Hotel Room of the Future

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Motivation:

- Increase happiness and comfort in hotel rooms
- Reduce unneeded load on hotel
- Give patron feedback to hotel

Objective:

- Human-in-the-loop control through smartwatch
- Robot assistant talks to the hotel for you
- Set moods through music and lighting
- Ambiance based on entertainment
- Situationally aware room
- Room status notifications

Intellectual Merit:

- Human-in-the-loop control
- Cloud API Integration
- Smart Home automation
- Human-robot Interaction

Technical Approach:

- Facial recognition and detection
- Heart rate monitoring (biometrics)
- RFID emulating
- Cloud server w/ sockets and http
- Smart device API usage

Prior Results, Deliverables:

- Wearable Robot Controller
- LofaroLabs web server

Schedule:

1. **Cloud server and communication [Day 1}**
2. **Device level "parallel": [Day 1]**
   1. **Home, Echo, Hue, etc.**
3. **Task level "parallel" (device level required): [Day 2]**
   1. **Mood changing, auto-entry, hotel request, etc.**

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