



Work in progress: Social Service Template for Social Robot Service



□ Social Service for Social Robot

- Recently, social robots providing social services such as PEPPER in Japan and JIBO in the US have been used in various fields.
- To develop services, it is necessary to handle various information such as human-robot interaction, environment, and emotion.
- This is very difficult for general developers who have not developed robot services in the past.

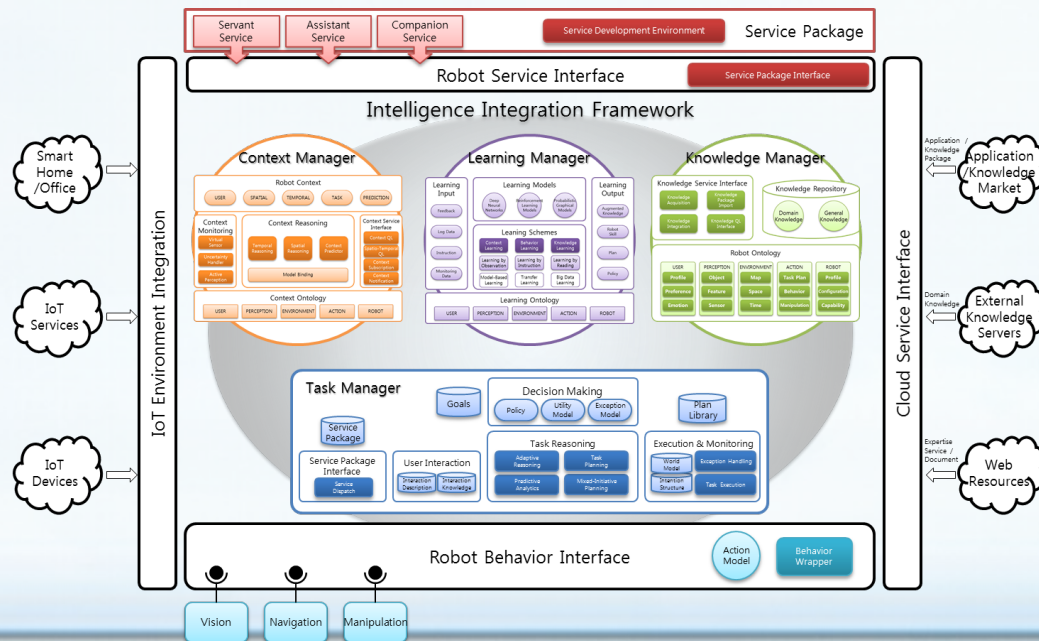
□ Social Service for Social Robot

- Social service is not performed by robot alone, but by service providers and service consumers.
- we define a template for service description involving multiple actors in various situations.

❑ Requirements for social service template

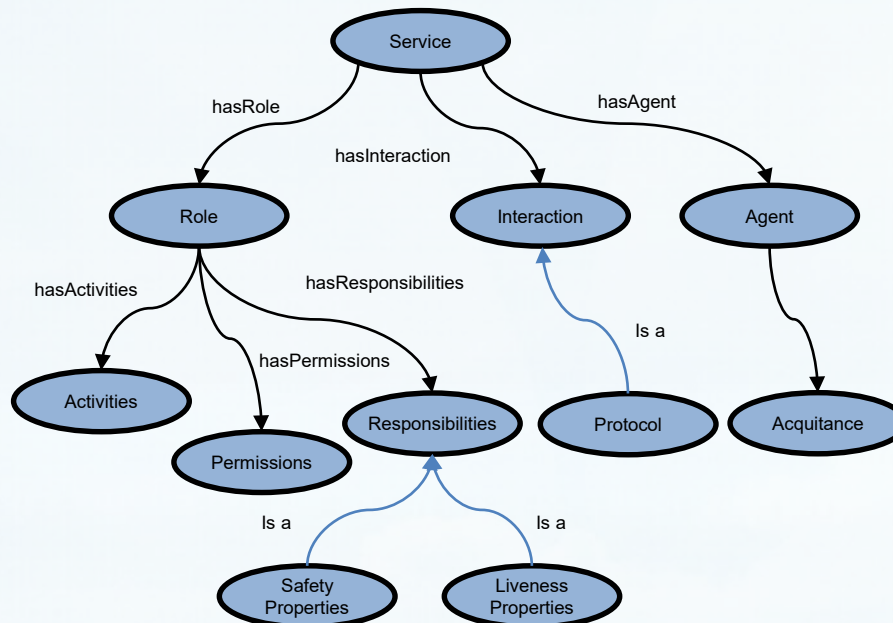
- Template should be able to describe multi-actor interaction
- Services created through templates should be applicable to model-based robot platforms.
- Template should have openness and expandability

- **Intelligence robot task management system**
 - Robot platform for task management using PRS system



□ Social service template scheme

- Based on GAIA Methodology for describing multi-actor service



Social service template

Property	Sub-property	Description
Role	Liveness	The Goal that the Role should perform
	Safety	The State that the Role should maintain
	Precondition	The State that required to have the Role
Protocol	Initiator	The Role that initiate the Interaction
	Responder	The Role that participate the Interaction
	Precondition	The State that required to start the Interaction
	Postcondition	The State that achieved through the Interaction
Acticity	Precondition	The State that required to start the Interaction
	Postcondition	The State that achieved through the Activity