## **UNRAQ**

## <u>Users' Needs, Requirements and Abilities Questionnaire</u>

Participant ID:		Date				
	,	,				
Are you a caregiver? (please circle)	YES	YES If YES, wh FA FF NI	e you an <u>informal</u> caregiver?  NO nat type: AMILY MEMBER RIEND EIGHBOUR THER (specify):	YES If YES, who SOO NU PH	nal caregiver:  NO at type: CIAL WORKER RSE YSIOTHERAPIST HER (specify):	

## PERSONAL DATA

Date of birth					
Gender	Male	Female	Female		
Education (number of years)					
Profession (if retired, former profession)					
Background	Technical	Medical	Other		
Are you familiar with computers?	YES	NO	Neither Y nor N		
Are you familiar with working with technological systems?	YES	NO	Neither Y nor N		

I strongly d  I partially d  I neither ag  I partially a	isagree ree nor dis	agree				
I strongly a	gree					
A. INTERACTION WITH THE ROBOT AND TECHNICAL ISSUES	I strongly disagree	I partially disagree	I neither agree nor disagree	I partially agree	I strongly agree	Comments
A1. The robot should be a companion of the elderly person		(:)	<u></u>	$\odot$	$\odot$	
A2. The robot should be an assistant of the elderly person	<u></u>	$\odot$	<u></u>	$\odot$	$\odot$	
A3. The robot should be a useful device of the elderly person (something to be used when need, with no other interaction)	<u>:</u>	<u>:</u>	<u>·</u>	<u>··</u>	$\odot$	
A4. The elderly are prepared to interact with a robot	<u></u>	<u></u>	<u></u>	···	$\odot$	
A5. The elderly are able to manage with the robot		$\odot$	<u></u>	$\odot$	$\odot$	
A6. The elderly want to increase their knowledge about the robots to be able to operate them	·:	<u>:</u>	<u></u>	$\odot$	(:)	
A7. The robot should instruct the elderly person what to do in case of problem with its operation	·:	<u></u>	<u></u>	···	$\odot$	
A8. The robot should be customizable (adjusted to individual user preferences and needs)	·:	·:	·:	<u>··</u>	$\odot$	
A9. The elderly should be able to choose the functions of the robot they want to use and disable other ones	·:	·:	···	$\odot$	$\odot$	
A10. If the robot has been switched off by the owner, it should reactivate automatically (after a specific period), so that it is not forgotten in off mode				$\odot$	$\odot$	

Please answer the following questions. There are always 5 possible answers:

B. ASSISTIVE ROLE OF THE ROBOT	I strongly disagree	I partially disagree	I neither agree nor disagree	I partially agree	I strongly agree	Comments
B1. The robot should increase the safety of the elderly home: e.g. locking doors, detecting leaking gas etc.	·:	$\odot$	$\odot$	$\odot$	(:)	
B2. The robot should help the elderly to preserve their memory function e.g. by playing memory games with them				$\odot$	$\odot$	
B3. The robot should encourage and guide the elderly to perform physical exercises		(:)	$\odot$	$\odot$	$\odot$	
B4. The robot should provide advice about a healthy diet	<u></u>	$\odot$	<u></u>	$\bigcirc$	$\odot$	
B5. The robot should monitor the environment (temperature, humidity) and suggest air conditioning adjustment or windows opening	·:	$\odot$	$\odot$	$\odot$	$\odot$	
B6. The robot should measure physiological parameters (blood pressure, heart rate, body temperature) of the elderly person	( <u>;</u> )	(:)	$\odot$	$\odot$	(:)	
B7. The robot should monitor the amount of food and fluid intake of the owner	·:	(:)	()	(:)	(:)	
B8. The robot should remind the elderly about appointments	·:	$\odot$	<u></u>	$\odot$	$\odot$	
B9. The robot should remind the elderly about medication	<u></u>	·:	$\odot$	$\odot$	$\odot$	
B10. The robot should remind about meals times, drinks	<u></u>	·:	<u></u>	$\odot$	$\odot$	
B11. The robot should observe the behaviour of the elderly person to detect falls or changes due to illness	<u>::</u>	<u></u>	$\odot$	$\odot$	$\odot$	
B12. The robot should call the centre in case of emergency		<u></u>	<u> </u>	$\odot$	(:)	
B13. The robot should help the owner to find lost objects (e.g. glasses, keys)		$\odot$	$\odot$	$\odot$	$\odot$	

C. SOCIAL ASPECTS	I strongly disagree	I partially disagree	I neither agree nor disagree	I partially agree	I strongly agree	Comments
C1. The robot could decrease the sense of loneliness and improve the mood of the elderly person	(:)	(:)	$\odot$	$\odot$	$\odot$	
C2. The robot could encourage the elderly to enhance their contacts with friends	$\bigcirc$	(i)	$\odot$	(:)	(:)	
C3. The robot should initiate contacts with others (calling friends, initiating Skype conversations)	(:)	(:)	$\odot$	$\odot$	$\odot$	
C4. The robot should have entertainment functions (e.g. gaming partner, reading aloud or playing music function)	(:)	$\odot$			$\odot$	
C5. The robot should detect the owner's mood (facial expression)	$\odot$	$\odot$	$\overline{\odot}$	$\bigcirc$	$\odot$	
C6. The robot should accompany the owner in everyday activities (watching TV, preparing meals)	·:	<u>:</u>	<u></u>	$\odot$	$\odot$	
D. ETHICAL ISSUES	I strongly disagree	I partially disagree	I neither agree nor disagree	I partially agree	I strongly agree	Comments
D1. The elderly person should have control over the robot	$\odot$	$\odot$	<u> </u>	$\odot$	$\odot$	
D2. The elderly person should be able to send the robot to its place/docking station and keep it staying there	(:)	(:)	$\odot$	$\odot$	(:)	
D3. It is acceptable that the robot inform a family member or caregiver about the older person's behaviour/health problems	(:)	(;)	$\odot$		(:)	
D4. The elderly person should be able to switch off the robot in specific situations (friends' visits, privacy reasons etc.)	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	
D5. It is acceptable that the robot will have much information about the user (social, medical, others)	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	

## **CREATIVITY BOX**

seful in the everyday life of elderly people.							
ve free rein to your imagination. Feel free to report any observations that came to your mind while aswering the questionnaire.							

Please write down all your ideas/suggestions for other functions the robot might have, which could be