



Picture from : <https://www.writeabout.com/2017/01/should-movie-theaters-ban-cell-phones-10/>

Theater Monitoring Cell Phone usage system

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Idea

Using Cell Phone in a theater can ruin a customer's experience. Our system aims to detect any customers who use Cell Phone while the movie is showing.

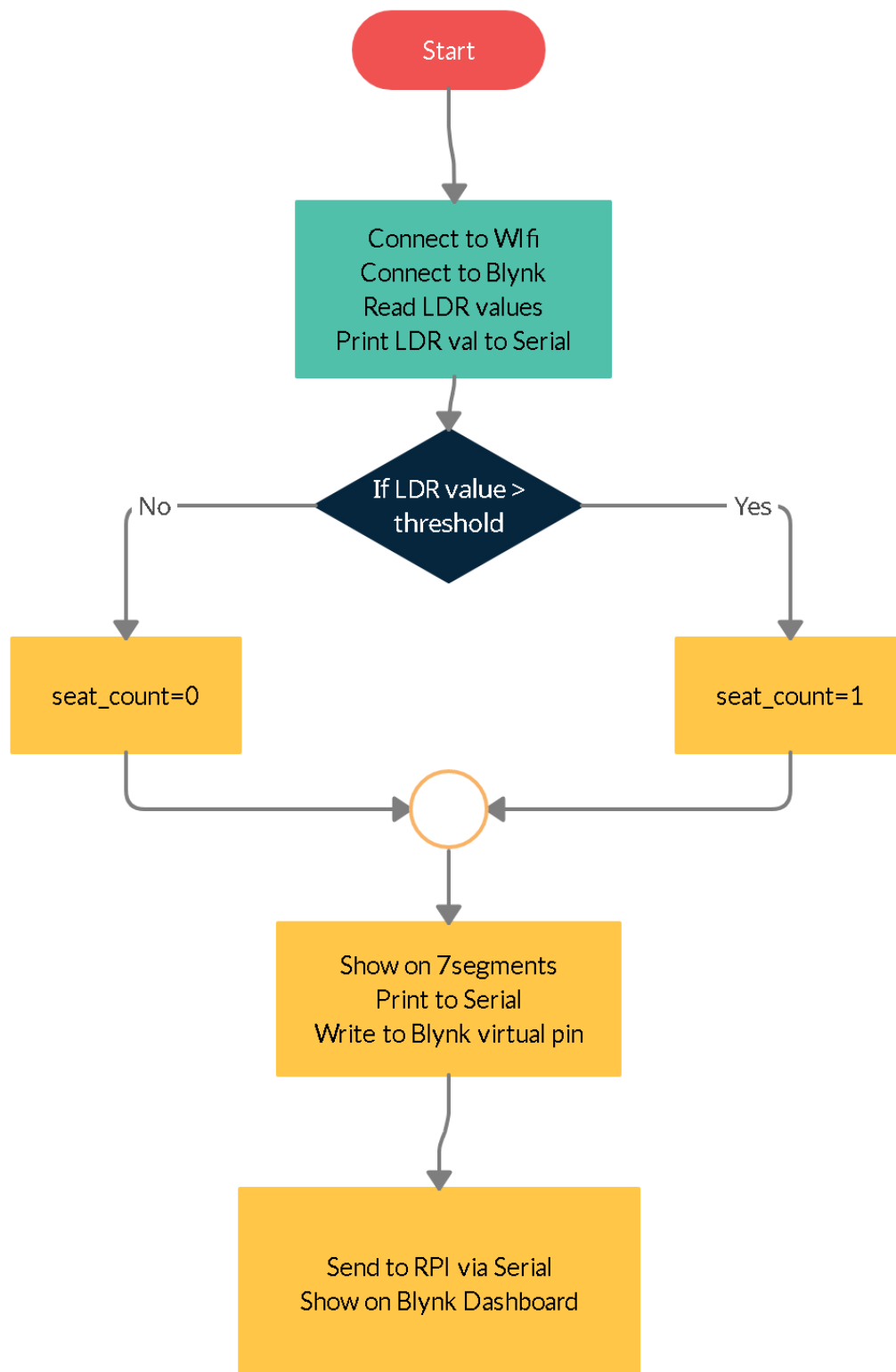
Objective

1. Improve overall cinema's customer satisfaction.
2. Improve immersion and watching experience.
3. Improve from customer feedback.

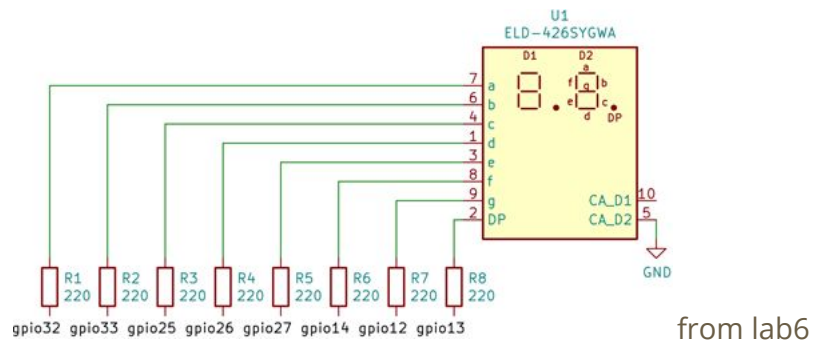
Scenarios

LDR will be installed behind every seat in a theater. Light levels on each LDR will be sent to ESP32 and ESP32 will compute the overall count of Cell Phone users in the theater then show the number on LCD 7 segments which every employee can see. In addition, the Cell Phone user counts will be sent to related employees (who look after that specific theater) on a mobile phone (demo via Blynk). Raspberry Pi will play a crucial role in receiving the number from ESP32 and might raise an alarm or show on the website (Not yet implemented in this version).

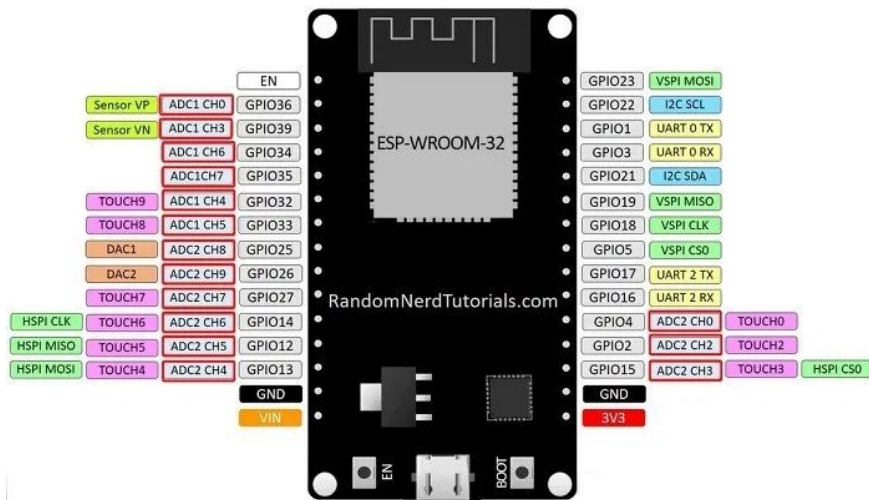
Flow chart



Circuit Schematic

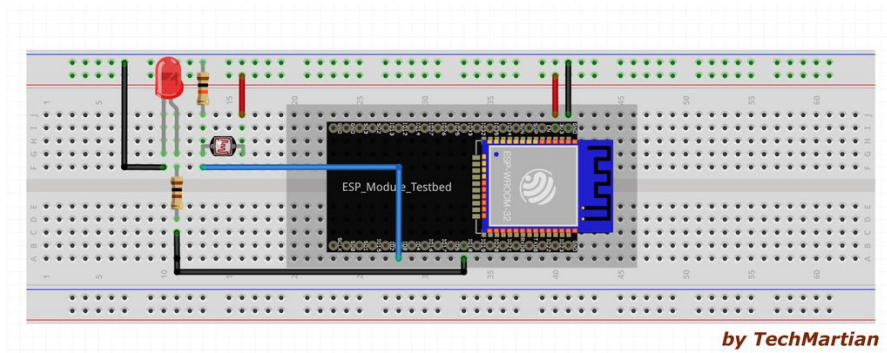


ESP32 DEVKIT V1 - DOIT



ADC slots for LDR

<https://randomnerdtutorials.com/esp32-adc-analog-read-arduino-ide/>



<https://www.instructables.com/Interfacing-Photoresistor-With-ESP32/> without LED