Main FSM loop, interrupt driven. Can be interrupted either by 100ms timer, or by a button press interrupt. FSM structure is as follows.

FSM (on timer interrupt, every 100ms):

0) Perform any setup, switch to 1

Setup States:
1) Names
   - Use keypad to enter name for currently selected player
   - If a player button is pressed, switch to that player
   - Switch to 2 if time button pressed
   - Switch to 3 if all button is pressed

2) Time: single player
   - Use keypad to enter time for currently selected player
   - If a player button is pressed, switch to that player
   - goto 3 when all button is pressed
   - goto 4 when start button is pressed

3) Time: all players
   - Use keypad to enter time for all players
   - goto 2 when time button is pressed
   - goto 4 when play button is pressed

Possibly a short delay before the game starts

Playing states:
4) Countdown
   - Decrement clock and update display
   - allow for score entry and update the display
   - If the numeric enter button has been pressed goto 5
   - If time runs out goto 6

5) Pause
   - allow for score entry if it hasn't happened already
   - if enter or start is pressed, switch players and goto 4

6) buzz
   - set buzzer
   - after certain amount of time turn off buzzer, go to 5