

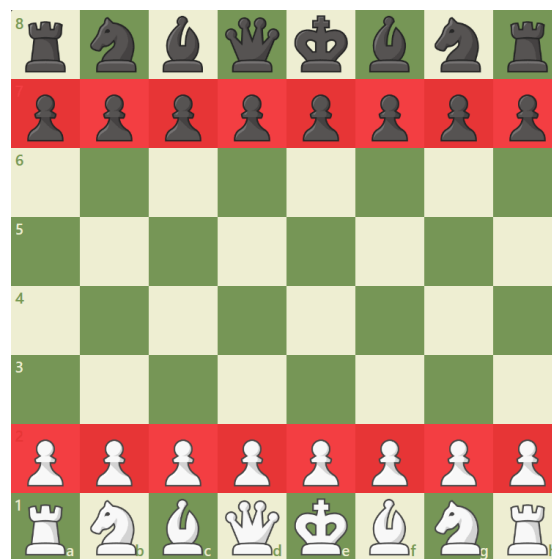
**Overview**

This easy assignment has two parts, one devoted to topics from Chapter 6 – Managing Orientation and the other to topics from Chapter 7 – Touch Events and Swipes.

**Part A – 50 points**

Write an app named Chessboard that works in both vertical and horizontal orientations. The app displays a chessboard in its starting position with letters K for King, Q for Queen, B for Bishop, N for Knight, R for Rook and P for Pawn. Include a Model that *also* acts as the Controller for the View. The UI should look good in both orientations. Use black and white for the squares in vertical orientation, and one other distinctly different color for the black squares in horizontal. In vertical orientation, position the chessboard at the top of the screen, using the full width of the screen and in horizontal, position the chessboard in the middle of the screen using the full height of the screen. Make sure that the color of the text indicating the pieces is as large as reasonable without looking ridiculous, is bold and is in a color that is easily visible.

The following is an illustration of a chessboard:



Note that along the bottom row the chess pieces are indicated with a lowercase letter: a is a Rook, b is a Knight, c is a Bishop, d is a Queen and e is a King. The red row above those pieces is filled with Pawns. Ignore the rows of red and consider them as resembling the other rows in alternating green and off white.

**Part B – 50 points**

Write an app named Tap It that has two TextViews. One of them has a red background – when the user taps inside it, it changes to blue, and when the user double taps inside it, it changes back to red, and so on. If the user taps or double taps outside the TextView, its color does not change. The second TextView displays the accumulated tap count.

(continued)

**What to Turn In**

Document any Java classes as described in *322 & 522 Android Coding and Documentation Guidelines* and zip any apps separately.

Attach your zipped file(s) to your assignment submission on Blackboard.

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