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EE306

MICROPROCESSORS

FINAL PROJECT:

Blackjack with Money and Bet Counter

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Explanation

We designed a classic blackjack game. At the beginning of the game, we define a certain amount of money for our player with the help of switches. Afterwards, we place a bet with the help of switches at each hand. The amount of bet we place during the game does not decrease from our safe. If we lose the game (when the lose appears on the screen), the bet amount is deducted from our main money, if we win (when the win appears on the screen), the bet amount is added to our safe. It shows the total money in our accident on the display.

We performed functions such as drawing cards, restarting the game, deciding on our last hand with the help of the buttons.

Basic Game Rules:

The goal in blackjack is to make 21 or get as close to 21 as possible. When reaching this number, 21 must not be exceeded, because when you do, you lose the game. If you fail to reach 21, the goal of the game is to have a high score from the house. Someone must be the dealer for each hand in this game. There is also a player opposite the dealer. The dealer gives everyone, including himself, one card facedown. Then he gives everyone a second card face-up.

Each player looks at his facedown card and adds its value to that of his face-up card to determine the hand's total value. The value of a card is equal to the number on the card. All face cards are worth ten. Aces can be worth either one or eleven, whichever value benefits the player.

Starting with the person to the left of the dealer, each player attempts to make the best possible hand by getting close to 21 points. A player with a point total far less than 21 may ask the dealer for another card. One card is then dealt with the player face-up. The player may continue to add cards until he thinks he has a good hand. If any added card sends the value of his hand higher than 21, the player has gone lost, and he loses his bet money. If the player reaches a number that he is satisfied is close enough to 21, he says, "Stand," to instruct the dealer that he requires no more cards. Finally, the dealer opens the cards in his hand. Whichever side's card is closer to 21 wins the bet.

If the player wins, he gets 2x the money he bet, if he loses, his money is reduced by the amount of the bet.

Blackjack Card Values:

In blackjack there are cards referred to as "face" cards, these are "K", "Q", "J" cards. These cards always carry the value of 10 (ten). The ace card is a "wild card" with the value of 1 (one) and 11 (eleven). It has a value that matches the numerical value it carries on the other card.

Flowchart:

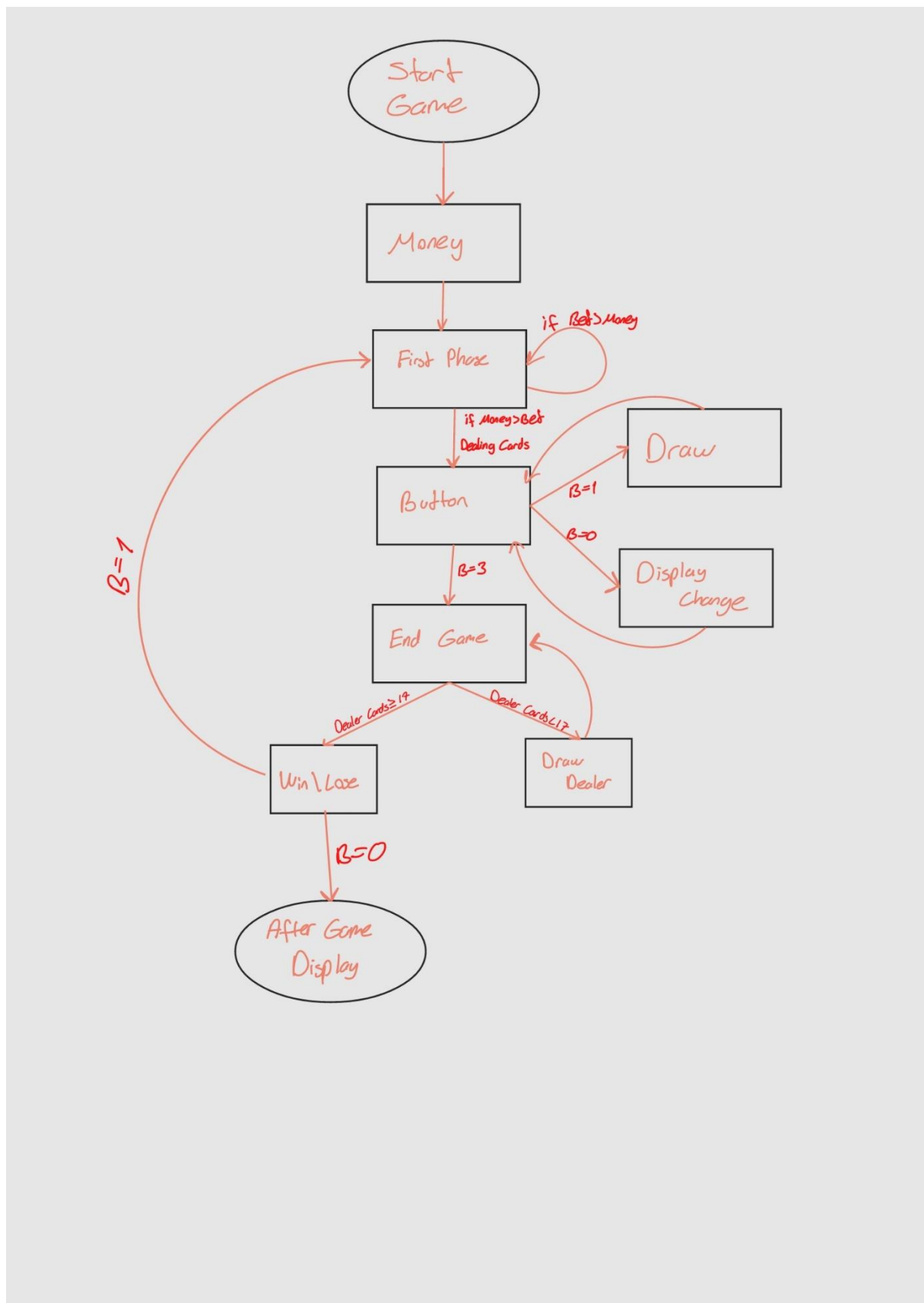


Figure 1. Flowchart of Blackjack Game