Design Description

I did not think that a simple black jack game required more than one class. This one class can be encompassed in the MainActivity class. I would have used more than one class if I thought that it would be more difficult to represent the actual deck/cards, but I figured out how to simulate an array of 52 integers as 52 different cards mathematically instead. I knew the game would require at most 10 different images that needed to be displayed, 5 for the user and 5 for the dealer. I was able to create a layout that contains 3 buttons. I have one button to start a new game, the other to hit, and the other to stop. I also have one text field that represents the game result. Those are the only 14 (max) elements that needed to be manipulated from within the MainActivity. I also new that the complexity would never grow past a certain point, so I concluded that an ArrayList would be fine to store my objects since there will never be an ArrayList greater than 52. I knew I needed to keep track of the player's score, the player's hand, the already drawn cards, the dealer's score, and the dealer's hand. This was all done by the use of integers. My program revolves around the fact that given you could mathematically manipulate numbers to represent a deck of cards as well as the drawing from that deck of cards. I thought about using a hashmap to keep track of what was already drawn, but again I thought an ArrayList would suffice. The above information led me to believe that I did not have to worry to greatly about things getting slow. The requirements were also very simple, and I knew it was not going to have to be incredibly maintainable so that is another reason why I only had one class.