Yini Qi (qyn) and Tania Yu (taniayu)
6.111 Checkoff List

Commitment:
- VGA display of camera for testing
  - Storage of downscaled video stream into BRAM
  - Reading frames from BRAM and displaying on monitor
- Button-controlled gameplay
  - Button presses to simulate flight and attack
  - Modules for all objects in game (Pegasus sprite, obstacles, ground blocks)
  - Basic physics for falling
  - Collision detection and appropriate response (e.g. game over when Pegasus hits bottom of screen or obstacles)
  - Blocks/simple shapes for all sprites

Goal:
- Motion tracking
  - Detecting where hands are from video input
  - Determining type of hand motion (flight or attack)
  - Calculating speed of hand motion
- Motion-based gameplay
  - Use hand motions for flight or attack actions
  - Use tracked hand speed for Pegasus flight
  - Load images from BRAM for Pegasus sprite
- Sound
  - Background music loaded from memory
  - Collision sound effects (e.g. Pegasus attacks an obstacle)

Stretch goal:
- More interesting background graphics (imported from SD card, not just a few sprites painted repeatedly)
- Matching Pegasus wings to hand position/motion
- Moving obstacles