BLACKJACK TERMINAL APP

By Mitchell & Glenn

RULES

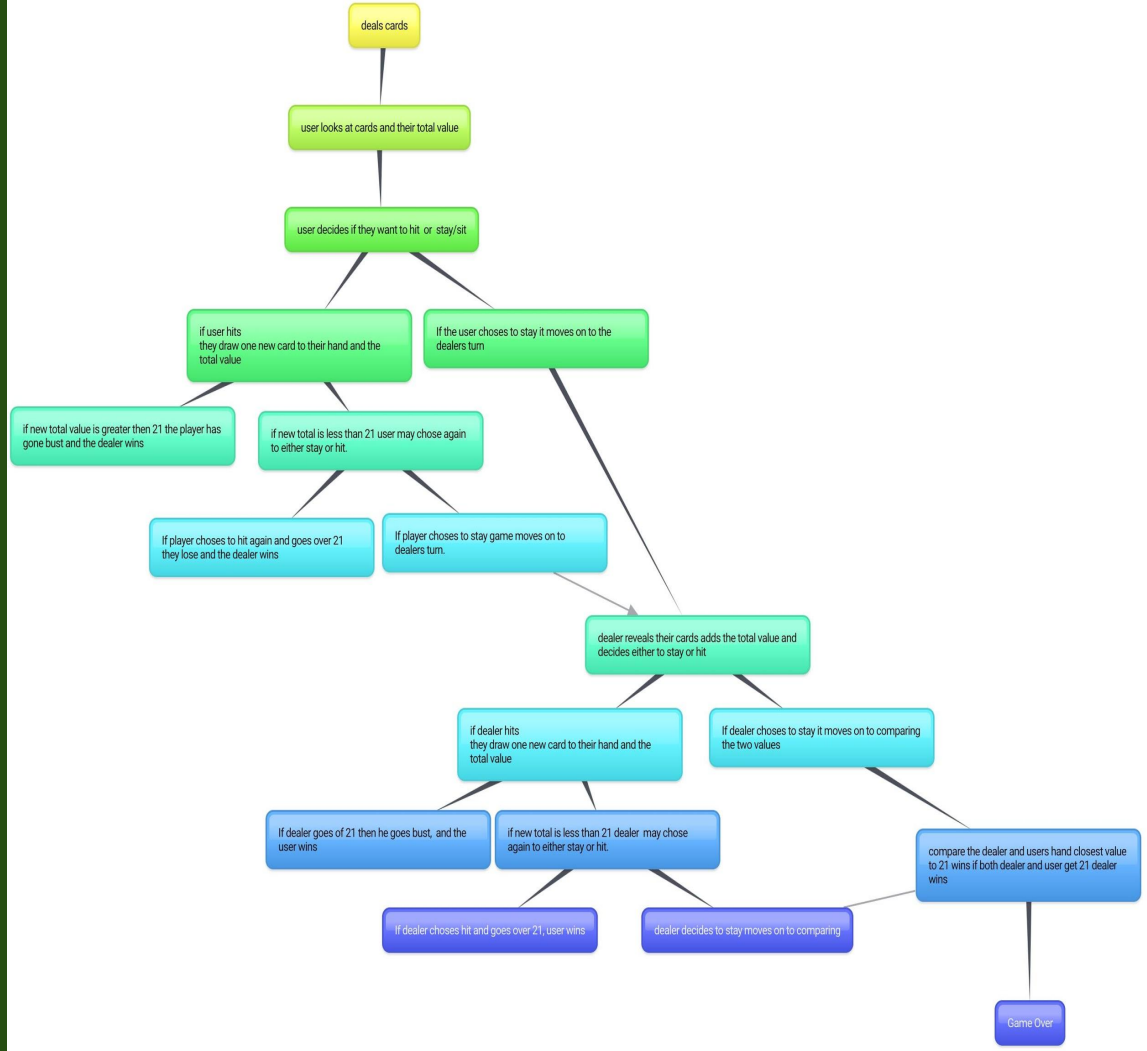
- Application is one player only, your player against the dealer
- Aces will be counted as 11
- Face cards will be counted as 10 ie. King, Queen, Jack
- The value of the hand is the sum of the point values of the individual cards
- After the player has placed initial bet, the dealer will shuffle the deck and give 2 cards to the player and 2 cards to himself.
- Player has 2 options:
- "Hit" - Player draws another card (and more if he wishes). If this card causes the player's total points to exceed 21 then he loses.
- "Stay" - Player is happy with his cards, and move to dealer's turn.
- If the dealer goes over 21 points, then player will win
- If the dealer doesn't bust, then the higher point total between the player and dealer

User Flow pt 1

- Welcome the user
- Ask for minimum bet of $25 to start the game
- After the the user submits bet greater than $25, we deal them their first two cards
- We then ask them if they want to ‘hit’ or ‘stay’

User Flow pt 2

- Deal the cards to the user
- Ask the user if they want to hit or stay
- If hit and card value goes over 21 dealer wins
- If hit and card value stays under 21 repeat hit or stay question
- If stay move on to dealers turn
- Dealer gets asked hit or stay and the same rules as previously stated apply
- If both dealer and player dont bust and chose to sit compare the cards
- Whoever has the closest value to 21 wins however if both player and dealer both had 21 dealer wins



Ethical Issues Regarding Our App

- The main ethical Issues in relation to our app is the encouragement of gambling and Underage kids being influenced by gambling games such a this one.
- However our app is pretty simple and the chances of it influencing a gambling addiction later on in the user life is slim to none

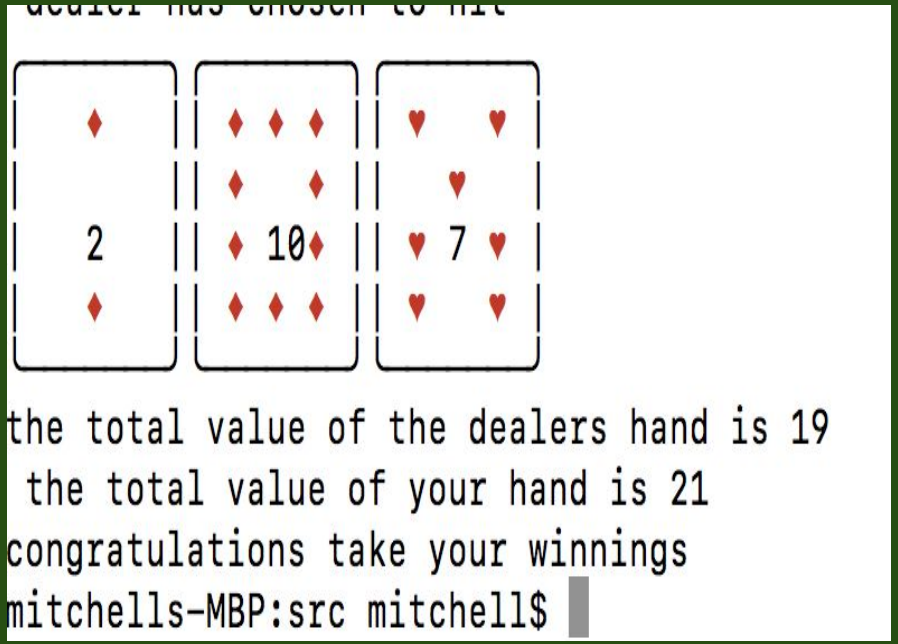
CHALLENGES

- We had some issues implementing RubyCards gem into our application, in particular giving each card a value, and then summing these cards together to give a total value.
- We addressed the issue of RubyCards gem having no value by creating a function that assigned values to the cards.
- However after fixing the issue of the cards having no value we, ran into the issue that the ace card can either have a value 11 or 1 at the user's discretion, for the sake of completing the app we decided to assign ace to the value of 11

Challenges

```ruby
def card_value(hand, deck, card_array)#this function is assigning values to the cards produced by ruby cards
   i = 0

 while i < hand.count
  card = hand.to_a[i].rank
  if card == "Jack"
  card = 10
  elsif card == "Ace"
  card = 11
  elsif card == "King"
  card = 10
  elsif card == "Queen"
  card = 10
  else
  card = hand.to_a[i].rank.to_i
 end
  card_array[i] = card
  i += 1
 end
end
```



IMPROVEMENTS

- Implement the ability to have multiple players, even possibly make dealer playable character to make the game more challenging.
- Store user balances and winning so that they can continue where they left off when they play again
- Maybe even an age verifier to address the ethical issues we spoke about earlier
- Make it so the user is able to decide they want the ace in their hand to be either equal to 1 or 11

Favourite part

- The best part of this project was definitely when found out that we could still use the RubyCards gem, this is because without the gem the output in the terminal was very bland.
- And of course the fact that the app actually works is pretty good too

RESOURCES

- Project management tools e.g. Slack, Trello
- RubyCards Gem
- Official Ruby Docs

APP DEMO


QUESTIONS