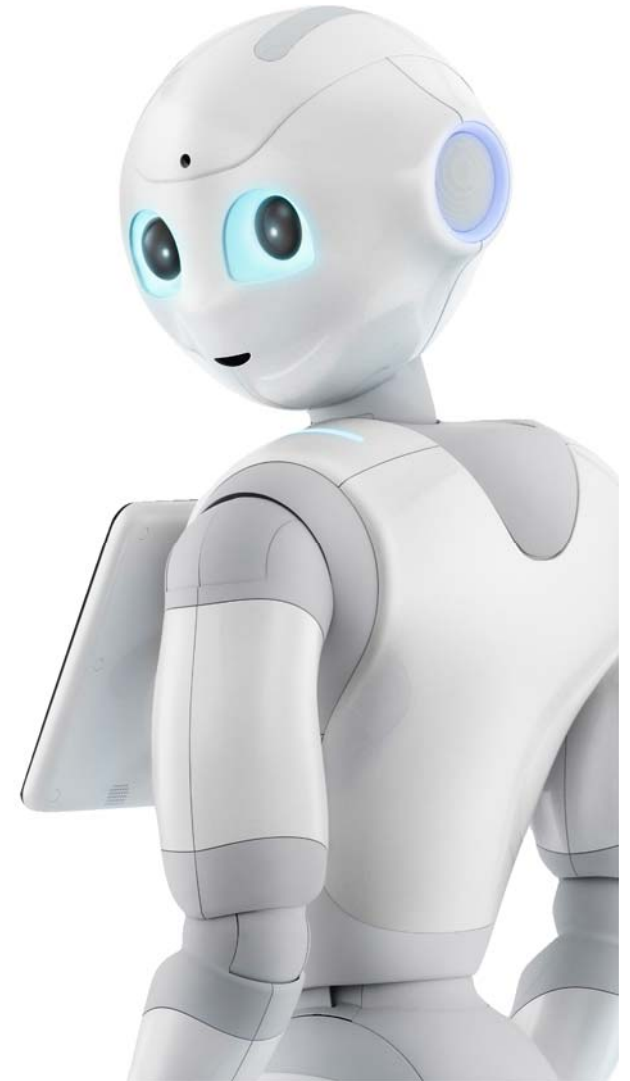# WRS
World Robot Summit

Junior Category
School Robot Challenge

Task overview

<Task Description>

Task 1 : Talk with person

・A person approaches Pepper and says, "Hello Pepper"
・Pepper faces the person approaching, and carries out a short conversation with the person
・At the end of the conversation, Pepper asks what the person need (i.e. "What do you need?")
・When that person says "xx", Pepper moves toward the teacher
・Pepper asks the teacher if s/he has "xx" (i.e. Do you have a xx?)

Note : All conversations in English

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Task 1 : Talk with a person

Someone from a team member

· Pepper starts from the specified location
· The starting position of the "Person" will be selected by the judge from A1 or E1.

· **A person approaches Pepper and says, "Hello Pepper"**
· **Pepper faces the person approaching, and carries out a short conversation with the person**
  · **At the end of the conversation, Pepper asks what the person need (i.e. "What do you need?")**
  · **When that person says "xx", Pepper moves toward the teacher**
  · **Pepper asks the teacher if s/he has "xx" (i.e. Do you have a xx?)**

· 4 or more objects needs to be selected by the team ※ If the objects could be randomly selected by the judges, 20 bonus points are rewarded.

"Teacher" is a mentor or a friend of the team. Teacher waits at [A4].
※20 bonus points will be rewarded if the location can be selected randomly by the judges

Note : All conversations in English

-Fill out the hearing sheet-

◆**Selection of 'Person' to talk to Pepper**
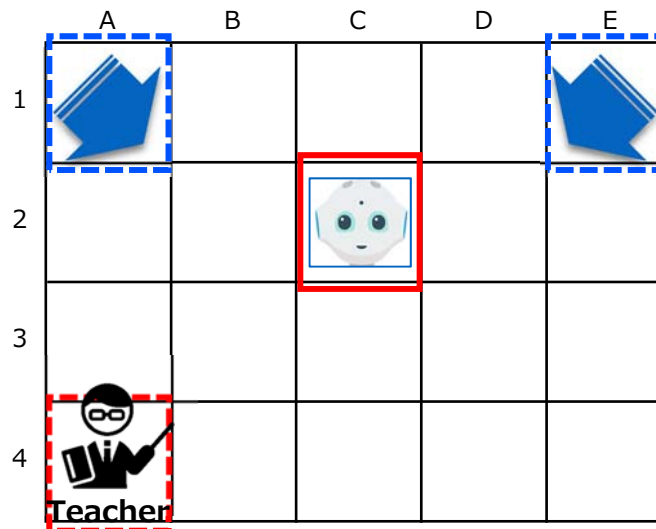Choose from team members

◆**Create an object list**
Select 4 or more objects.
(describe on the hearing sheet)
※ **If the objects could be randomly selected by the judges, 20 bonus points are rewarded.**

◆**"teacher" is…**
the mentor or a friend of the team
※ **20 bonus points will be rewarded if the location can be selected randomly by the judges**

-Task Settings-

※Position of Pepper is fixed to [C2]
※Position of Teacher is fixed to [A4]
If team aims for the bonus points, the judge specifies the location.

・Declare the task.
・The judge specifies a object from the object list.
　※**Not required if not specified**
・The judge specifies the start location of "person" as [A1] or [E1]
・"Teacher" waits at [A4]
　※ **If team aims for the bonus points, the judge specifies the location.**
・Start the task using the app on Pepper's tablet.
・Running Task
・Declares the end of the task

Scoring Criteria

Task 1	25pts	25pts	25pts	25pts
Talk with a person	Recognize that person are approaching and face the person	Talk with the person facing in the direction of the person (the conversation includes the name of the specified object)	Recognize what the person said and tell the words to the "Teacher"	Move to the "Teacher"
			If Pepper recognizes the name of the object randomly selected by the judge, and can tell the teacher, add 20 bonus points	If Pepper can reach the teacher who is in a random location, add 20 bonus points

Task 2 : Recognize a person's unique information

A person is wearing a T-shirt and raising one hand

・Pepper recognizes a human emotion and explains what it saw in one sentence
・Pepper recognizes which hand a person is raising and explains it in one sentence
・Pepper recognizes the color of the T shirt the person is wearing and explains it in one sentence

Note : All conversations in English

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Task 2 : Recognize person's unique information

Someone from a team member

A judge specifies from [red or black or yellow]

The judge specifies [Right hand or left hand]

A person is wearing a T-shirt and raising one hand

・ Pepper recognizes a human emotion and explains what it saw in one sentence

The judge specifies an emotion from [Happy or Sad]

・ Pepper recognizes which hand a person is raising and explains it in one sentence

・ Pepper recognizes the color of the T shirt the person is wearing and explains it in one sentence

Finally, if Pepper can say a sentence that includes all elements (the team member's emotion, hand raised, and T-shirt color), add 20 bonus points
Example: "A person wearing a blue T-shirt is sad, and raising his (or her) right hand"

Note : All conversations in English

Stage description

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-Fill in the hearing sheet-

◆**Selection of 'Person' to talk to Pepper**
Choose from team members

	A	B	C	D	E
1					
2					
3			Pepper	Member	
4					

-Task Settings-

※Position of Pepper is fixed to **[C3]**
※Position of a Member is fixed to **[D3]**
・ Declare the task
・ The judge specifies T-shirts color from **[Red, Black, Yellow]**
・ The judge specifies an emotion **[happy] or [sad]**
・ The judge specifies **[Right hand] or [Left hand]**
・ Start the task using the app on Pepper's tablet.
・ Running Task
・ Declares the end of the task

Scoring Criteria

Task 2	33 pts	33 pts	33 pts
Recognize person's unique information	Recognize a person's "emotion" correctly and explains it in one sentence	Recognize a person's "hand raised" correctly and explains it in one sentence	Recognize a person's "T-shirts color" correctly and explains it in one sentence
	1 bonus point if you can do all three items		
			Explains a sentence that includes all elements (emotions, hand raised, and T-shirt color), add 20 bonus points

Task３ : Recognize alphabets

 ・ **Pepper approaches the leftmost letter sign, recognizes the letter and reads it**
 ・ **Pepper approaches the letter sign in the middle, recognizes the letter and reads it**
 ・ **Pepper approaches the rightmost letter sign, recognizes the letter and reads it**
 ・ **Finally, Pepper speaks the three recognized alphabets as one word.**

Note : All conversations in English

Task 3 : Recognize the letters of the alphabet

The judge sequentially specifies three alphabets which become words from **"A, C, E, N, S, T"**
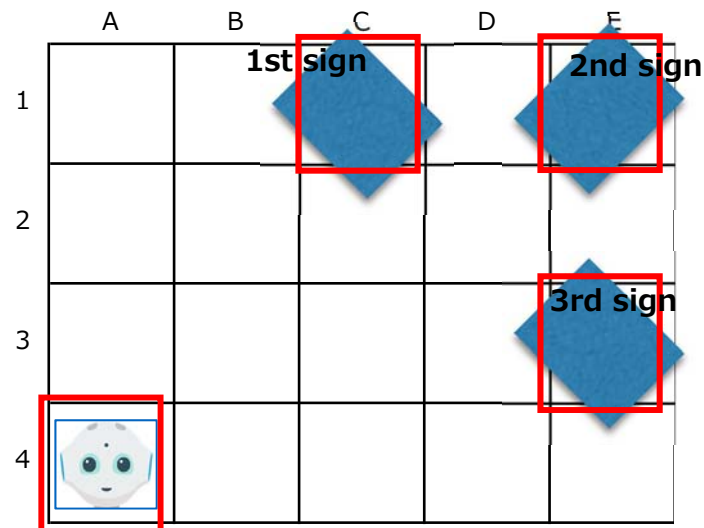
・ **Pepper approaches the leftmost letter sign, recognizes the letters and reads it**

・ **Pepper approaches the letter sign in the middle, recognizes the letters and reads it**

・ **Pepper approaches the rightmost letter sign, recognizes the letters and reads it**

・ **Finally, Pepper speaks the three recognized alphabets as one word.**

If Pepper can also display the word on the tablet, **add 20 bonus points**

Note : All conversations in English

Stage description

Task 3

Scoring Criteria

Task 3	25 pts	25 pts	25 pts	25 pts
Recognize alphabets	Recognize and read the first letter	Recognize and read the second letter	Recognize and read the third letter	Speaks the three letters alphabets as a word
				Display the word on the tablet, add 20 bonus points

Task4 : Move Pepper to three locations

- · A person guides Pepper to the yellow panel
- · **Pepper leads the person and moves to the blue panel**
- · The person orders Pepper "Go to the place near the red ball",
  and Pepper says "I understand" or "OK" and so on.
- · Pepper looks for the red ball and moves to the ball by itself.

Note : All conversations in English

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Task4 :　Move the Pepper to three locations

Someone from a team member

Pepper's starting location is specified **randomly** by the judge

Fixed to **[A1]**

Fix to **[D3]**

・**A person guides Pepper to the yellow panel**
・**Pepper leads the person and moves to the blue panel**
・**The person orders Pepper "Go to the place near the red ball",
and Pepper says "I understand" or "OK" and so on.**
・**Pepper looks for the red ball and moves to the ball by itself.**

・The position of the red ball is specified by the judges from **[B1] [C1] [D1] [E1]**, and the red ball will be placed on the floor at the center of the back line at the specified frame
・Pepper is in the specified frame

Note : All conversations in English

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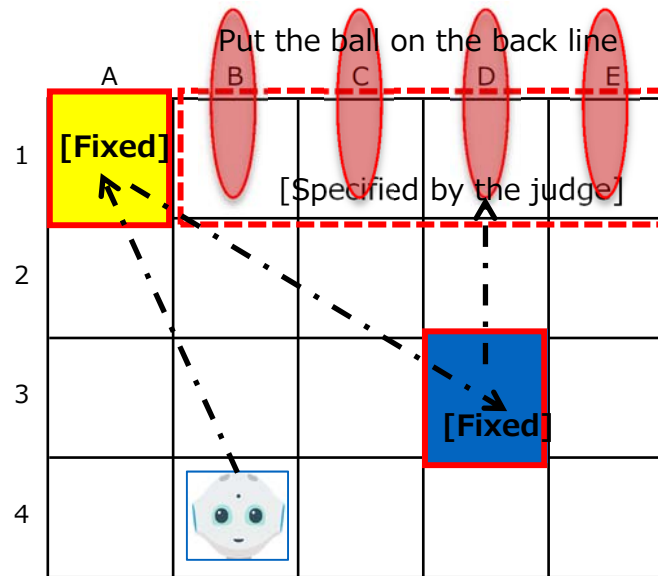| Task 3	25 pts	25 pts	25 pts	25 pts
Move Pepper to three locations	Move to the Yellow panel	Move to the Blue panel	Recognize what the person said and reply	Move to the frame where the red ball is placed

Stage description

Task 4

-Fill in the hearing sheet-

◆**Selection of 'Person' to talk to Pepper**
Choose from team members

Put the ball on the back line

[Specified by the judge]

	A	B	C	D	E
1	[Fixed]				
2					
3				[Fixed]	
4					

Moving image of Pepper

-Task Settings-
※Yellow panel is fixed to **[A1]**
※Blue panel is fixed to **[D3]**

・Declare the task
・A judge randomly selects the start position of Pepper
・The position of the red ball is specified by the judge from [B1] [C1] [D1] [E1]
・Placing the ball on the floor at the center of the back line at specified frame
・Start the task using the app on Pepper's tablet.
・Running Task
・Declares the end of the task