

## Details for the TicTacToe app:

- **Declaration:**

1. For scores part confusion: Since I don't really know how to count score part, for example "the p1:2 p2:0" on the android challenge page(I asked Lauren Bayes to help me out, maybe she's already back home when I sent email to her so she didn't really answer my question), then I regard the scores as: each time create a new game, two players can play the game multiple times as they like, and the score of players represent how many rounds they have won.
2. For this app, it only support portrait mode(I disabled landscape mode for that app)
3. To fast create a new game, you can either use any "+" buttons, and the default game mode is that : PVP mode, Player1's symbol is X, Player2's symbol is O. Otherwise, you can use "Game Mode" button to choose any mode as you like
4. Finished advanced Game Mode part.

- **Shortcomings:**

1. For PVE mode, there is a bug in it. Since the computer move is not that efficient, sometimes if you play so fast, the game would be unresponsive. Sorry about that. Still needs further debug for this game mode.
2. After the game shows a result, I didn't really disable the whole gridView. Sorry about that. (Please do not click on the grid view if you already won or tie, please click rematch or back button instead.)

- **Further improvement:**

1. Using AsyncTask:

Due to single thread model of android, till the time response is awaited our screen is non-responsive. So we could use AsyncTask to avoid performing long running operations on the UI thread.

(Since this challenge also take how much time you spent on the challenge into consideration, I didn't spend time on AsyncTask, but it's really a good feature for android. If have more time, I would implement my game with AsyncTask)

- **Time spent for the Android Challenge:**

From morning to midnight in Oct 30.