



**Unlimited Imagination & Creativity!  
Team Work! Problem Solving!**

# **2023 CREDECA AI Coding Contests**



**World Association of Creativity**

# AI Coding Contests

## Task Performance Requirements

### 1. Situation

Following last year, Genie plans to devise and produce AI goods storage boxes for the disabled. There are various types of goods delivered to disabled users. The item may be food, or it may not deteriorate even if left for a long time.

Therefore, the notification function is essential because the collection time for each item is important. It is to create an artificial intelligence storage box that operates various notification functions depending on the items ordered and arrived.

### 2. Problem

(Problem 1.) Create an **Automatic Notification Devices** that informs disabled users of the items that the AI storage box has arrived. (The type of disability is determined by the participant.)

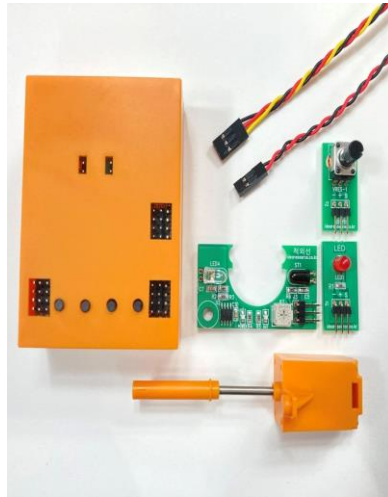
(Problem 2.) Create **Additional Automatic Devices** related to the object on the device manufactured above (Problem 1).

(Problem 3.) Describe the things (devices, data, programs, etc.) needed to install AI classification functions to improve the performance of the device manufactured above, and the operating principles and methods of the final work. It is not necessary to demonstrate.

### 3. Restriction

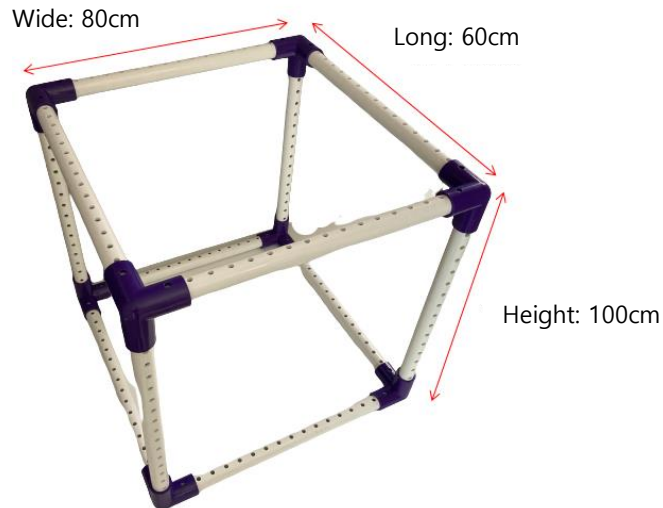
- a. Automatic notification device and additional automatic device shall be operated by coding.
- b. The device should show its operating principles and appearance through demonstrations. However, the device does not need to be a size that can be applied directly to real life, and can be presented as an operating model.
- c. The control board shall use Arduino or Arduino compatible products.

- d. Coding programs should use **'entry' in elementary and middle schools** and **'Arduino Sketch' in high schools**.
- e. When using entries in elementary and middle schools, hardware-related blocks can only be used when selecting 'Arduino Uno genuine board', 'Arduino Uno compatible board', 'Arduino Uno expansion mode', and 'Arduino Nano' among entry hardware.



<Note : Control Board (Arduino Compatible)>

- f. Size: Works are made within 80cm wide, 60cm long, and 100cm high, including coding computers.



- g. Ingredients: There is no limit, but all materials and tools necessary for production are prepared by the team.
- h. Preparation time: 30 minutes are given at the venue. It should be done within the preparation time so that the work that has been made can be demonstrated.

#### 4. Evaluation Category

<b>Problem</b>	<b>Examination Category</b>	<b>Score</b>
<b>1</b>	Technology and creativity of operation methods	0~20
	Degree of complement	0~20
<b>2</b>	Need for add-ons, innovation	0~20
	Additional functionality completeness	0~20
<b>3</b>	New features or performance enhancements incorporating AI	0~20