# Mobile Test Spec

**Build a very simple mobile app (Android/iOS) in 5 hours that simulate a tennis tournament:**

1. Have UI similar with the screenshots below.
   * Show a splash screen as in the 1st screenshot.
   * Allow user to input the number of players that participate in the tournament, then run the simulation when user press “Start”.
   * Allow user to navigate back to the 3rd screenshot by pressing the back button in the 4th screenshot. Have animations when switching back and forth between screens.
   * Show the result of the tournament with scores for each match (in detailed format) in 4th screenshot.
2. In the simulation, players will be selected randomly to play vs another player. Loser of a match will drop out of the tournament. Winner will proceed to next round to play against another player. This happens until there is one final winner for the tournament.
3. Full Tennis rules can be found at <http://en.wikipedia.org/wiki/Tennis_scoring_system>. You have 2 options:
   * Implement simulation using the full tennis scoring system (with tie-breaker, deuce logic). You will get higher score implementing this scheme (Warning: this one is hard).
   * Implement this simplified rules (You will get lower score implementing this scheme):
     1. In a 5-set match, first player to win 3 sets win the match.
     2. In a set, first player to win 6 points will win the set. You need to simulate each point to see which player wins that point and outcome should be random i.e. each player would have 50% chance of winning that point.

This is very simplified tennis rules because no tie-breaker, deuce logic for scoring that the real Tennis rules have.

1. Use the given AppIcon.png as the icon for the app.
2. You will get bonus scores by making the app better in a way that you see fit. Be creative.

**Finishing:**

1. You **MUST** stop at the 5 hour mark promptly and send your code to me by email (huy.pham@robusttechhouse.com). If you are done early and finished testing, you can also send me early by email.
2. I may not be at my PC when you are done. I will review what you send over and come back to you.

**Hints:**

1. Not everyone can finish the test on time. Try to maximize what you can achieve.
2. Good code counts.
3. Good UI/UX can compensate for incomplete simulation logic.
4. I’m available for questions.

