User Manual 1.1(English version)

This is the User Manual ('This Manual' as below) for CollaBox ('This Game' or 'The Game' as below). This manual consists of four sections.

Section I: Safety Precautions

- 1. Safety is the first priority of this game.
- 2. The gaming process of this game may involve electronic devices and small items. Throughout the gaming process, which is defined as from Section II and IV, at least one adult facilitator should be in charge of monitoring the players to ensure gaming safety.
- 3. The hardware of this game may involve external wiring. Although CollaBox's production team has tried to minimise hazards, care should be taken to avoid tripping over the wires. Shoes should be worn at all times.
- 4. The input device of this game InBox can be affixed to a table using plastic suction cups, which may have a strong but not permanent attachment. The owner(s) of the InBox is(are) responsible for keeping the InBox away from young children. InBox users should use the InBox with care.
- 5. The train set contains small components and runs on electricity. Students must at all times be supervised to avoid putting them in their mouth.

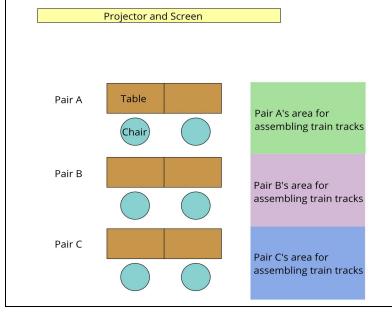
Section II: Before CollaBox game starts

- 1. Manpower setting: No less than one adult facilitator
- 2. Materials required for the game
 - 1. A classroom

- 2. A Laptop preinstalled with the following items:
 - CollaBox application
 - Arduino IDE:https://www.arduino.cc/en/Main/Software
- 3. A Projector or a large interactive screen connected to a computer/tablet/phone
- 4. Two input consoles affixed on a table with suction cups attached
- 5. Stickers (at least one for each student, should be provided by facilitator)
- 6. A few train compartments and tracks

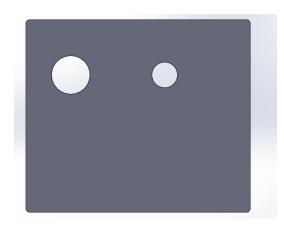
3. Classroom settings

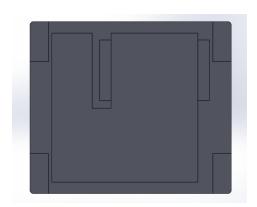
- Step 1. Facilitator(s) switch on the projector and load the slideshow.
- Step 2. Arrange the tables and chairs two-by-two.
- Step 3. Place the laptop and the two input —consoles on the table, where the first pair will play the game.
- Step 4. Players enter the venue. Two players sit together as one pair, facing the projector. Players keep a certain distance with other pairs.

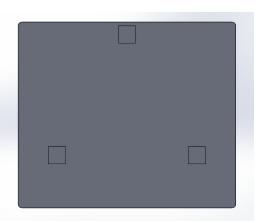


4. Input device 'InBox' and its use
The input device InBox's dimension is 175mm*150mm*66mm.
InBox can be switched between 'Desk Mode' and 'Relax Mode'

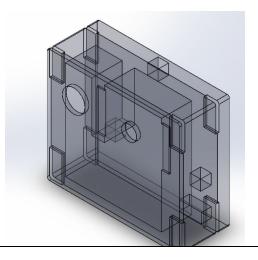
During Desk Mode, InBox contains three parts, which are the Lid, the Container and the Base (as pictured). Follow the steps to install it.



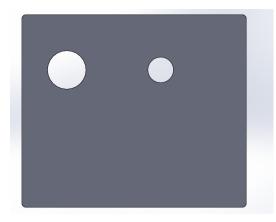


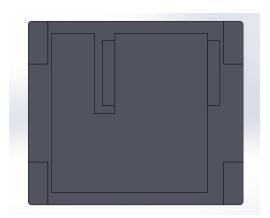


- 1. Attach the velcro between the Lid and the Container.
- 2. Attach the velcro between the Container and the Base.
- 3. Place the InBox on the table.
- 4. Lightly press the InBox to stick the suction plates of the Base better with the table surface.
- 5. The installation is completed.



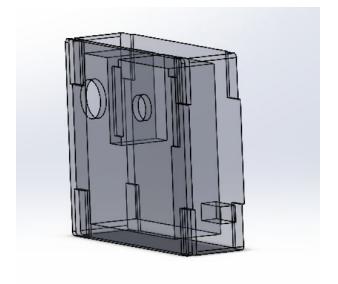
During Relax Mode, InBox contained two parts, which were the Lid and the Container respectively(as pictured).





To switch from Desk Mode to Relax Mode, users may refer to the following steps:

- 1. Remove the velcro between the Lid and the Container.
- 2. Remove the Base to lower the height of the InBox.
- 3. The installation is completed.



To connect the InBox to the system, simply plugin the blue cable to a USB port on the laptop/computer.

Section III: Gaming

Process	Projector/ Laptop screen's display	Players' task	Facilitators' task
Scene one: video direct in. When the video completes broadcasting, button will appear on the bottom right of the laptop screen. This video may be broadcasted by the projector.		Click to enter the next scene.	Click to enter the next scene.

Pepper will play a recorded audio to explain the setting of CollaBox. The picture in the conversation frame will change according to the contents of the recording.

This video may be broadcasted through the projector.

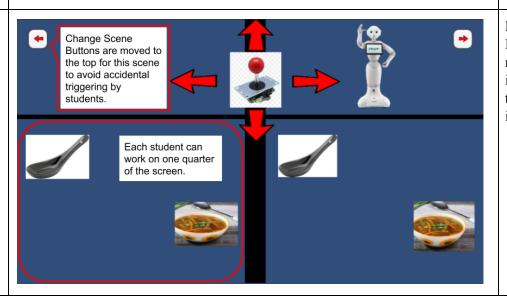
Before each pair of players starts the Game, Pepper will broadcast a recording to explain to players how to use InBox's joystick moving the images.



Familiarize with the setting of the game.

Provide assistance when players are in need.

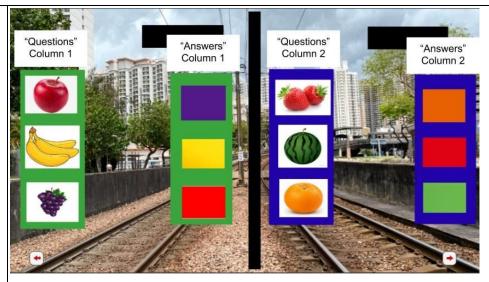
If necessary, click to get back to the previous scene.



Players attempt using InBox's joystick moving the spoon image and dragging them to where the soup image is.

Same as above.

This is the page of the Game.



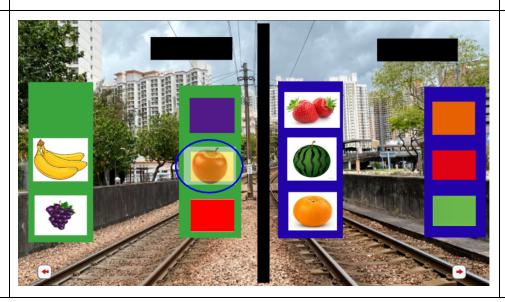
Two players, each control one half of the screen, may answer the questions at the same time.

Same as above.

Each player uses the joystick to control the cursor, press the button to pick up an image from the "Questions" column, and move it on top of its reciprocal image in the "Answers" Column.

mage Same as above.

If the image becomes transparent, the player does not drag the image to the correct position.



Try to move the image with the joystick again.

If matched correctly,

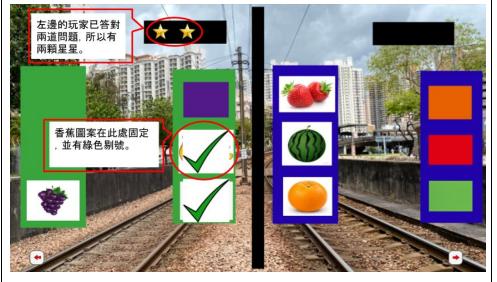
The image of the left column will be locked to the image of the right column

And then, a check mark appears on the right column image

The Game broadcasts a chiming sound.

On the screen a star appears above the answer column.

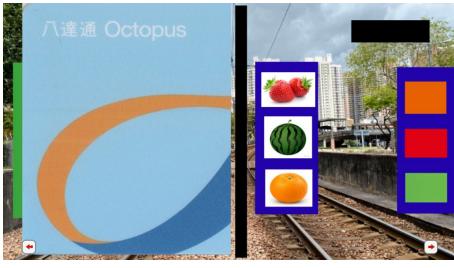
An image of half an "magic" sound,



Continue answering the remaining questions.

Award each player with a sticker every time he/she answers a question correctly.

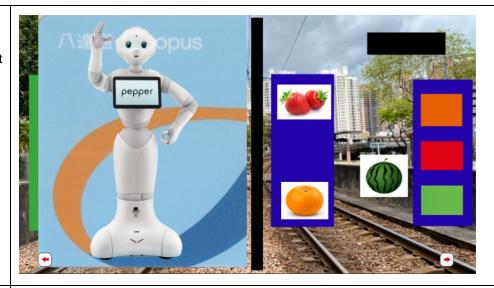
octopus card, with a appears 3 seconds after one player answers all three questions correctly.



The individual task for one player is completed, who may help his/her partner.

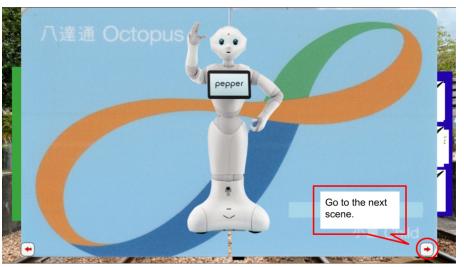
Encourages the player to help his/her partner to finish the remaining questions.

Screen pops out
Pepper's image if the
second player does not
complete the task
within 30 seconds
after his/her partner
completes the game,
Collabox broadcasts
an audio prompting
the student who has
completed to help
his/her partner.



Same as above Same as above

Screen displays both halves of Octopus, Pepper congratulates players with voice recording.



Both players in the pair complete the game.

Use the mouse to press

to move to the next scene.

The two halves become one. The characters of the CollaBox tap the card on the processor and wait at the platform.		Assemble the track(s) till reaching the front of the sitting position of the next pair.	Award the pair with the toy tracks.
/		Same as above.	Pass the laptop and the InBox to the next pair.
		The completed pair may help the other pairs.	Encourages the completed pair to help the other pairs.
Repeat above until all the pairs have completed the Game.	Repeat above until all the pairs have completed the Game.	Repeat above until all the pairs have completed the Game.	Repeat above until all the pairs have completed the Game.
Game completed	Screenshots to be added	May put the trains on the tracks.	Provide assistance when players are in need.

Section IV: After the game

Students may assemble the tracks and put the trains on. Facilitators may assist students.

Facilitator may fill in the survey for future reference for CollaBox's improvement.

https://docs.google.com/forms/d/1tAJ5k0d0nPKVwjZ4RqD4fn8cOdzYCeB-lVkFw dY10k/edit?usp=drive web

Please note:

- If users have any enquiries, kindly contact HKUST- Student Innovative Technology of Science and Technology(SIGHT).
- If there are any differences between English version and Chinese version, please follow the English version.
- If there are any arguments, the right of final decision-making goes to Student Innovative Global Health Technology(SIGHT) of The Hong Kong University of Science and Technology.

This is the end of the users manual.