# Helping autistic children via robot interaction

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#### RECAP! How to improve the social skills of autistic children?

#### Problem:

- Experiencing difficulties with working together
- Lack of motor imitation results in difficulties to understand each other's behavior
- difficulties in recognizing facial expressions and emotions

#### Solution?:

- A robot and/or interactive game with facilitates easy learning

#### Deliverables

- Literature study
- Design of an interactive game



### State of the art

- ZECA: displays facial expressions
- WikiTherapist: embodied interaction for improving social skills
- FACE: expresses emotional information
- Robot Bandit project: HRI in natural way, verbal









#### State of the art

- KASPAR: predictable and repetitive communication
- Kismet: basic visual and auditory social cues
- Leka: uses expressions, sound, light to interact
- Zeno: expressive face, focused on emotions









#### Deliverables

- Literature study
  - What is already investigated/developed?
  - Potential?!
- Our own game with Nao!!
  - Especially aimed at improving teamwork



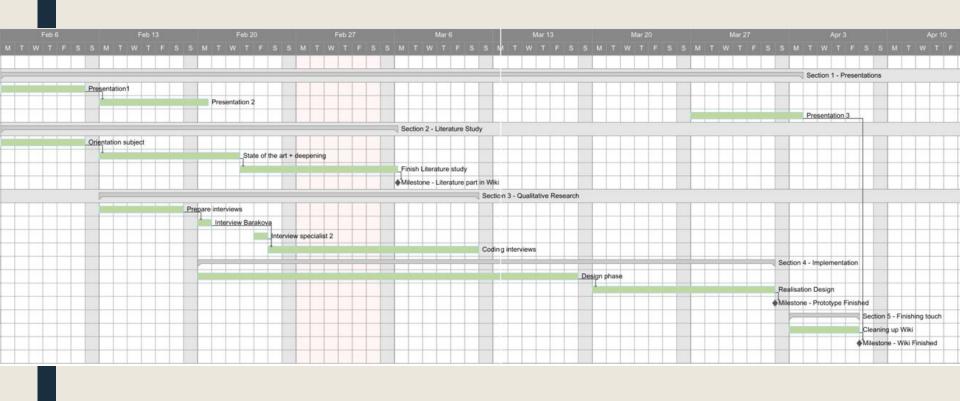
## How to improve the social skills of autistic children by s(t)imulating teamwork?

- First simulate....
- ...Then stimulate



## Planning & Milestones

	At Risk	Task Name	Start Date	End Date
1				
2		Section 1 - Presentations	02/06/17	04/03/17
3		Presentation1	02/06/17	02/11/17
4		Presentation 2	02/13/17	02/20/17
5	1	Presentation 3	03/27/17	04/03/17
6		Section 2 - Literature Study	02/06/17	03/06/17
7	2	Orientation subject	02/06/17	02/11/17
8	1	State of the art + deepening	02/13/17	02/22/17
9		Finish Literature study	02/23/17	03/06/17
10		Milestone - Literature part in Wiki	03/06/17	03/06/17
11		Section 3 - Qualitative Research	02/13/17	03/11/17
12		Prepare interviews	02/13/17	02/18/17
13	2	Interview Barakova	02/20/17	02/20/17
14		Interview specialist 2	02/24/17	02/24/17
15		Coding interviews	02/25/17	03/11/17
16		Section 4 - Implementation	02/20/17	04/01/17
17	1	Design phase	02/20/17	03/18/17
18		Realisation Design	03/20/17	04/01/17
19	2	Milestone - Prototype Finished	04/01/17	04/01/17
20		Section 5 - Finishing touch	04/03/17	04/07/17
21		Cleaning up Wiki	04/03/17	04/07/17
22	P	Milestone - Wiki Finished	04/07/17	04/07/17



## Questions??

