Checklist

1. Video controller
   a. Screen displays maze
   b. Screen displays dots
   c. Screen displays Pac Man
   d. Screen displays 4 ghosts
   e. Screen displays current score

2. Collision Detector
   a. Pac Man does not run through walls
   b. Ghosts do not run through walls
   c. Pac Man is eaten if he collides with a ghost

3. Scoring Module
   a. Dot disappears from screen if Pac Man passes over the dot
   b. Score increments each time a dot disappears
   c. On reset, RAM that stores the dots is refreshed.

4. Ghost AI
   a. Ghosts follow either left or right walls
   b. (if time permits) Ghosts move randomly.

5. Pac Man controller
   a. Pac Man is controlled via the labkit buttons
   b. (if time permits) Pac Man is controlled by a Playstation controller.

6. Power Pills
   a. Pac Man eats ghosts if he collides with them
   b. Ghosts stop moving if Pac Man eats the power pill
   c. Power pill mode does not continue indefinitely

7. Ghost Respawning
   a. Ghosts reappear in ghost pen 30 seconds after they have been eaten.

8. Animation
   a. Pac Man can open and close his mouth.
      (if time permits) Pac Man’s mouth opens in the direction he is moving in.
   b. Ghosts can move their eyes in circles and wiggle their feet.

9. Game Controller
   a. Game ends when all the dots have been eaten or if the ghosts eat Pac Man
      (if time permits) Pac Man has multiple lives
   b. On reset, Pac man moves to bottom of screen, ghosts move to ghost pen

10. (if timer permits) Sound effects
    a. Music each time Pac Man eats a power pill
    b. Music at game end and reset

11. (if time permits) Two Player mode
    a. 2 Pac Man sprites on the screen. One controlled by labkit buttons, the other controlled by the a keyboard.
    b. Two score displays, one for each Pac Man. Game is still over when all the dots have been eaten or when both Pac Man sprites have lost all their lives