## Final Project Checklist

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## **Required Modules**

- Input module
  - 1. Should receive and properly debounce the inputs from the keyboard
  - 2. This module's functionality will be demonstrated by connecting the outputs to LEDs and changing the status of an LED every time a particular button was pressed.
- Game Engine module
  - 1. Should update the game state depending on the inputs from other modules and the previous game state.
  - 2. This module's functionality will be demonstrated using the working display module. Before that, hex display will be the main testing mechanism.
- Memory module
  - 1. Should include all the information on the current state of the game needed to display the state in display module and to update state in the Game Engine module. Implemented using BRAM.
  - 2. Tested using the elementary store/retrieve mechanisms and using the display module in the future.
- Display module
  - 1. Should display the current status of the game.
  - 2. Tested together with the memory module.
- Communication module
  - 1. Should send the signal in the packet over the serial port to another labkit.
  - 2. Tested using the loop technique, where the labkit is connected with itself and an echo should be observed.

## If Time Permits

- Display interpolation
  - 1. Should display the "active" piece falling smoothly.
  - 2. Tested inside the memory module.
- Audio
  - 1. Should produce appropriate sounds depending on the changes occurring in the game.