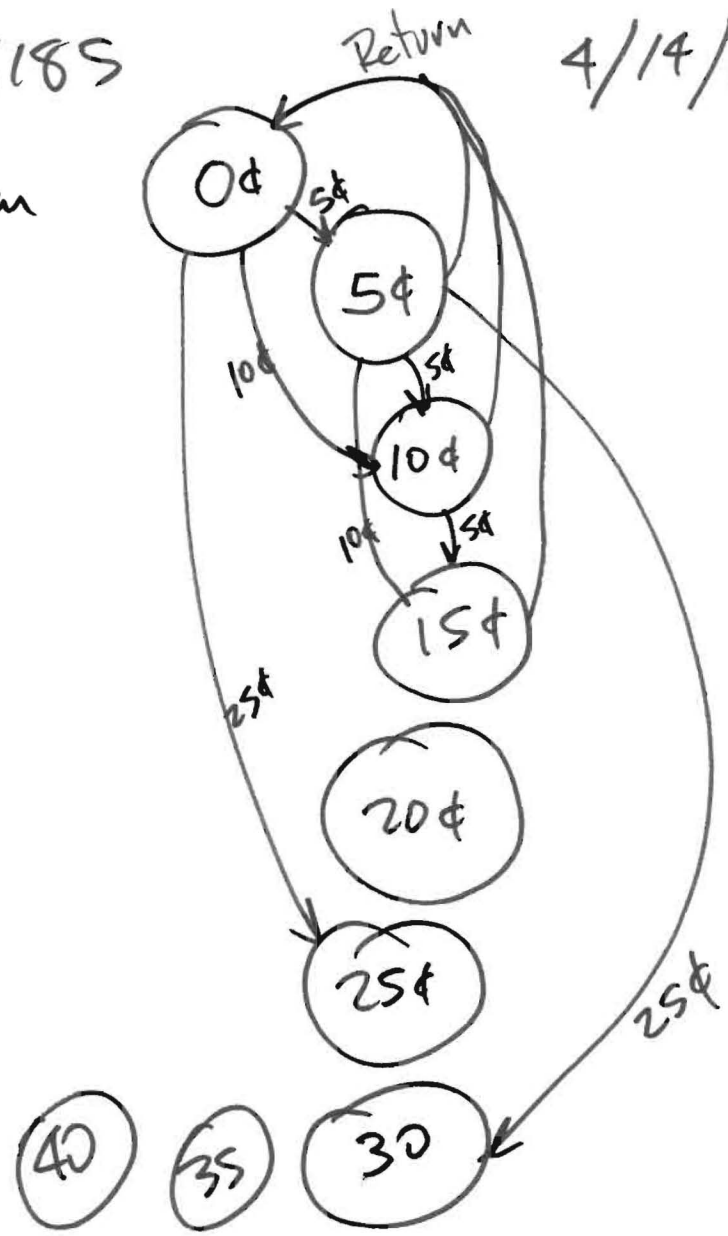


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State diagram for vending machine



¢ ①  
\$0.25

60

55

50

45

Discrete Part

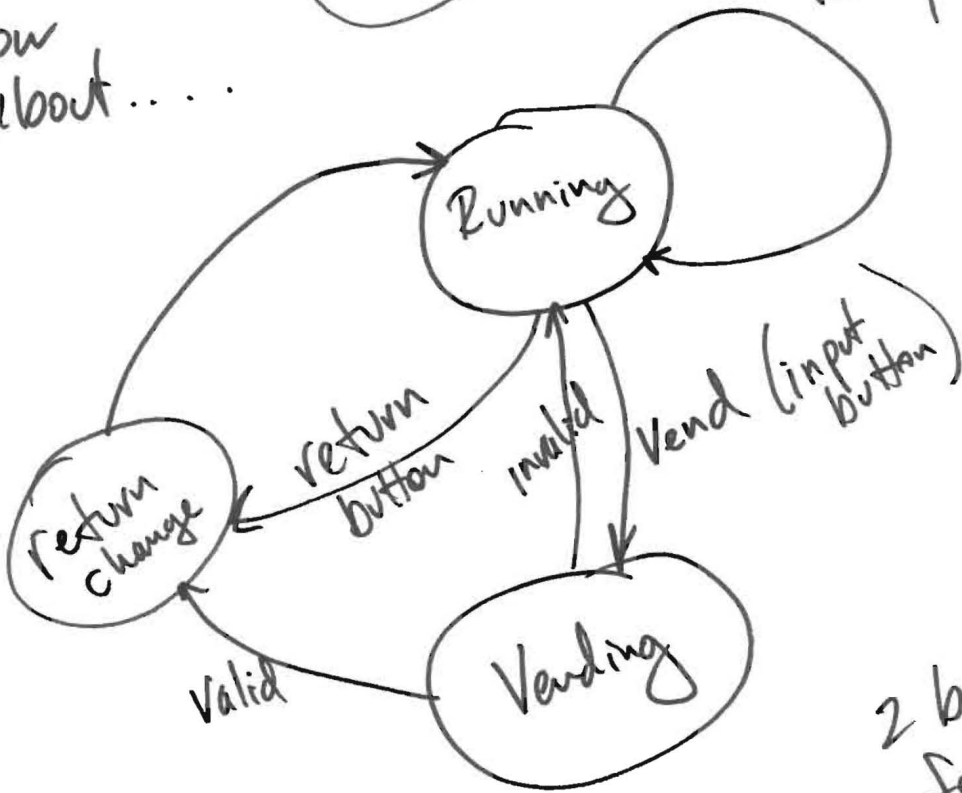
Does this make sense for an embedded system

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How about.....

zero \$



2 button input for selection

---

After the field trip to the Woodward machine....

Now, identify a better state diagram for the system.

reset: CS = reset  
 NS = paused  
 state change = 1  
 timer off  
 Timer set to 50ms  
 Event counter set to 20  
 char string = 00:00  
 Send first char  
 break

minutes = 0  
 seconds = 0

Paused: CS = paused  
 Timer off  
 break;

running: CS = running  
 start timer  
 break

prepare-string: CS = prepare-string  
 NS = running

seconds++

if seconds = 60, minutes++;

if minutes = 60, minutes = 0

create MM:SS string

Send first char

break

seconds = 03