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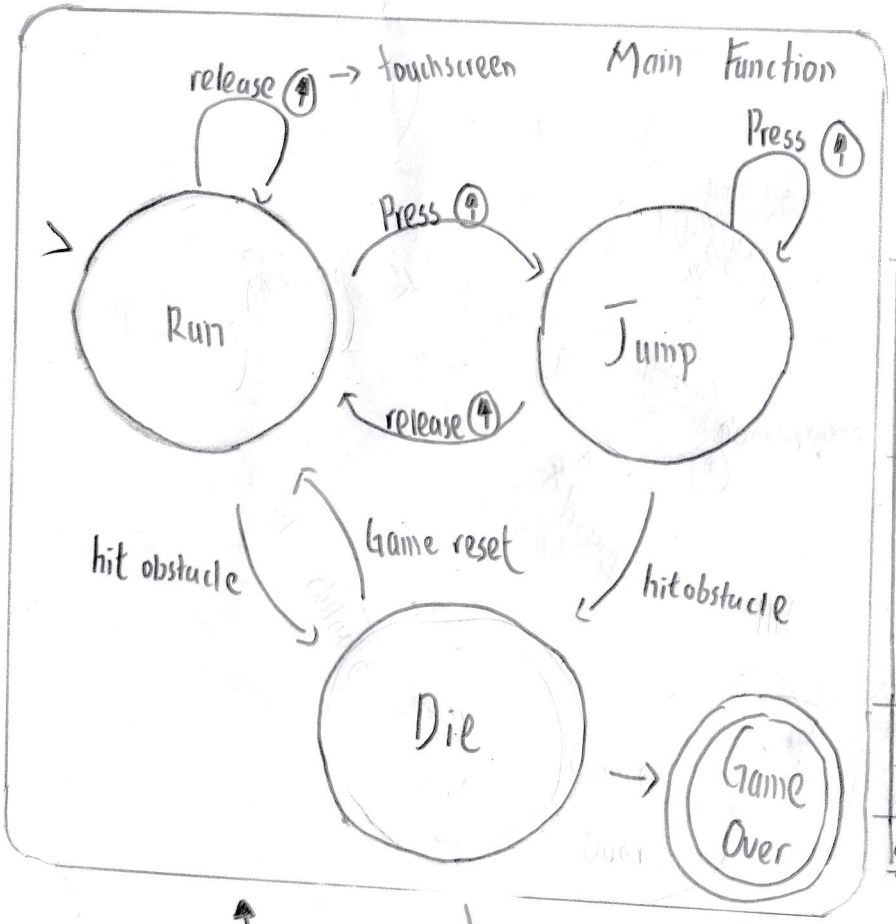
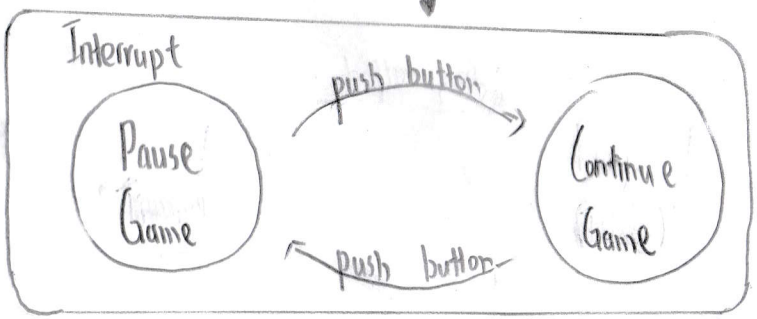
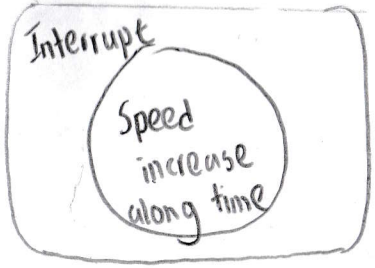
Finite state machine (FSM) diagram



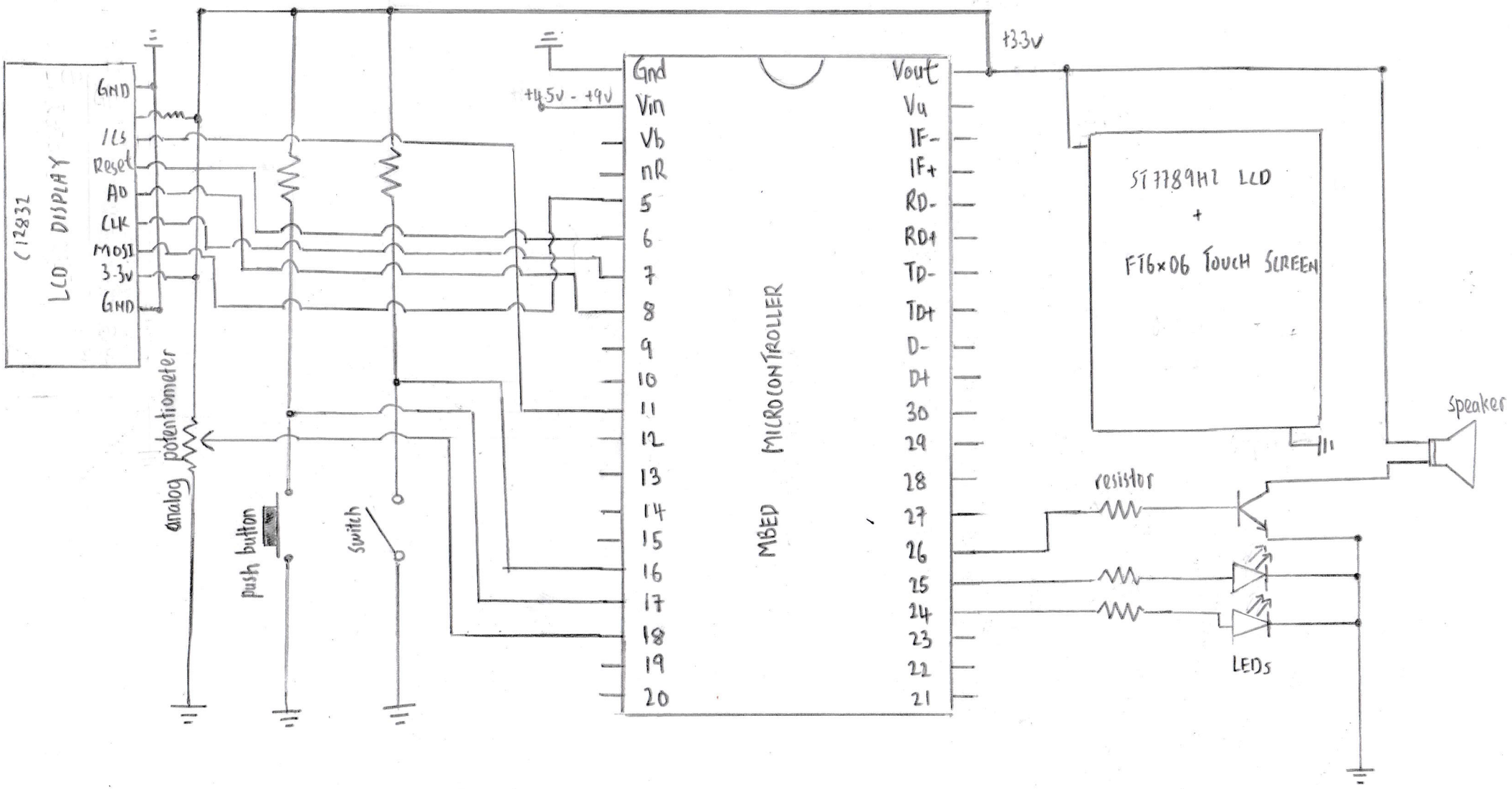
Fsm table

Inputs	Initial state	Next state
Press	Run	Jump
Release	Jump	Run
Press	Jump	Jump
Release	Run	Run
hit obstacle	Run	Die
hit obstacle	Jump	Die
push button	Continue	Pause
push button	Pause	Continue
game reset	Die	Run





Schematic diagram



Algorithm (Pseudocode)

```
Input
        switch, touchscreen, push button, potentiometer

Start Game
        switch on
        load graphics on to display(touchscreen)

Initialize Variables
        create speed limit, player position, obstacles position, score, game start

Function Speed Limit
        speed limit set by voltage output of the potentiometer
        increase of speed along time (every 5 min) until speed limit reached
End Function

Function Obstacles Position
        obstacles keep moving toward player (y fix but x keep changing)
End Function

Main Loop
set score to zero
set speed limit to zero
set player position
set game start to one

While game start is equal to one
        If up key on touchscreen is pressed then
                player will jump (change player's y axis)
        End If

        If player position not equal to obstacles position
                call: obstacles position
                call: speed limit
                accumulation of score
        Else If player position equal to obstacles position
                kill player
                reset variables
                restart game
        End If

End While
End Main Loop
```