer to make; whether that be for blocking the player's move, or by winning the game itself by getting three symbols in a row.