**Autism Spectrum Disorder**

*What is it?*

Developmental disorder that affects communication and behaviour.

- **Difficulties:**
  - *interacting* with other people
  - handling *emotions*
  - dealing with *unexpected events*

**Conversational Agent**

*What is it?*

Artificial Intelligent system that interacts with humans via natural language.

**Personal Healthcare Agent**

Conversational agent that interacts with patients providing tailored contents to achieve a better health status.

BLU helps people with ASD in dealing with social and emotional daily challenges. The person describes the critical situation he/she is experiencing to the PHA, which retrieves and proposes a set of solutions in the form of natural language recipes.

**Domain Knowledge Elicitation Framework**

*Problem*

All the possible situations are not predictable *a priori*, thus the PHA needs to continually learn.

*Solution*

Involve domain experts in the learning process:

- BLU sends a message (elicitation event) to experts through a web application.
- The experts read the message, containing the dialogue, and propose additional situation descriptions and solutions.

**Continual Learning Algorithm**

BLU automatically and periodically retrieves the new information. By adapting its DM and NLU and NLG models, BLU bridges its knowledge gap allowing it to increase the coverage of situations, solutions and the personalization of the interaction.

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