

One-player Blackjack

A final project proposal for ECE 383

by

C2C Dananga K. Agalakotuwa

April 03, 2024

1.1 OBJECTIVE STATEMENT

This will be a single-player game of Blackjack against the computer. The computer will act as the dealer.

1.2 REQUIREMENTS

Basic functionality

A player must be able to play a complete game of Blackjack against the computer. Use keyboard inputs to implement a “Hit” and “Stand” by the player. The UART would display the cards dealt to player and dealer. Once both dealer and player are done, indicate who won through the UART.

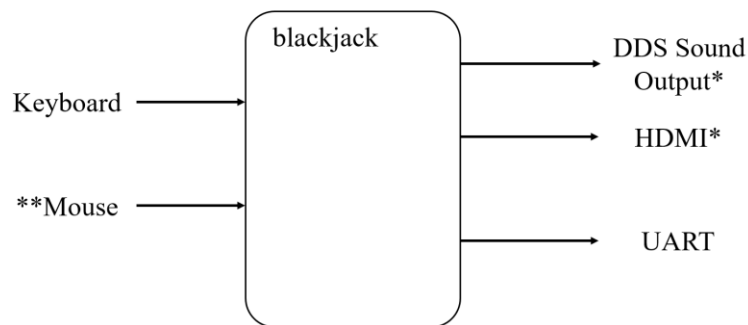
B-functionality

Complete Basic functionality. There needs to be a display output on a monitor indicating the result of the game (green screen: player wins, red screen: computer wins). Include sound output for win/lose screens.

A-functionality

Complete both basic functionality and B-functionality but instead of the FPGA button/switch input, use a mouse input. Left mouse would be “hit” and right mouse would “stand”.

1.3 LEVEL-0 DESCRIPTION & TOP-LEVEL DESIGN



**only A-functionality

*only B-functionality

DOCUMENTATION

None.