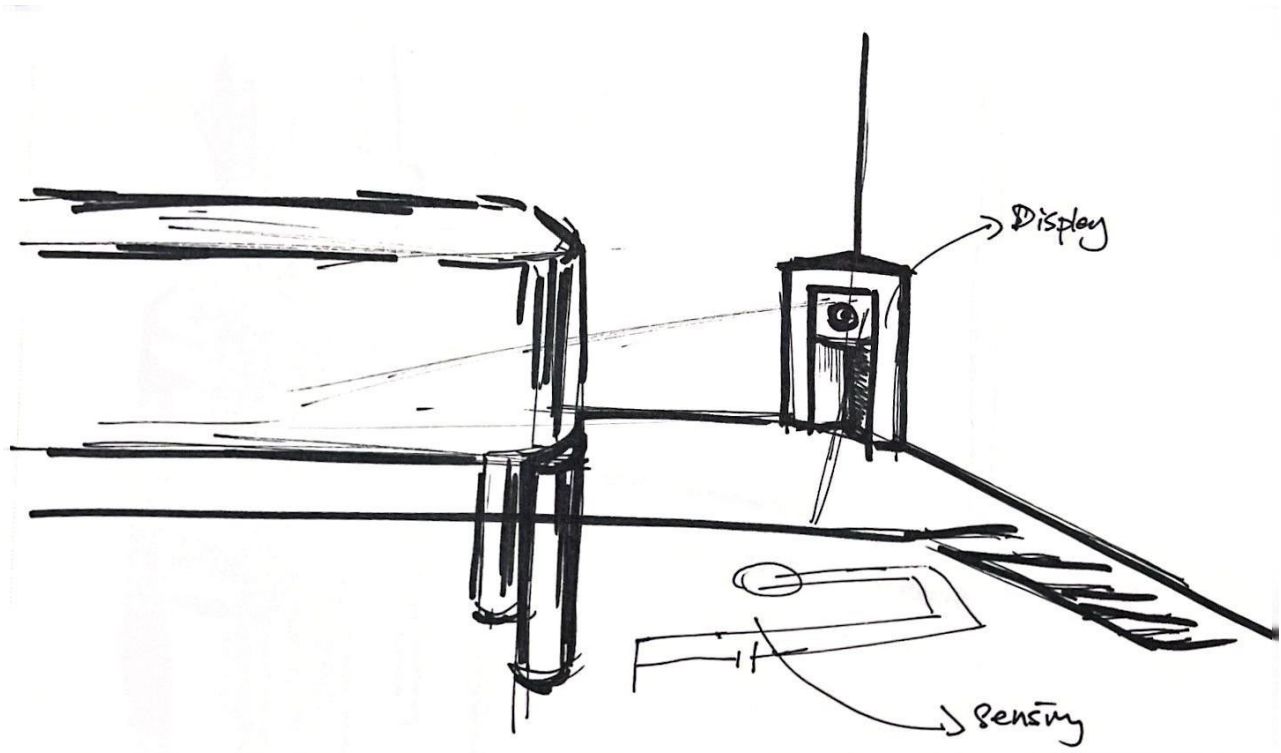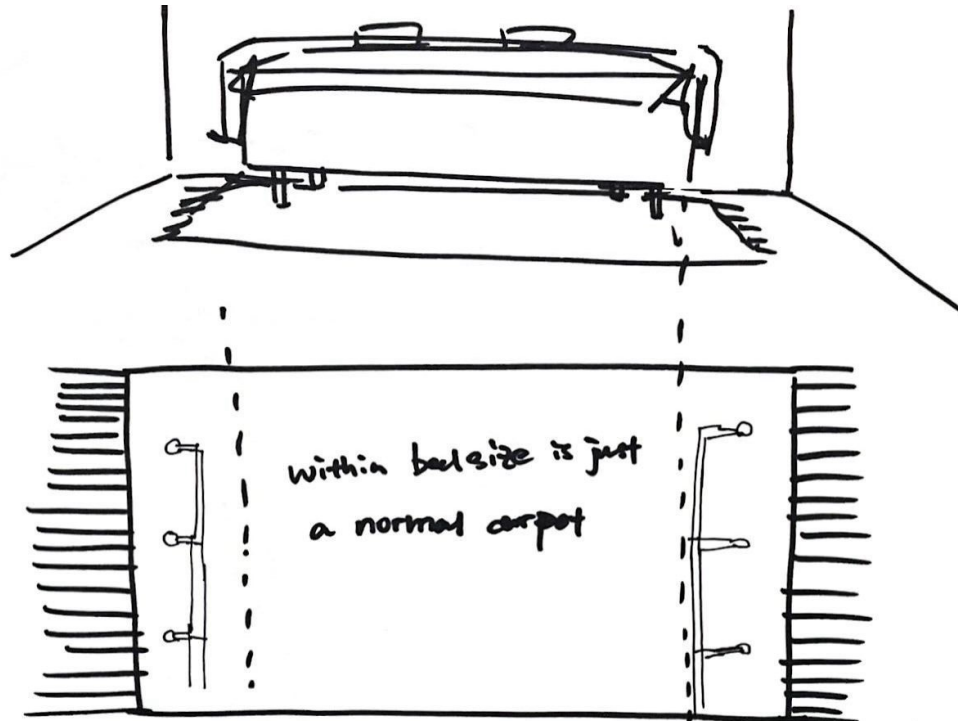# 514A-FInalProject

Section 1

A system to provide safe, low-brightness lighting when users get out of bed at night. One sensing device shaped like a carpet and one displaying device can be place at the corner of the room to light the path for user.
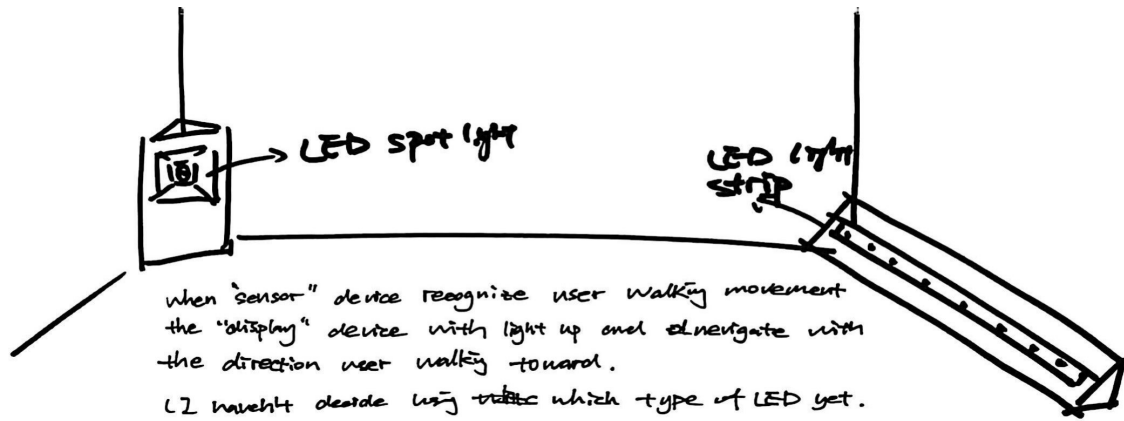
Section 2
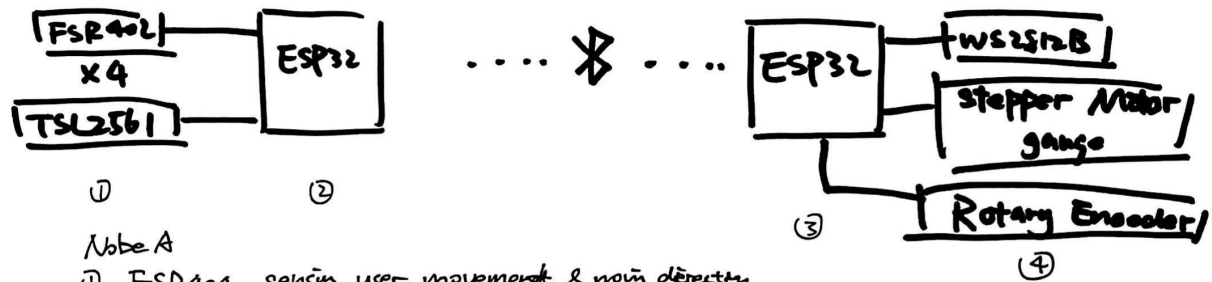
within bed size is just
a normal carpet

use multiple FSR sensor sensing user movement and moving in other direction.
Amount depent on Voltage & budget. ><

- FSR
- ESP32
- Resistors ..
- LED Light
- TSL 2561 (Luminosity Sensor.

Section 3

LED spot light

LED light strip

When "sensor" device recognize user walking movement the "display" device with light up and elnevigate with the direction user walking toward.

L2 haven't decide hsy which type of LED yet.

—LED
—ESP32
— Gauge
— Rotary Encoder

Section 4

FSR404 x4 — ESP32 ···· ✳ ···· ESP32 — WS2512B
TSL2561 — Stepper Motor gauge
① ② — Rotary Encoder
③ ④

Nobe A

① FSR404 sensing user movement & moving direction

TSL2561 sensing light level

② ESP32 traslate sensing data to command for display device

communicate wit blue-tooth

Nobe B

③ ESP32 send command from NoBe A to each component

WS2812B Light up

Stepper motor gauge show light level

rotary encoder, option from for user adjust light level manually.