



Global Innovation Challenge 2024
Living Assistance Robot Contest

Application Guidelines

Global Innovation Challenge
Executive Committee

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1. Introduction

1.1. Introduction

These Global Innovation Challenge 2024 Living Assistance Robot Contest Application Guidelines (hereinafter, the "Application Guidelines") provide application information and details for the Global Innovation Challenge 2024 Living Assistance Robot Contest (hereinafter, the "contest"). As the Application Guidelines may be revised after publication, please refer to the latest version on the official website. Please contact the organiser if you have any questions or concerns about this Application Guidelines.

The organiser may revise the Application Guidelines without prior notice by indicating and publicizing the changes to the Application Guidelines, the contents of the revised Application Guidelines, and the effective date of the said changes on the official website or in any other manner determined by the organiser. However, if such revision will have a material impact on the applicants, the organiser shall notify the applicants in advance for a reasonable period of time (at least two (2) business days in the case of a material adverse impact on the applicants). (A "business day" shall mean a day other than Saturdays, Sundays, and national holidays in Japan on which banks generally conduct their normal business operations.) Please contact the organizer if you have any inquiries or questions about this Application Guideline.

Contact: inquiry@global-innovation-challenge.com

Official Website: <https://global-innovation-challenge.com/>

1.2. Update History

Last Updated	Version
8/1/2023	1st Edition

2. Contest Summary

2.1. Purpose and Objectives

Commitment to "independent walking"*

- The number of people who need assistance in their daily lives is increasing all over the world due to illness, accidents, and aging, among other reasons. Both the caregivers and the assisted are burdened mentally, physically, and economically. And yet commercial investment in robotics development in the welfare sector is limited due to the relatively small market.
- With the development of public infrastructure and barrier-free accessibility, it is now more convenient to use a wheelchair to carry out everyday activities without hindrance than before. However, the reality is that places without proper facilities put restrictions on activities. For example, when you visit a friend's house, you might come across steps in the entrance or hallway of a typical home, or insufficient space for a wheelchair. In such cases, living assistance robots that was usable indoors and outdoors, regardless of barriers, would allow people with disabilities to enjoy their lives more freely.
- This Living Assistance Robot Contest aims to support researchers and developers around the world, with the ultimate goal being widely available and innovative tools that leverage remaining limb functions to provide "independent walking", without the support of caregivers, for those people living with wheelchairs due to disabilities such as paralysis of the lower limbs.
- Purpose of this contest
 1. A contest venue that recreates real environments leads to faster real-world implementation
 2. Shorten the time to commercialization of living assistance robots by conducting the tests in contest venues that are close to real-world environments

*In this contest, "independent walking" refers to a person with a disability such as paralysis of the lower limbs who live with a wheelchair, and who are then able to move their legs to walk without the assistance of others or without using a wheelchair.



2.2. Organiser

The Global Innovation Challenge Executive Committee (hereinafter, the "organiser") has been established to realize section "2.1 Purpose and Objectives" above.

It is operated with advice from experts in the fields of medical welfare, sports for the disabled, robotics, and so on.

<https://global-innovation-challenge.com/about/>

2.3. Schedule

- This Application Guidelines uses Japan Standard Time (JST).
- Entry sheet published August 1, 2023
- Entry period: September 1, 2023, to February 28, 2024
- Notification of application screening results: March 31, 2024
- Demonstration period: May to June 2024 (scheduled)

2.4. Contest Stages

2.4.1. Entry

Teams who wish to enter the contest submit the completed forms to the organiser.

The cost of entry is the responsibility of each team. In addition, the teams shall be responsible for any accidents that occur in connection with the preparation of the entry form.

2.4.2. Document Screening

The organiser will screen documents and inform the result to the teams based on the entry forms submitted by the teams

2.4.3. Demonstration

Teams that pass the document screening are invited to the contest venue (2.5 Contest Venue) to demonstrate their robot by performing Tasks on the contest field.

Each team has about one or two days for their demonstration during demonstration period.

Monthly schedule June

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						1
2	3	4	5 Equipment delivery	6 Practice day	7 Contest performance	8 Preparation day
9	10	11	12 Equipment delivery	13 Practice day	14 Contest performance	15 Preparation day
16	17	18	19 Equipment delivery	20 Practice day	21 Contest performance	22 Preparation day
23	24	25	26 Equipment delivery	27 Practice day	28 Contest performance	29 Preparation day

Team A
Team B
Team C
Team D

Team schedule (Example)

Time	1st day	2nd day	3rd day
10:00		Orientation	Opening ceremony
10:30			Task 1
11:00			Task 2
11:30		Task practice	Task 3
12:00			lunch break
12:30			
13:00	Equipment delivery	lunch break	Task 4
13:30	Facility information		
14:00			Task 5
14:30			Task 6
15:00	Robot adjustment		Task 7
15:30		Task practice	
16:00			
16:30			Closing session
17:00	Robot confirmation by judges		Withdrawal work

2.4.4. Award Selection

The organiser awards teams that complete the Tasks and grants cash prizes.



Figure: Contest Stages

2.5. Contest Venue

- GIC Tsukuba Innovation Center (former Elementary School)
- 877 Nakasugama, Tsukuba, Ibaraki 300-4242, Japan
- Google Maps URL: <https://goo.gl/maps/GFA4XEWKVu8iDxEK9>

2.6. Fees and Entry Costs

- Entry to this contest is free of charge.
- The costs associated with entry (e.g., costs associated with making the video required to create the entry form, costs associated with the doctor's diagnosis, and other costs associated with creating and submitting the entry form) are the responsibility of the team.
- Travel, accommodation, purchase of equipment, etc. for participation in the demonstration will be subsidized by the organiser up to 10,000 USD per team.
- Interpreters will be arranged by the organiser.

3. Entry

3.1. Team Eligibility

- Individuals and organizations involved in robot research and development are eligible. Groups that include multiple organizations or individuals are also eligible for the contest.
- There are no restrictions on the nationalities of team members
- Team members must not be members of organized crime groups, companies or organizations affiliated with organized crime groups, or other antisocial organizations, and must not have any relationship with antisocial forces, etc.

3.2. Robot Eligibility

- A robot eligible for the contest may be worn externally or fitted internally to the body and is a device or tool that enables the independent walking of a person with lower limb paralysis without the assistance of others.
- Robot that causes physical or emotional distress to the pilot are not allowed.
- There are no restrictions on the shape or size of the robot, provided it can be used in a general residential environment.
- The total weight of the robot and pilot cannot exceed 150 kg.
-
- A robot used in contact with a person with lower limb paralysis is eligible for this contest. Movement of the robot alone, through remote control or similar, is not allowed.
- The robot may operate automatically or manually. In the case of manual operation, the robot must be operated by the pilot only, and not externally (from the outside) except for safety reasons.
- One robot only may be used in the contest.
- A robot must be able to be used with the pilot wearing the jacket, which is an accessory to the device which eases the shock of falling.
- Robots that would be difficult to use in real-life situations, for example those that are excessively noisy, are not eligible for selection. There is no limit to the cost of building the robot.
- Robots that infringe or may infringe on the intellectual property rights or other rights of a third party and robots that violate or may violate other applicable laws and regulations are not eligible for selection.
- During the demonstration period, the organiser will check for discrepancies between the entry form and a robot itself. Any discrepancy may result in the applicant being disqualified from participating in the demonstration.

3.3. Pilots Eligibility

- The team member who directly attaches and uses the robot is called the pilot.
- Pilots must not have muscle strength that affects their ability to stand up and walk.
- The pilot will be an individual who is paraplegic, due to spinal cord injury or other reason, equivalent to a Frankel Classification rating of A to B and ASIA rating A to B. No upper limb impairment is required.
- The pilot shall be a mentally and physically healthy individual.
- There may be different pilots for different tasks.
- Pilots are required to submit a medical certificate and written medical opinion letters, as prepared by the organiser, at the time of entry.

3.4. Entry Tasks

- Applicants may enter all seven tasks or any one or more.
For example, a team can apply for tasks 1, 3, and 6.

3.5. Documents to be Submitted

- Entry Form
- Medical certificate provided by a doctor for each pilot
- Medical opinion letters regarding contest participation provided by a doctor for each pilot
- Medical checklist for each pilot
- ASIA assessment for each pilot
- Please note that the above medical certificates, opinion letters, medical check sheets and ASIA evaluations for each pilot must have been obtained within two weeks of the entry sheet submission. If any of the information in the medical certificates or opinion sheets submitted at the time of entry changes before the demonstration, the team must submit the changes to the organiser.

4. Selection Process

4.1. Document Screening

4.1.1. Eligibility for selection

Teams that submit their entry forms to the organiser during the entry period for this contest are eligible for selection.

Entry period: September 1, 2023, to February 28, 2024

4.1.2. Notification of application screening results:

End of March 2024

4.1.3. Selection criteria

Based on the content of the entry sheet submitted by applicants, the organizer will consider successful applicants who satisfy both of the following two criteria

- Applicants who are judged by the organizer to have the potential to accomplish the tasks.
- Applicants who can come to Japan during the demonstration period.
If the entry form is incomplete or lacking information, the organiser will ask the team for corrections or additional information.
The organiser will not respond to any inquiries or objections regarding the selection criteria or the results of the organiser's selection process.

4.2. Demonstration

The contest will take place on the contest field at the GIC Innovation Center in Tsukuba City. The organiser shall assess demonstrations of the team robot and determine which robots complete the tasks.

4.2.1. Eligibility for demonstration

Teams that pass the document screening

4.2.2. Demonstration period

June 2024 (scheduled)

The organiser and each team will agree on a schedule, and the team will have about a day or two days within the demonstration period.

4.2.3. Demonstration location

On the contest field at the contest venue

4.2.4. Judging method

Teams will conduct demonstrations on a contest field prepared by the organiser.

A panel of judges requested by the organiser will judge if the teams complete the contest tasks.

5. Tasks

5.1. Criteria for accomplishment

- This contest consists of seven tasks.
- For each task, required actions to be performed are set.
- A task is deemed successful when the pilot uses the robot to complete the task without incident within the time limit set for that task.
- A "Judgement table for Required Actions" is included in the description of each task, which shows the actions that must be performed in order to complete the task. The judges will assess whether or not the actions were performed.

5.2. Contest Field

- The floor plans below show the contest field on which the teams will perform their demonstration.
- The dimensions and fixtures can be changed.

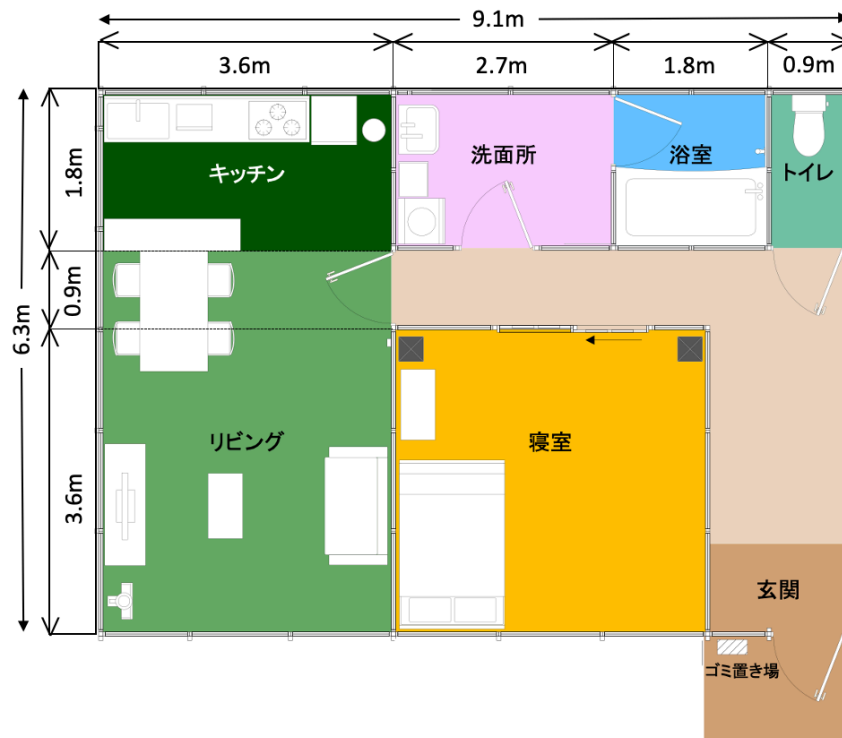


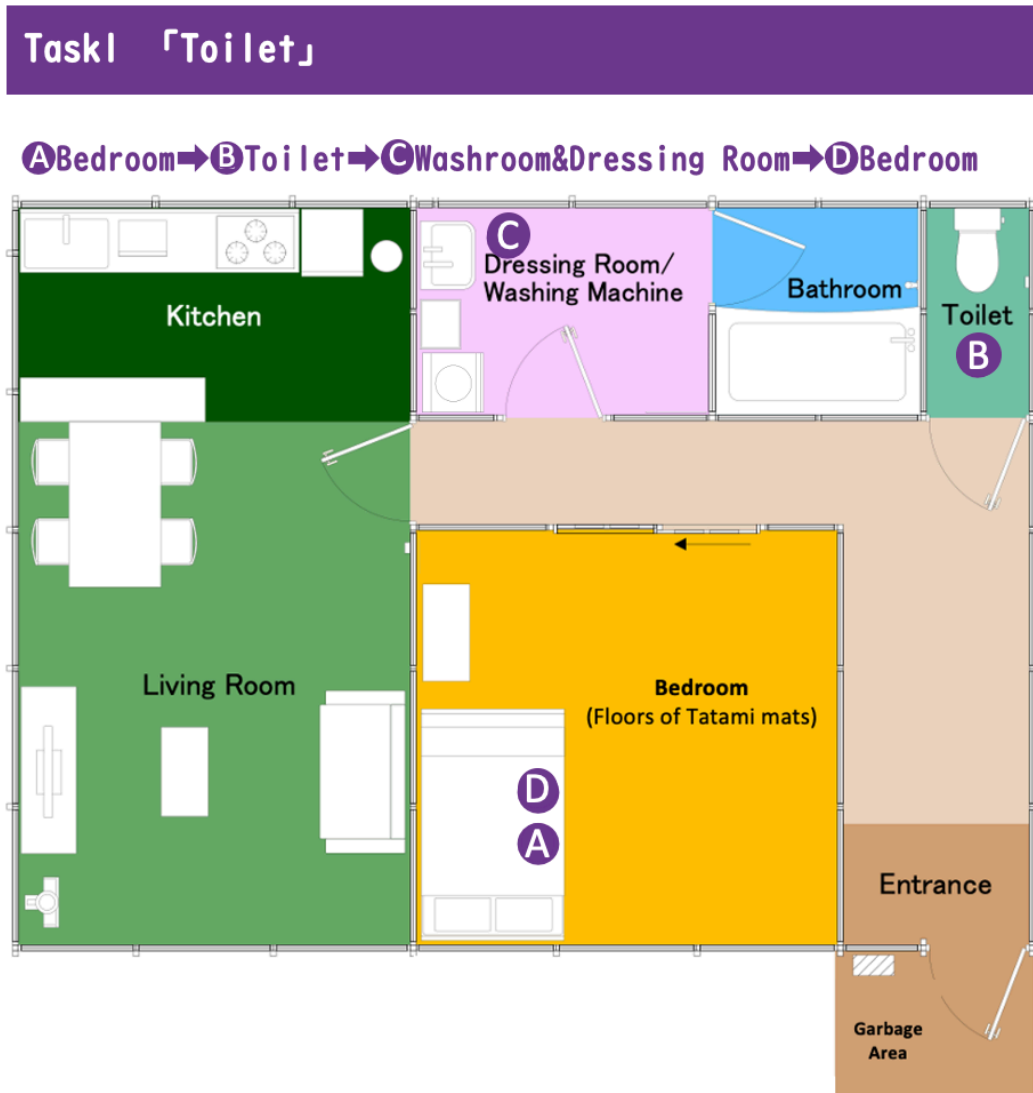
Figure: Contest Field Floor Plan

5.3. Notes Common to All Tasks

- At the start of each task demonstration, the robot should be placed in the position designated by the organizer, away from the pilot's body. (except for robot implanted in the body)
- If a pilot needs shoes to wear the robot, they should be taken off at the start of the demonstration since those shoes are considered to be a part of the robot.
- Pilots are required to close all the doors when they finish each task. However, they must close the toilet door in Task 1 and the bathroom door in Task 7 after coming into the room.
- The pilot may use walkers, canes, and other walking aids. However, these aids cannot be used for purposes other than to assist walking. For example, the cane cannot be used to shut a door or the walker to [hang or] carry objects.
- When changing direction or going up and down steps, the pilot may not put his or her entire weight on the walking aid to lift both lower limbs in order to change direction or go up and down steps.
- The pilot may not intentionally put his or her weight on the wall, to lean against it or for balance.
- Pilots are expected to wear the robot for all tasks. If a demonstration of another task is to be continued, the robot must be removed during the preparation time when the previous task is completed, and the robot must be fitted again in the next task.
- The organiser will provide the main fixtures used in each task. Teams may bring other implements (carrying bags, etc.) that they have determined are necessary for carrying out each task, but these must fit into a backpack of 10-liter capacity or less.
- Teams should not change the contents of the implements for every tasks. Teams may fit all the implements necessary to all tasks they participate into a backpack of 10-liter capacity or less. The pilot must keep this backpack close at hand at the start of the demonstration.
- If an unexpected event occurs during the demonstration, such as dropping an object, the pilot will not be allowed to start the demonstration over. However, if the pilot is able to recover on his/her own, for example by picking up the dropped object, the pilot may continue the demonstration. If an object is damaged when dropped and cannot be returned, the task will not be completed.
- The pilots are required to wear a vest equipped with a device which eases the shock of falling during demonstrations. Teams may rent this vest from the organiser, and it needs to be returned in one month approximately since there are only a few.
- The pilots are required to start Task 2 through 7 in a position that their feet are placed on the floor.
- If any problems occur with the robot during the demonstration, the pilot must fix the problem by himself/herself.
If a pilot drops goods or knocks down the furniture during the demonstration, he/she must return them to their original position.

- If a pilot damages goods or housing during the demonstration, he/she will be disqualified. (Footprints or stains caused by friction are the exceptions if they come off.)
- If a task requires timing during toileting, washing hands or showering, the assistants may count the seconds.
- Teams may assign a maximum of two assistants in the contest field as a standard. Teams may increase or decrease the number of assistants as they needed.
- Teams are not allowed to move any furniture, goods or fixtures in the contest field before the demonstration starts. However, pilots are allowed to move them during the demonstration.

5.4. Task Descriptions



Move to the toilet and use it

Time limit: 8 minutes

Task description:

Start lying in bed (A) in your pyjamas. Sit up and put the robot on. At this time, the robot may be placed on a chair next to the bed. Get up from the bed and move to the toilet (B). Once in the toilet, close the door. Drop your trousers to your ankles, sit on the toilet seat, and count ten seconds. Then get up from the toilet seat and raise your trousers. Pull the flush lever on the right side of the flush tank. Exit the toilet and close the door. Move to the washroom (C) and wash your hands with soap for 10 seconds. Wipe your hands with the towel hanging in the washroom. Return to the bedroom and sit on the bed (D) to complete the task.

Task notes:

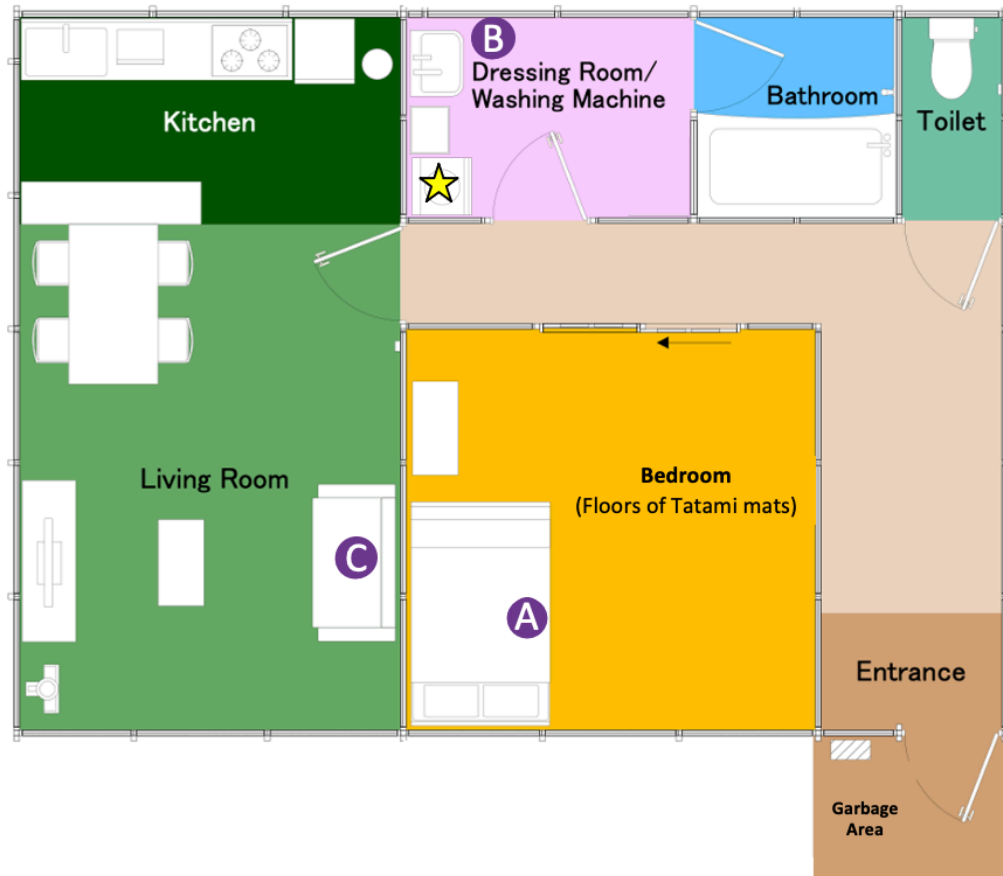
In the toilet, lower trousers to your ankles.

Task 1: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Bedroom	Start lying in bed in your pyjamas	
2	"	Sit up and put the robot on	
3	(Move)	Get up from the bed and move to the toilet	
4	Toilet	Close the door after entering the toilet	
5	"	Drop your trousers to your ankles, sit on the toilet seat, and count ten seconds	
6	"	Get up from the toilet seat and raise your trousers	
7	"	Pull the flush lever on the right side of the flush tank	
8	"	Exit the toilet and close the door	
9	(Move)	Move to the washroom	
10	Washroom	Wash hands in the washroom (about ten seconds, using soap) and wipe your hands with the towel hanging in the washroom	
11	(Move)	Close the washroom door and return to the bedroom	
12	Bedroom	Enter the bedroom and close the door	
13	"	Sit on the bed	

Task2 「Preparation」

ⒶBedroom→ⒷWashroom&Dressing Room→
ⒸDining&Living Room



Wash face in the washroom

Time limit: 6 minutes

Task description:

Start from a sitting position on the bed (A). Put the robot on and move to the washroom (B). Take a towel from the rack. Scoop handfuls of water, keep touching your face with both hands and wash the face for three seconds. After wiping your face with the towel, place the towel in the basket in front of the washing machine (marked with a star) and move to the living room. Once in the living room, close the door and sit on the couch (C) to complete the task.

Task notes:

When washing your face, you are supposed to perform to scoop handfuls of water. And then you keep touching your face with both hands and perform washing motions for three seconds.

Task 2: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Bedroom	Start from a sitting position on the bed	
2	”	Put the robot on and stand up	
3	(Move)	Go into the hallway, close the bedroom door, and move to the washroom	
4	Washroom	Take a towel from the washroom rack	
5	„	Scoop handfuls of water, keep touching your face with both hands and wash the face for three seconds.	
6	”	Wipe your face with the towel	
7	„	Place the towel in the basket in front of the washing machine (marked with a star)	
8	(Move)	Exit the washroom, close the door, and move to the living room	
9	Living room	Close the door after entering the living room	
10	”	Sit on the couch	

Task3 「Meal」

① Dining&Living Room → ② Kitchen →
③ Dining&Living Room → ④ Kitchen → ⑤ Dining&Living Room



Place a prepared meal on the table, sit down, and eat

Time limit: 9 minutes

Task description:

Start from a sitting position on the living room couch (A). Put the robot on and move to the kitchen (B). Start toasting bread in the toaster, Transfer food from the frying pan to a plate, and serve soup from a pot into a bowl. Take a drink out of the refrigerator and pour it into a cup. Take the toast out of the toaster. Bring all four of these prepared items to the table on tray (C). Then take a seat. Take a spoon and fork from the table and make any sign to begin eating. Perform eating motions for ten seconds. After that, make a sign again which means the end of a meal and carry the empty dishes into the kitchen (D). Place all the dishes in the dishwasher (marked with a star) and press the start button. Return to the living room and sit on the couch (E) to complete the task.

Task notes:

- For safety reasons, the tray must not be suspended from the pilot's neck when carrying dishes on the tray. The tray can be suspended from something other than the pilot's neck, but it cannot be carried on top of the walker.
- When seated in the dining chair, the pilot should be sitting straight, facing the table, with knees under the table. It is not allowed to move the table and place it over the knees.
- Wrapping or covering dishes with plastic wrap or lids is not permitted. At the start of the task, the food and crockery are set out as shown in the picture below.



- The water and food brought to the table should be replaced by the assistant.

Before meals



After meal



Task 3: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Living room	Start from a sitting position on the living room couch.	
2	"	Put the robot on and stand up	
3	(Move)	Move from the living room to the kitchen	
4	Kitchen	Start toasting bread in the toaster	
5	"	Transfer food from the frying pan to a plate	
6	"	Serve soup from a pot into a bowl	
7	"	Take a drink out of the refrigerator and pour it into a cup	
8	"	Take the toast out of the toaster	
9	"	Bring all of these prepared items to the table on tray	
10	(Move)	Move from the kitchen to the living room	
11	Living room	Take a seat in the dining chairs in the living room	
12	"	Take a spoon and fork from the table	
13	"	Make any sign to begin eating	
14	(Move)	Move from the living room to the kitchen	
15	Kitchen	Place all the dishes in the dishwasher (marked with a star) and press the start button	

Task4 「Laundry」

① Dining&Living Room → ② Washroom&Dressing Room →
③ Bathroom → ④ Bedroom → ⑤ Dining&Living Room



Wash clothes, take down the laundry, fold and put it away in drawers

Time limit: 10 minutes

Task description:

Start from a sitting position on the living room couch (A). Put the robot on and move to the washroom (B). Take clothes from the basket and put them into the washing machine (marked with a star), add detergent and fabric softener, close the lid of the washing machine, and press the start button. Then immediately take the clothes out of the washing machine and hang them in the bathroom (C). Take down other laundry that was hung out to dry. Fold the laundry (it doesn't matter where you fold it) and carry it to the bedroom and put it away in the drawers (D). Move from the bedroom to the living room and close the door after entering the living room. Sit on the living room couch (E) to complete the task.

Task notes:

- A basket or bag can be used to carry the laundry, but it cannot be carried on top of the walker.
A pole is affixed to walls at a height of 185 centimeters from the floor. The pitch between each hanger hung from the pole is 15 centimeters.
- At the start of the task, the laundry pajamas are casually placed in the basket with the buttons closed.

Laundry basket



Laundry pole



Please refer to the following pictures for how to fold and dry the laundry. If you deviate significantly from good examples, you may not be recognized as having completed the task.

- How to fold clothes

Good example



Bad example



- How to dry clothes

Good example



Bad example



Task 4: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Living room	Start from a sitting position on the living room couch	
2	"	Put the robot on and stand up	
3	(Move)	Move from the living room to the washroom	
4	Washroom	Take clothes from the basket and put them into the washing machine (marked with a star)	
5	"	Add detergent and fabric softener, close the lid of the washing machine, and press the start button	
6	"	Take the clothes out of the washing machine	
7	(Move)	Move from the washroom to the bathroom	
8	Bathroom	Hang the clothes in the bathroom	
9	"	Take down other laundry that was hung out to dry	
10	"	Fold the laundry (it doesn't matter where you fold it)	
11	(Move)	Close the bathroom door and washroom door and return to the bedroom	
12	Bedroom	Put the folded laundry away in the drawers	

13	(Move)	Go into the hallway, close the bedroom door, and move to the living room	
14	Living room	Close the door after entering the living room	
15	"	Sit on the couch	

Task5 「Package Receiving」

① Dining&Living Room → ② Entrance →
③ Kitchen → ④ Dining&Living Room



Receive a delivered package and put its contents in the refrigerator

Time limit: 8 minutes

Task description:

Start from a sitting position on the living room couch(A). When the intercom chimes, put the robot on and get up from the couch. Move to the intercom (marked with a yellow star) and answer it. Then move to the front door(B) with the step (about 20 cm) and receive the package by hand (a cardboard box of about 1.5 kg, 32 cm (W) x 25 cm (D) x 11 cm (H)). Close the front door, carry the package by hand to the kitchen(C), open the package, and put its contents in the refrigerator. Fold the cardboard box and place it by the kitchen trash can (marked with a red star). Close the living room door and sit on the living room couch(D) to complete the task.

Task notes:

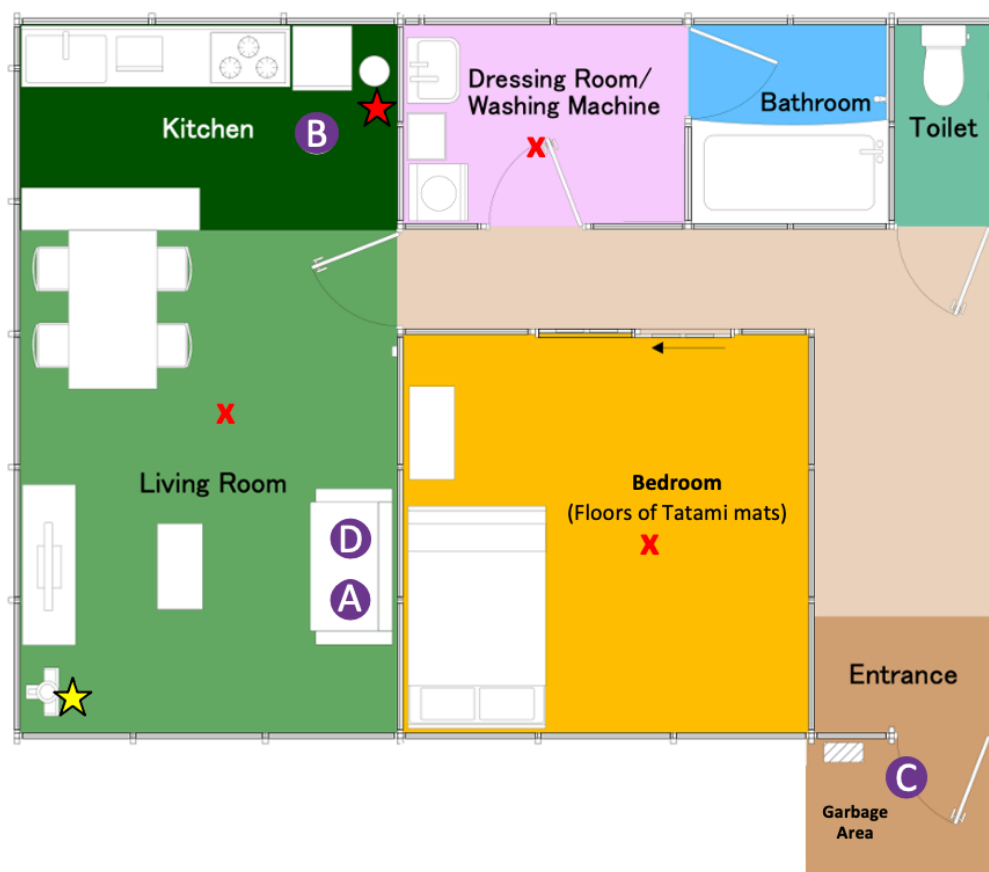
Carry the received package by hand.

Task 5: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Living room	Start from a sitting position on the living room couch	
2	„	After the intercom chimes, put the robot on and stand up from the couch	
3	„	Move to the intercom (marked with a yellow star) and answer it	
4	(Move)	Move from the living room to the front door with the step (about 20 cm)	
5	Front door	Receive the package	
6	(Move)	Take the package by hand, close the front door, and move to the kitchen	
7	Kitchen	Put the package contents in the refrigerator	
8	„	Fold the cardboard box and place it by the kitchen trash can (marked with a red star)	
9	(Move)	Move from the kitchen to the living room	
10	Living room	Close the door after entering the living room	
11	„	Sit on the couch	

Task6 「Cleaning」

① Dining&Living Room → ② Kitchen →
③ Entrance → ④ Dining&Living Room



Use a vacuum cleaner to clean the house, and take the trash bag outside

Time limit: 11 minutes

Task description:

Start from a sitting position on the living room couch (A). Put the robot on and use the vacuum cleaner (marked with a yellow star) placed in the living room to vacuum trash in three places (red X). After vacuuming the trash, dump the trash inside the vacuum cleaner into the kitchen (B) trash can (marked with a red star) and tie up the trash bag. Set a new trash bag in the trash can. Return the vacuum cleaner to its original place. Carry the trash bag (about 4 kg) by hand and exit (C) through the front door with the step (about 20 cm) and quietly place the trash in the garbage area. Close the front door and return to the living room. Close the living room door and sit on the living room couch (D) to complete the task.

Task notes:

- Carry the trash bag by hand.
- Garbage is in a 20 cm square frame near the center of each room. You don't have to remove all the dust, but check to see if there are three colors of dust in the dust that you threw away from the vacuum cleaner.

Living room trash



Dressing room trash



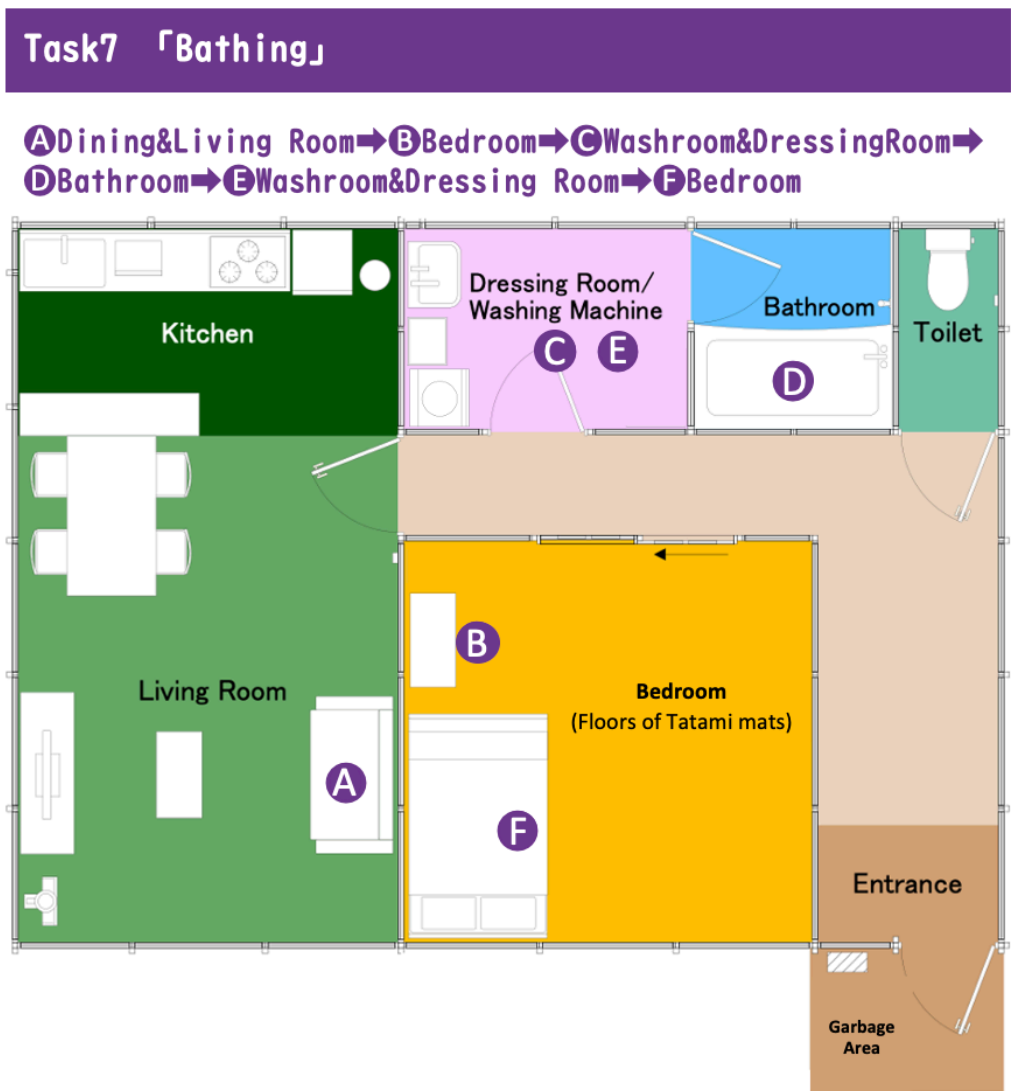
Bed room trash



Task 6: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Living room	Start from a sitting position on the living room couch	
2	"	Put the robot on and stand up	
3	(Several rooms)	Use the vacuum cleaner (marked with a yellow star) placed in the living room to vacuum trash in three places (red X)	
4	(Move)	Check that the doors to each room are closed behind you, and move to the kitchen with the vacuum cleaner	
5	Kitchen	Dump the trash inside the vacuum cleaner into the kitchen trash can (marked with a red star)	
6	"	Take the trash bag out of the trash can and tie it	
7	"	Set a new trash bag in the trash can	
8	(Move)	Move to the living room with the vacuum cleaner	
9	Living room	Return the vacuum cleaner to its original place (marked with a yellow star)	
10	(Move)	Move to the front door with the trash bag (about 4 kg)	

11	Front door	Exit through the front door and place the trash bag in the garbage area (next to the front door)	
12	(Move)	Close the front door and move to the living room	
13	Living room	Close the door after entering the living room	
14	”	Sit on the couch	



Have a bath and change clothes

Time limit: 16 minutes

Task description:

Start from a sitting position on the living room couch (A). Put the robot on and go to the bedroom and take your pyjamas out of the drawers (B). Take your pyjamas and

head to the washroom. Once in the washroom (C), close the door and take a towel from the rack. Take off your clothes and put your clothes in the laundry basket. Then go into the bathroom (D). Take a shower and rinse yourself off. (Use both hands to rinse your hair, wash your back with a towel, and clean the soles of your feet. Spend about ten seconds on each action.) Sit with your buttocks on the floor of the tub for ten seconds. Get out of the tub, leave the bathroom (E), wipe your whole body with the towel, and put on your pyjamas. Dry your hair for ten seconds using the hair dryer by the sink, then return to the bedroom. Sit on the bed (F), take off the robot, and lie down to complete the task.

Task notes:

- During the task, the bathroom floor may be wet. No water will be used in the shower or tub. Instead, to test the water resistance of the robot, it will be soaked for 30 minutes in 40°C water prior to the task.
- The pilot should wear an inner layer of clothing for actions that require removing

Task 7: Judgement table for Required Actions

No.	Location	Required Actions	Judgement
1	Living room	Start from a sitting position on the living room couch	
2	"	Put the robot on and stand up	
3	(Move)	Go into the hallway from the living room, close the living room door, and move to the bedroom	
4	Bedroom	Take your pyjamas out of the drawers	
5	(Move)	Move to the washroom with pajamas in hand.	
6	Washroom	Close the door after entering the washroom	
7	"	Take a towel from the rack	
8	"	Take off your clothes and put your clothes in the laundry basket	
9	(Move)	Move from the washroom to the bathroom	
10	Bathroom	Take a shower and use both hands to rinse your hair and wash your back and soles of your feet with a towel; spend about ten seconds on each action	
11	"	Sit with your buttocks on the floor of the tub for ten seconds	

12	"	Get out of the tub, leave the bathroom	
13	(Move)	Move to the washroom	
14	Washroom	Wipe your whole body with the towel and put on your pyjamas	
15	"	Dry your hair for ten seconds using the hair dryer	
16	(Move)	Close the bathroom and washroom doors and move to the bedroom	
17	Bedroom	Close the bedroom door, sit on the bed, and take off the robot	
18	"	Lie down on the bed	

6. Tasks, Task Groups and Prize Money

6.1. Task Groups

The tasks in this contest will be categorized into three task groups. The organizer will award a prize for the achievement of each task and for the achievement of the task group.

- Task Group 1 includes three tasks: Task 1 "Toilet", Task 2 "Preparation", and Task 3 "Meal".
- Task Group 2 includes three tasks: Task 4 "Laundry", Task 5 "Package Receiving", and Task 6 "Cleaning".
- Task Group 3 consists of Task 7 "Bathing".

Task Group 1	Task Group 2	Task Group 3
Toilet 50,000USD	Laundry 50,000USD	Bathing 200,000USD
Preparation 50,000USD	Package Receiving 50,000USD	
Meal 50,000USD	Cleaning 50,000USD	
Task Group 1 accomplished 150,000USD	Task Group 2 accomplished 150,000USD	
All Task Groups accomplished 200,000 USD		

THE TOTAL AMOUNT OF PRIZE 1,000,000 USD

Figure: Tasks, Task Groups and Prize Money of the Global Innovation Challenge2024

6.2. Prize Money by Task

The prize money for each task is as follows:

- Task 1: Toilet 50,000 USD
- Task 2: Preparation 50,000 USD
- Task 3: Meal 50,000 USD
- Task 4: Laundry 50,000 USD
- Task 5: Package Receiving 50,000 USD
- Task 6: Cleaning 50,000 USD
- Task 7: Bathing 200,000 USD

6.3. Prize Money for Task Groups

Teams that complete all tasks in a task group at the same time will be awarded a task group achievement prize in addition to the achievement prize for each task. The achievement prizes for the task groups are as follows.

- Task Group 1: 150,000 USD
- Task Group 2: 150,000 USD
- All Task Groups: 200,000 USD

Example: If a team completes Task 1, 2, 3, 4 and 5 at the same time, they will be awarded 400,000 USD total in prize money. (250,000 USD for completing five tasks (50,000 USD for each task) and 150,000 USD for completing Task Group 1)

6.4. Special Judges Prize

6.4.1. Purpose

In addition to completing tasks, a Special Judges Prize will be awarded to robot that "wheelchair users would like to use".

6.4.2. Prize Eligibility

- Any team that has completed at least one task.
- The prize may not be awarded.

6.4.3. Judging

- A panel of judges requested by the organiser will carry out the judging.
- The judging criteria for the Special Judges Prize will not be announced, but judges will consider robot to which this statement applies: "If this robot was on the market, I'd definitely want to buy it and use it."

6.4.4. Prize Money

10,000 USD

6.5. Prize Money Distribution

- If a task or group of tasks is achieved by more than one team at the same time in the same contest, the prize money for the achievement will be divided equally between the respective achieving teams.
- The prize money will be awarded within one month of the end of this competition.

6.6. Other

- If, after the contest has been completed, a team is found to have presented false information or engaged in any other fraudulent activity that the organiser deems inappropriate, the organiser reserves the right to cancel distribution of the prize money.
- The prize money received from previous GIC contests will be reset, and teams can participate tasks that they had completed in previous ones.
- Prize-winning teams will be announced on the official GIC website and elsewhere.

7. Awards and Closing Ceremony

- At the end of the contest, the teams that completed tasks will receive awards.
- The closing ceremony will be held after all tasks are finished.

8. Other

8.1. Safety Measures

To prevent accidents, the organiser will install device which eases the shock of falling and provide assistants. Judges may suspend a demonstration for safety reasons. In such cases, follow the judges' instructions. In addition, each team member (especially the pilot) is responsible for his/her own and his/her team's safety in participating in this contest.

8.2. Confidentiality

The organiser will not use the confidential information on robotics and other technologies obtained during the judging process for any purpose other than the judgement. The submitted confidential information will be stored in strict confidence for a certain period using an appropriate method and then destroyed. The confidential information will not be disclosed without the team's permission. This does not apply if the information is public knowledge, or it was already in the possession of the organiser prior to the judging process, or it was legally obtained from a third party that possessed the appropriate rights thereof without any obligation of confidentiality, or it has been mutually confirmed as exceptional information by the organiser and the owner of the information. The organiser may also disclose confidential information to the extent necessary to comply with the law or a court order or directive, regulatory authority, or other public body with the authority to regulate the organiser. In the event of such a disclosure, the organiser will contact the team in the subject in advance (or, if unavoidable, afterwards).

8.3. Photography

The organiser may photograph, record, or videotape the contest Award Ceremony and demonstrations, etc., and distribute such recordings over the Internet or otherwise, or post them in printed materials, etc., for the purpose of promoting the contest and related events such as promoting technological development and commercialization in the field of living assistance robots, etc. In addition, the organiser may distribute the team and its members' likenesses, names, self-introductions, and other information via the Internet or other media or post them in printed materials for the purpose of promoting the contest and related events. However, the privacy of all parties involved, including the team, will be taken into

consideration and the information will not be used for any purpose other than that for which it was intended.

8.4. Indemnity and Damages

Except in the case of intentional misconduct or gross negligence on the part of the organizer or its affiliates, the organizer will not be liable for any accidents, theft, loss, disputes, or information leakage that may occur to the team or its affiliates before, during, or after the entry, selection, and contest period of this contest. Teams are responsible for taking all necessary precautions to prevent accidents.

In no other event shall the organizer or its affiliates be liable for any other damages incurred by the team or its affiliates as a result of participation in the contest, except to the extent permitted by applicable law, unless such damages are caused by the intentional or gross negligence of the Organizer or its affiliates.

In addition, the team and its affiliates will be liable for all damages caused by that team to the organizer or its affiliates or to other teams or other third parties in connection with this Contest.

If a team does not meet the conditions of participation as stated in the Application Guidelines (e.g., members belong to antisocial forces, etc.), or in the event that a team is found to have submitted false information, the team may forfeit its rights under the contest, including the right to participate and be judged, even during the course of the competition.

Neither the teams nor their members may object to the organizer or its affiliates regarding the loss of rights, nor may they make any claim against the organizer or its affiliates for any damages resulting from the loss of rights.

11.

8.5. Media Coverage

There is a possibility that teams and team members may be interviewed by television, newspapers, Web media and other media in connection with this contest. When a media representative contacts the organizer to interview the team, the organizer will procure the team's permission before such interview takes place.

8.6. Cancellation of the Contest

The organizer may cancel or reschedule the contest if the organizer determines that the contest cannot be held due to an accident involving the organizer, any member of the team or any other person involved, or due to an earthquake, outbreak or spread of an infectious disease, or any other reason. In the event the contest is cancelled, no prize money will be awarded to any team. The organizer cannot be held liable for any damages caused to entrants or other third parties because of the contest's cancellation.

8.7. Revised Application Guidelines

The organizer may revise these Application Guidelines from time to time as it deems necessary. The revised version will be posted on the contest's official GIC website.

8.8. Dispute Resolution

The laws of Japan shall apply to the rights and obligations pertaining to the contest and its terms and conditions, and all disputes arising from the contest and its terms and conditions shall be subject to the exclusive jurisdiction of the Tokyo District Court as the court of first instance.

