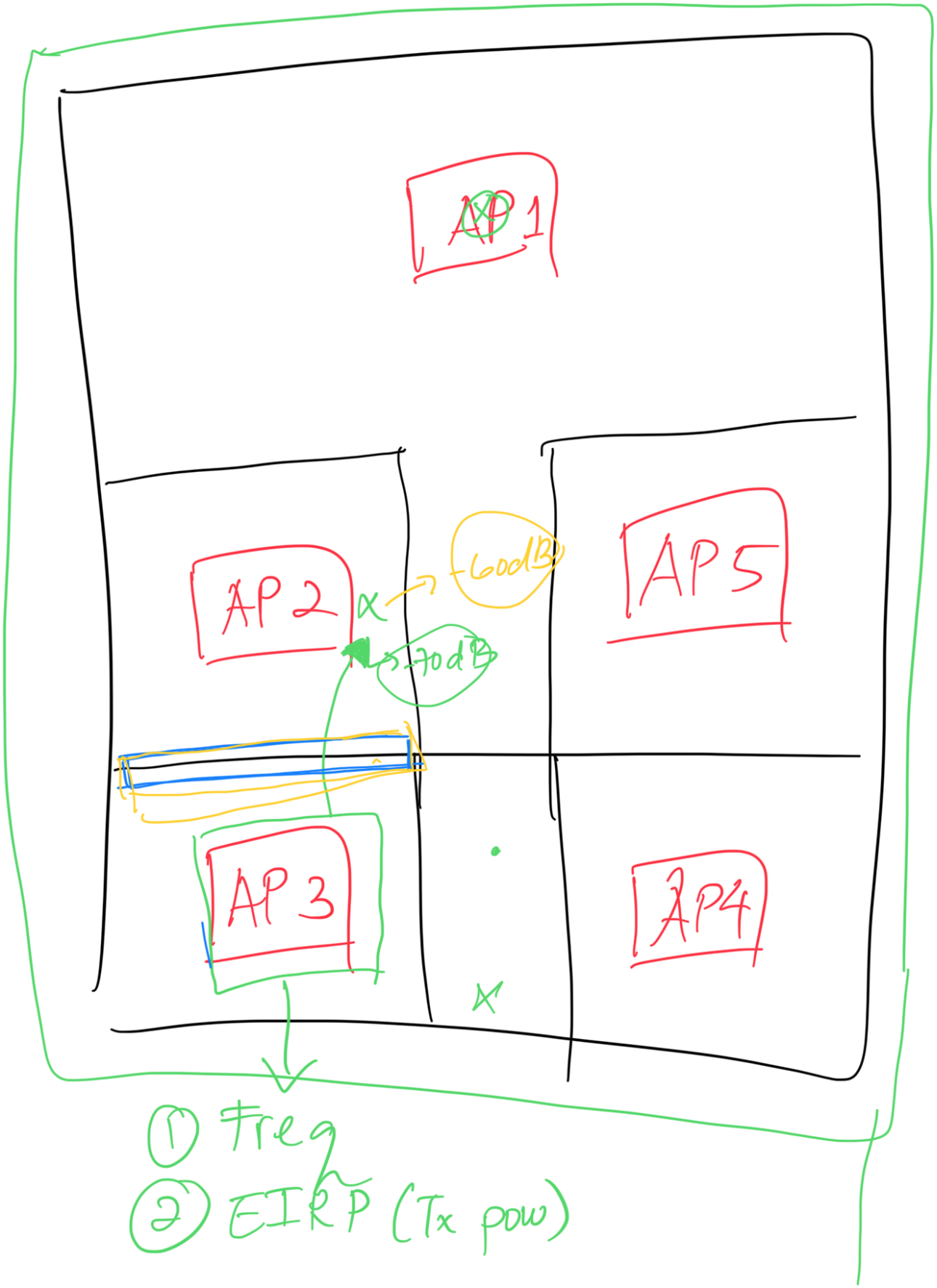
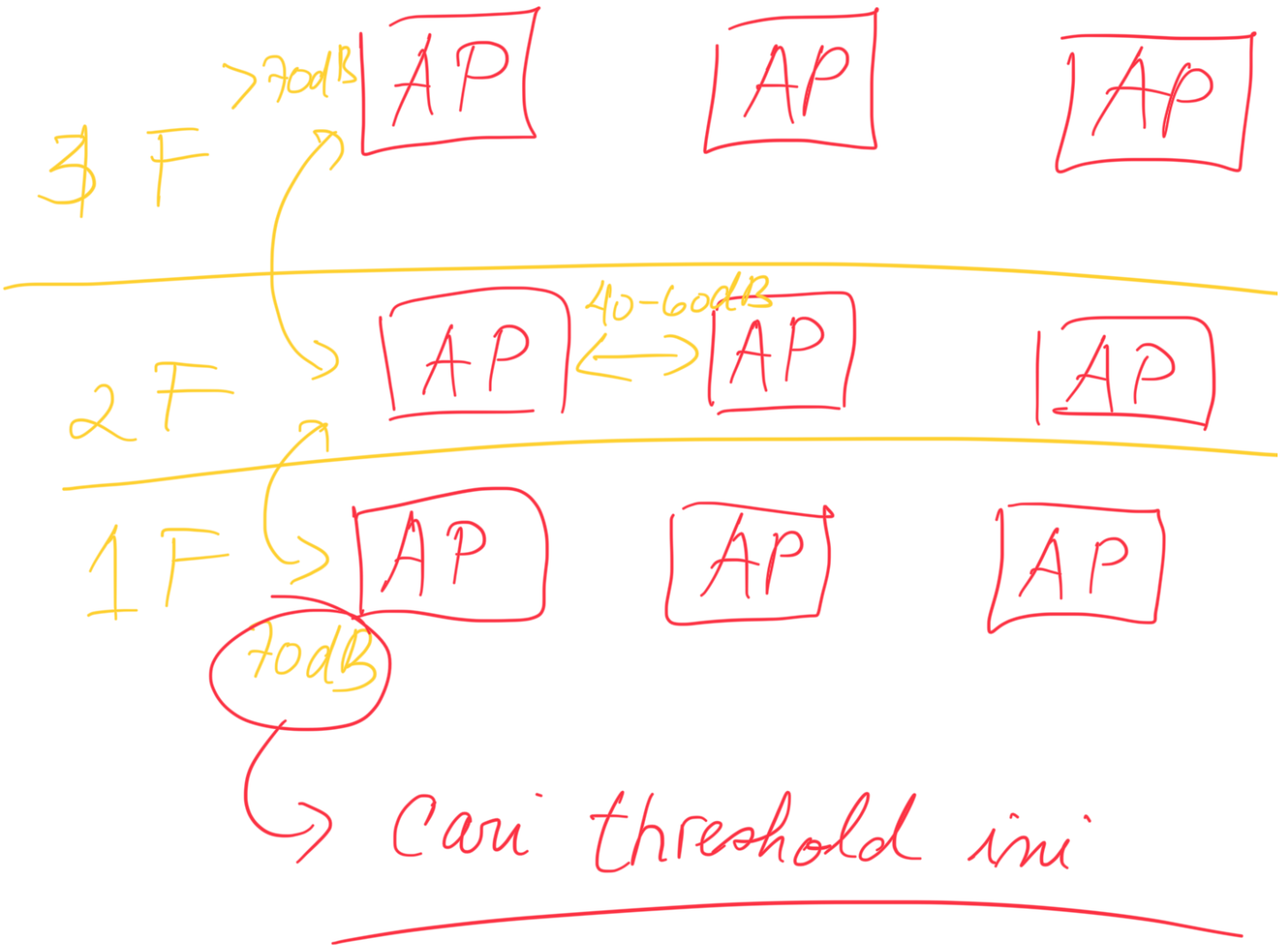

AP 1
AP 2
60dB
70dB
AP 5
AP 3
AP 4
① freq
② EIRP (Tx pow)

① Heatmap from multiple APs

② Heatmap calibration using RSSI from adjacent AP

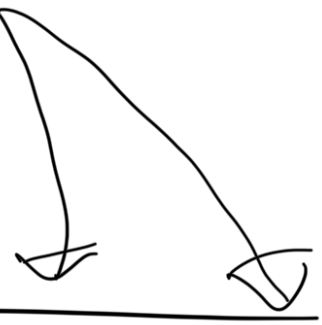



# Preprocessing Steps

## ① Labeling

-> NTUST → Extract floor & AP # from 'ap-name'

-> UI → ?



| RSSI | Label | |
|---|---|---|
| AP1 AP2 ... APn | Floor | Room |

## ② Input :

(1,5m) → GodB

☆ ① RSSI

② Band → 2.4 GHz or 5GHz ?

☆ ③ Channel → 1 - 11 | 30 ... 40 ...

Output :

① Floor ② Room ③ (x, y, z)

---

# Floor Classification

a) Daniel & Ghullam needs it.

→ Skripsi potential

---

# Alifya Thesis :

① Topic → Analysis of (x)ifi

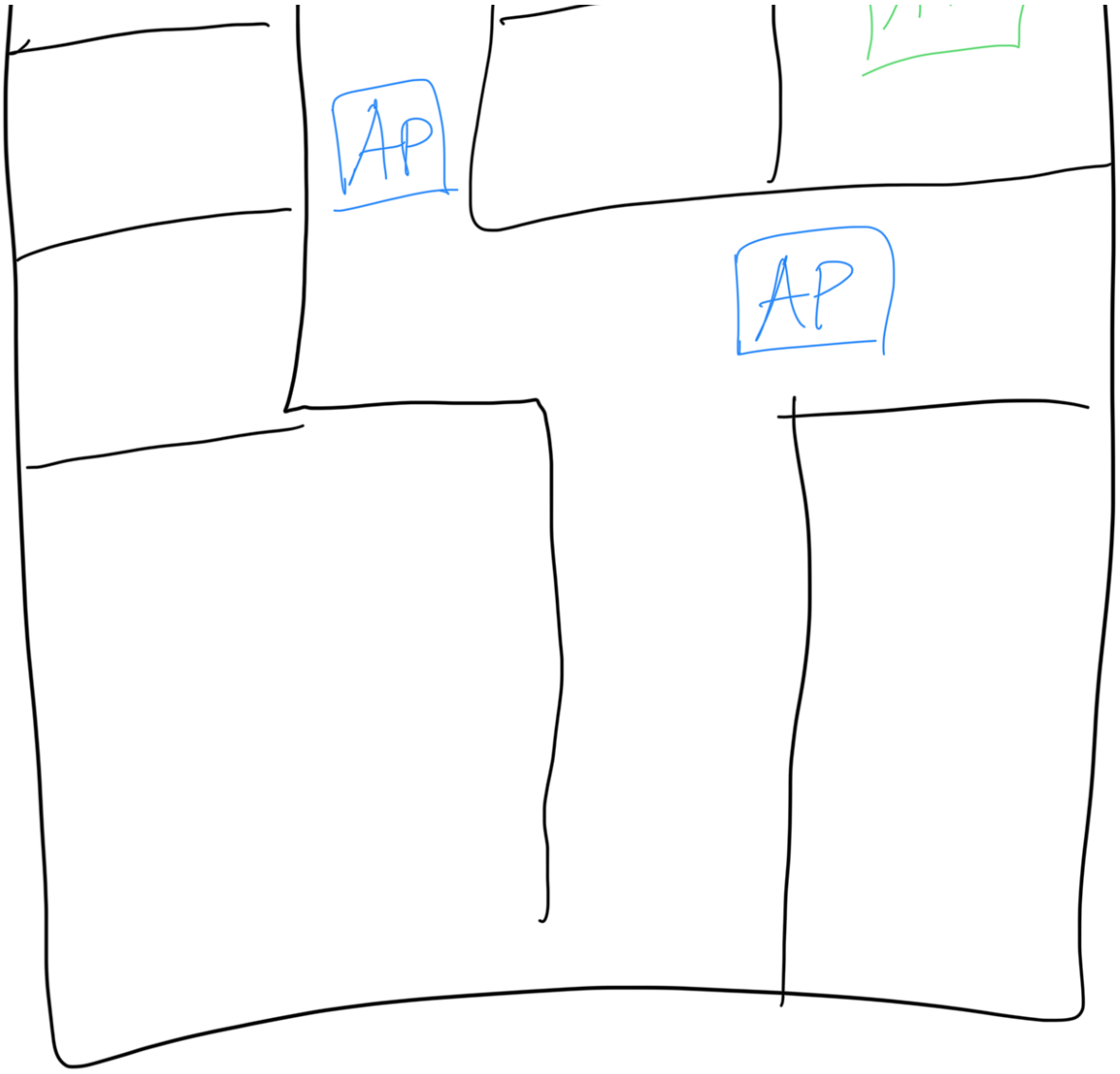
# Signal coverage

## ② Goals :

1) Check Heatmap / AP based on frequency & EIRP (Done with Sionna)

Code tracing for getting RSSI on a single coordinate ↓ Path loss func

2) Overall Heatmap from all AP → improve Sionna




③ Heatmap_calibrator
(RSSI, freq, AP_name)

④ Ubiquiti crawler