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BFM Modular BlackJack

Play a one-player game of Blackjack

- Start a new game
    - Display default game configuration
    - Ask user if they would like to change game configuration
    - Prompt for new config values
    - Store new config values
    - Display starting life points
- Betting turn
    - Display two player card and one dealer card + card totals
    - Prompt user for hit or stay
    - Display 2nd dealer card and 3rd player card (if hit)
    - Calculate totals
- Bet scoring
    - Determine score deducted/added
        - Determine if player busted (went over)
        - Determine if player tied
        - Determine if player got closer to bust or if dealer did
    - Add/subtract score from life points
    - Display life points for dealer and player
- End Game
    - Determine if player's life points hit zero
    - Determine if dealer's life points hit zero
    - Display who wins

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Modular BlackJack Functional Requirements

Starting a new game:

Upon starting a new game of modular blackjack, the player will be prompted with the default configuration for a game of blackjack (the bust value of 21). They will then be asked if they would like to play with a custom bust value. If they say yes, they can enter the bust value they would like to play with. If they refuse, the game will continue with the default bust value. Upon starting the game, they will see both the player and dealer's life points at the top of the screen.

Betting turn:

The betting turn starts with displaying two player cards and one dealer card, as well as the added totals of what the cards for each person come to. The player will then be prompted to "hit" (draw another card) or "stay" (keep their current cards). If "hit" is chosen, another card will be displayed at random for the player as well as one more for the dealer. If "stay" is chosen, only one additional card will be displayed for the dealer. The totals are then recalculated and displayed.

Bet scoring:

At this point, it is determined who won the round. If the player goes over the bust amount, they have lost the round. If the dealer goes over the bust amount, the dealer loses the round. If the player and the dealer tie at the end of the round, the round is called a tie and nothing happens. If the player's total is over the dealers but still below the bust value, the player wins the round. If the dealer's total is over the player's but still below the bust value, the dealer wins. Whoever loses the round then has the difference between the bust value and their hand subtracted from their score. The next round then begins.

End game:

The end of the game is triggered when either the dealer or the player drops below 0 life points. The winner is then displayed, and the game ends.