

Blackjack Technical Assessment

For this problem, you will be coding a simplified version of the game Blackjack. You may use one of the following development languages:

- **Java**
- **C++**
- **Groovy**
- **JavaScript**
- **Python**
- **Scala**
- **Ruby**
- **Clojure**

The Object Of The Game: to get as close to or equal to 21 without going over.

The Rules Are As Follows:

- There will be only 2 players – a “human” player and a dealer
- The players are each dealt 2 cards to start the hand
- The player can choose to hit one or more times, or stand with any amount
- The dealer must hit if his cards total less than 17 and stand otherwise
- If the player’s or dealer’s cards total over 21, they bust and their turn is over
- If either player has 21 with their first two cards, they win (unless they both have 21 on their first two cards, in which case it is a tie)
- If both players bust, the dealer wins
- If both players have the same score, they tie
- The player always takes their turn before the dealer
- All cards count as their face value, except A which can be 1 or 11 and J, Q, K all count as 10
- The deck should be shuffled before each game
- You do not need to implement advanced blackjack rules (split, double or insurance)
- Only one deck will be used per game

You must create a model of the blackjack game and entities involved (no GUI components required). If you have experience writing unit tests, please include unit tests with your code. You may use 3rd party support libraries (e.g. Apache commons).

Submission:

Please submit a zip or tar file (a link will be provided to you) containing everything needed to run your application and test code, and a README file indicating how to run it. You may use standard build systems (ant, maven, gradle) or write a batch/bash script file to run your code.

Don't forget to inform us that you have submitted your work!