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Final Project Check-off List

Display Module – Yi Wang

1. Background
    a. Life Counter - represented by mini-Marios at the bottom of the screen
    b. Score Counter – represented by digits at the bottom of the screen
    c. Platforms – repeated blocks of platforms
    d.Donkey Kong Title Screen
2. Donkey Kong
    a. Frame 1: Stands stationary
    b. Frame 2: Picks up a barrel
    c. Frame 3: Rolls a barrel
3. Mario
    a. Frame 1: Jumps
    b. Frame 2: Moves up or down the ladders
    c. Frame 3: Walk 1
    d. Frame 4: Walk2
4. Princess
    a. Frame 1: Stands stationary
    b. Frame 2: Screams HELP
5. Barrels

Game Logic – Stephen Pueblo

1. Game FSM
    a. Ends the game when Mario reaches the princess

b. Restarts the game when Mario hits a barrel or touches Donkey Kong

c. Increments the score by 100 when Mario jumps over a barrel

d. Decrements a life when Mario hits a barrel or touches Donkey Kong

e. Restarts the modules when necessary

f. Keeps track of which state the game is in (Title Screen state, Playing Game state, Game Over state)

g. Tells the display logic to display the Title Screen or Game Screen when necessary

2. Collision Detector - Mario doesn't run through a barrel, platform, or Donkey Kong

3. Mario Module

a. Moves correctly on the platforms

b. Moves up and down the ladders

c. Jumps up/left/right

4. Barrel Logic

a. Outputs the coordinates of the barrels

b. Barrels should roll on the platforms and drop off the platforms correctly

5. Donkey Kong Logic

a. Tells Barrel Logic to create new barrels

Possible Future Implementations

1. Barrel Logic - different colored barrels move at different speeds

2. Donkey Kong Logic – throws more barrels as Mario gets closer to the Princess

3. Game Over animation or screen

4. A new level with new platforms and barrels which move at faster speeds

5. Camera Motion Detection – Mario's on-screen movements controlled by user's hand motions detected by a video camera