Project Title: Piano Dance Revolution
Student Names: Helen Liang, Wendi Li, David Meyer, Lucia Tian
TA Name: Theodoros Konstantakopoulos
TA Signature/Date:

Design
☐ State transition diagrams, Block Diagrams, Code for Projection Screen (Helen)
☐ State transition diagrams, Block Diagrams, Code for Position Detection
  Video input, frame buffer, interkit communication (David)
  Ankle band location detection and key identification (Wendi)
☐ State transition diagrams, Block Diagrams, Code for Audio Output (Lucia)
☐ State transition diagrams, Block Diagrams, Code for Game Mode (Team)

Functionality
☐ Display (Helen)
  - Generate 3-octave stacked piano image
  - Setup a 2-projector system to show image
☐ Position detection
  - Demonstrate color camera input on monitor (David)
  - Demonstrate communication between labkits (David)
  - Demonstrate detection of red ankle band (Wendi)
  - Demonstrate determination of key pressed based on input of ankle band location (Wendi)
☐ Audio system (Lucia)
  - Demonstrate all note audio outputs from frequency input
  - Demonstrate stored song playback
☐ Demonstrate operational piano and game mode (Team)
  - Demonstrate sound playback in reaction to step
  - Demonstrate display reaction to step
  - Demonstrate game mode and scoring display

Discussion
☐ 1. What are the important timing issues for audio and video?
☐ 2. What are the issues in color/position detection?
☐ 3. How can we extend the system to improve game play?