



Environmental Sensing

Part of the End to End Demo

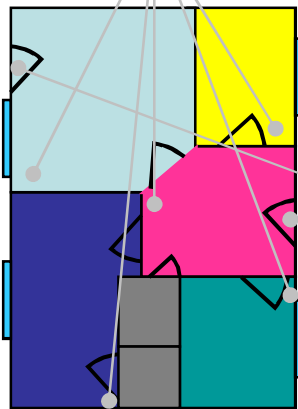




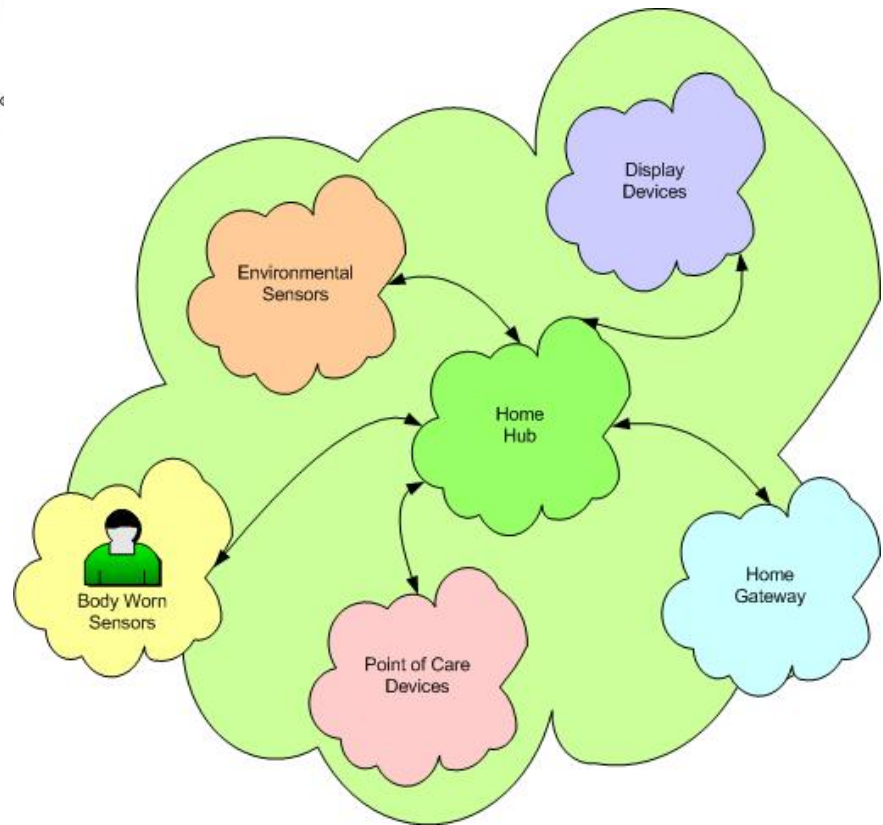
Hall
Lounge
Kitchen
Landing
Bedroom
Bathroom



ZigBee[®]



Front door
Back door
Fridge door



Capabilities

- ZigBee enabled motion sensors and door contacts:
 - Battery powered
 - Continuous event reporting (no sleep periods)
 - Temperature
 - Acknowledged transmission and mesh networking
 - Analysis provides:
 - Activity levels
 - Room occupancy
 - In/out/visitors
- Actigraphy (sleep) sensor:
 - Commercial device
 - Bluetooth interface unit – mains powered.
 - Bed occupancy reporting
 - Movement reporting (30s epoch)
 - Analysis provides Quality of Sleep measures:
 - Total sleep time
 - Sleep efficiency
 - Sleep latency
 - Bed exits