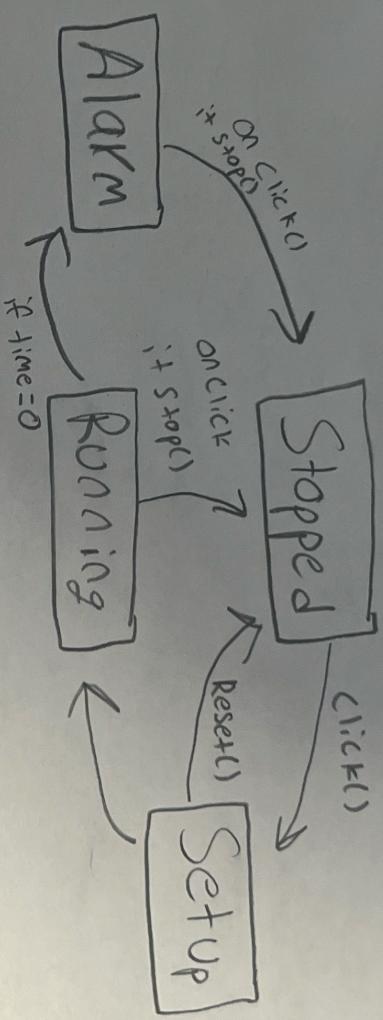


Timer State Diagram

UML Design



Start() or 3-s timeout

States:

$Setup \doteq time > 1 : display \text{ time}$

$On \text{ Click} : Start() \rightarrow Running$

3-s countdown active $\rightarrow Running$

$Running \doteq time - (dec) : display$

$time = 0 \rightarrow Alarm$

$Click \rightarrow Stopped$

$Alarm \doteq On \text{ Click} \rightarrow Stopped$

2 events

Button Click()

Clock tick()