Vegas-Style Slot Machine Check-list Laura M. Roberts and Daneaya Wallace

Video in:

- 1) Take in camera data, convert it to RGB color format, convert it to HSV, store it in block memory, read the RAM, and observe live camera data on the VGA display
- 2) Adjust the coordinate system of the smaller frame coming from the camera to fit the computer's display
- 3) Find the pixels corresponding to the center of the glove in the video input.

Video out:

- 1) Determine if glove is over a button, if it is then demonstrate the appropriate function
- 2) Show how the game logic module updates the 64-bit hex display for the cash pot and bet amounts
- 3) Demonstrate how the sprites are each accessed from the ROM

Overall:

- 1) Integrate the various components into the complete system.
- 2) Show general slot machine function

If Time Permits:

- 1) Show the current cash pot on screen instead of on the FPGA
- 2) Animate the reels so that they spin faster or slower depending on the pull-down of the lever
- 3) Allow the user to select bet amounts from the on-screen display instead of using the switches on the FPGA
- 4) Make it user-friendly by having instructions on the screen