Project requirements

+ button -> Increment time (minutes should increase).

- button -> decrement time (Minutes should decrease).

S/P button -> start/pause the countdown; show STAT.

When the countdown is paused time can be modified.

Press the + and – button simultaneous to abort the running timer.

Application must beep 20 times when it returns to IDLE mode.

When the application is in IDLE mode pressing the S/P button should show the STAT for 1 Sec and auto return to IDLE mode.

States

Map the different situations in your project into states

1. IDLE
2. TIME SET
3. PAUSE
4. COUNTDOWN
5. STAT

Events

|  |  |  |  |
| --- | --- | --- | --- |
| User activity | Event generated:  signal | Parameters | note |
| Press ‘+’ button | INC\_TIME | None | This event get posted to the state machine whenever the user presses the + button |
| Press ‘-‘ button | DEC\_TIME | None | This event get posted to the state machine whenever user presses the - button |
| Press S button | START\_PAUSE |  | The event gets posted to the state machine whenever the user presses the S/P button |
| Press + and – button together | ABRT |  |  |
|  | TIME\_TICK | ss  (sub second) |  |