

# BDI agents in elderly people hospitalization

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# Motivation

- One of the promising domains in which agents can be applied is hospitalization.
- Especially elderly people require constant attention, which is not always assured by the personnel.
- A BDI agent system would take care of many things (like keeping the temperature accurate in the room) and also warn the staff of critical conditions.

# What is BDI?

## ■ BDI

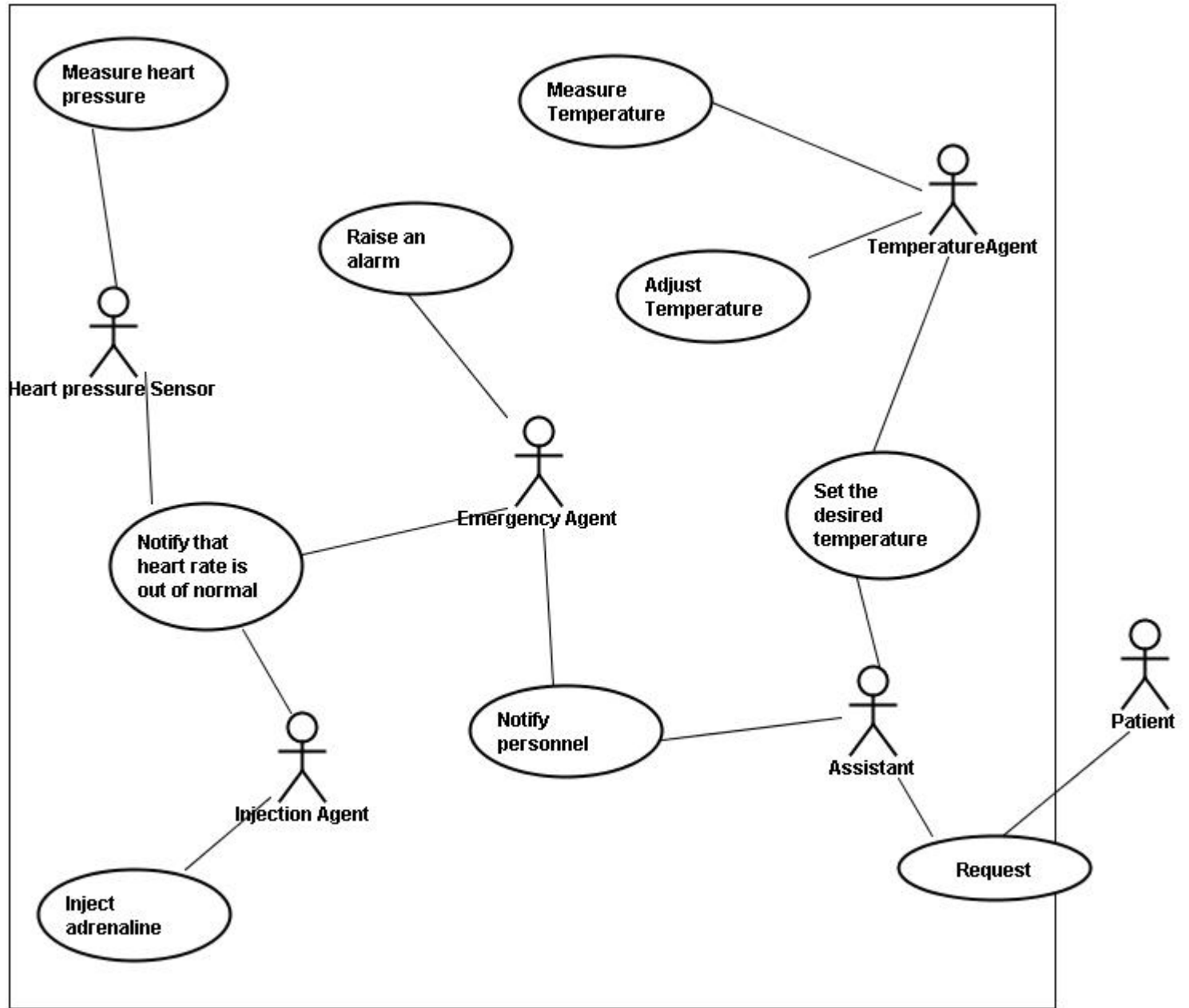
- Belief – the information an agent has about its surrounding environment (e.g. current temperature)
- Desire – the aim of the agent (e.g. target temperature)
- Intention – the objective that the agent is trying to achieve

# Why BDI in hospitalization?

- An agent should have a knowledge about the patient, the environment in which the patient is being hospitalized, the available staff, etc.
- Example: In a situation where the patient's life is threatened, the agent should know it (based on e.g. heart monitoring sensors), have the desire to inform the personnel or another agent to inject some drug and have the intention of doing the above.

# BDI agents in the system

- Example of possible agents in the system:
  - an agent measuring patient's blood pressure and in case it goes out of norm sends requests to other agents
  - agent that injects insulin, morphine, adrenaline, etc.
  - agent that takes care of proper temperature in the room
  - agent that alarms the personnel in case of emergency
  - others



**Thank you**