Release Notes

v2.0.4

New Functions

1. English mode

If the language setting of your device is other than Japanese, the app will start in English mode.

Fixes

Minor bug fixes and improvements

v1.1.7

New Functions

1. Undo, Redo

Undo and Redo buttons have been added in the lower right of the Programming area. This allows you to restore the connection if you accidentally touch the blocks and their connection collapses.
The operation target is limited to the block operations within the same object such as move, delete, inputs, etc. It does not support other operations such as moving or rotating an object or copying blocks to another object.

2. Locally autosave programs loaded from the locker

Up to five programs loaded from the locker (My locker/Public locker) can now be autosaved in your device. This allows you to restore the previous contents if you edit the locker program and then accidentally load another program without saving. The program will be saved in the History at the bottom of the Lab. The programs are listed in chronological order from 1 (oldest) to 5 (newest).

3 Sort and tag programs in the locker

You can now sort programs in the locker by name or by date.

Also, by adding tags (groups) to the program, you can select the programs to be displayed by the tag. Up to 10 alphanumeric characters can be used for the tag name.

4. Import programs from the Public locker

You can import programs in the Public Locker to My Locker. Press the “Import” button of the program you want to import, then a copy of the selected program will be saved in My Locker with the same name.

5. Copy blocks

You can now copy and paste blocks in the Programming area.

[How to copy and paste blocks]

1. Long press (or click and hold) the block you want to copy.
   If you long press a block in the middle of the connected blocks, the following blocks below will be copied together.
2. Copying is complete when the word “Copy” is displayed momentarily on the left shoulder of the block.
3. Long press (or click and hold) on an empty area in the Programming area, and the copied blocks will be pasted.

You can copy blocks in one mission and paste them in another mission.

6. Dataset

You can define variables in tabular form with rows and columns. Blocks to handle datasets are in Advanced > Variable.

7. Page assignment

You can create programs on multiple pages and switch pages with the buttons 1 to 4 at the bottom of the Programming area.

This allows , for example, instructors to use pages 2 to 4 to create program assignments and students to use page 1 to program assignments.
Also, if one object has so many blocks that it takes long to load, dividing them into pages will make the load faster.

8. New blocks

- [Show (add)] : Append a new message to the next line, leaving the previous one (Basic > Variables)
- [Show (add) title , unit] : Display messages with title and/or unit (Basic > Variables)
- [Set to of target] : Dynamically specify the other party while running programs (Advanced > Game)

9. Add new objects

We have added some models (characters, food, etc.), backgrounds, sounds, and effects.

10. Add new labs

We have added a new type of labs “Forest girl” and “Space boy” where you can create programs to complete the story, and “Advanced lab 4 Game” where you can play fun games.

FIXES

Minor bug fixes and improvements

V1.1.5

FIXES

Minor bug fixes and improvements

V1.1.4

FIXES

Minor bug fixes and improvements

V1.1.3

NEW FUNCTIONS

1. Added command blocks

New command blocks have been added to the "[Basic] Event", "[Basic] Control", "[Basic] Variable", "[Advanced] Object", "[Advanced] Effect", and the newly added "[Advanced] Game".

With these new blocks, you can now group objects, send and receive events, move between missions, display texts and variables on the screen, and add new objects to specified coordinates. You will be able to create more wide variety of programs.

2. Change of command block operation

Command block operation has been changed. When bringing a block from the block list on the left side of the screen to the programming area in the center, drag it straight to the right. Vertical movement will scroll the block list.

3. Improvement of operation when scaling screen size and rotating screen (camera operation)

・Pinch in/pinch out to move the screen (camera) back and forth
・Swipe up/down/left/right with two fingers to rotate the screen (camera)
・Swipe up/down/left/right with three fingers to move the screen (camera) in that direction

FIXES

Minor bug fixes and improvements

V1.1.2

FIXES

Minor bug fixes and improvements

V1.1.0

NEW FUNCTIONS

4. Added AI Functions

We added a self-driving car that was trained to drive avoiding collision with the wall and obstacles on the racetrack. At some level, it will avoid obstacles even if they are moved.

[How to Operate]

5. Select the [Lab] Menu, and on the [Lab] screen select Mission 1 from [Adv 3]. (Please scroll down to the bottom of the screen.)
6. If you start the program, the car will begin self-driving.
   The red and green lines coming out from the front of the car are sensors. It is read when the car collides with the wall or obstacles (rocks). It is green when there is nothing to collide against inside the sensor boundaries.
7. Stop the program and try to move the location of the rock by yourself. Tap on the rock you want to move and move it to the direction of the arrow when the arrows are being shown on the rock. If difficult to move it back and forth, tap the [y] of the 3D arrow on the upper right screen. Pinch in the screen so that you will see the entire racetrack with an overhead view. It will be easier to move it.

8. When you start the program, the car will start self-driving with the new rock location. Depending on the location of the rock, it might not be able to avoid enough and may collide.

This car has been equipped with a trained AI program. You can check on YouTube how the AI program is learning self-driving.

9. Improvement on content for elementary school students [Junior]

・ The content is moved to [Lab 6] .
・ You can use [Junior] block commands in the [Standard] labs and also use [Standard] command blocks in the [Junior] lab.
・ You can save programs made in [Lab 6] to the locker.
・ We changed part of the settings of Mission 2.

[How to Operate]

1. Select the [Lab] Menu, and on the [Lab] screen select either Mission 1 or 2 of the [Lab 6].
2. To switch to the [Junior] commands, select [Settings] from the command category and select the command set [Junior].
3. Create [Pat] and [Pat ll] programs.
4. You can save the created program to the locker.

10. Added locker sharing function

A function to share programs saved in the locker with other users is now added. You can use it to send out programming assignments to others.

[How to Operate]

1. Login to the Locker.
2. Specify programs you want to share. In the [My Locker] tab, put a check to the [Share] checkbox of the programs you want to share.
3. Set a Public ID (password). Any users who know this Public ID can download your shared programs.

In the [Settings] tab, enter any character string to the [Public ID] area and tap the [Share] button. (You can use hiragana, katakana, alphanumeric and some symbols)

4. Other users log in to their own Locker, enter the Public ID set above and tap the [Change] button in the [Public Locker] tab. The sharable programs will be displayed
5. Tap [Load] button to load the program you want.

11. Support [micro:bit]

You can now use micro:bit functions from Mind Render. For example, you can read out the light sensor value in micro:bit to control the brightness of the lamp in Mind Render.

[How to Operate]

1. Install the hex file for Mind Render to micro:bit. (You can download the file from the Mind Render homepage (https://mindrender.jp/).
2. Turn on Bluetooth on the setting screen of the tablet or smartphone to connect to micro:bit.
3. On the Mind Render screen, select the [Add] button in the object list and select [micro:bit] in the [tool] tab.
4. micro:bit will be added to the object list. Also on the Mind Render screen, the micro:bit image will be displayed. If the diamond shape light is blinking, the connection is completed. (If the light is not blinking, then tap on the micro:bit image.)
5. Create programs. The command to use micro:bit functions can be found in the command category [Advanced] > [micro:bit] .

FIXES

Minor bug fixes and improvements

V 1.0.9

NEW FUNCTIONS

1. Added [Junior] content

[Junior] Content for elementary school students, which enables programming with easy to understand commands such as [go forward 10 steps], [turn right] has been added. The number of commands is limited to the minimum needed.

[How to Operate]

1. Select [Settings] from the command category.
2. Select the command set [Junior].
3. The commands and mission will switch to [Junior] .
4. Create programs for [Pat] and [Pat ll].

FIXES

Minor bug fixes and improvements

V 1.0.8

NEW FUNCTIONS

1. Added a new camera command

A command has been added to easily put the camera on the front or back of an object by selecting options such as [front], [back] and so on. You can continue to use the existing camera setting method, too.

[How to Operate]

1. Select [Camera] from the basic command category.
2. Select the top command [Set camera [self] [front]]
3. You have options such as front, back, above, below,・・・ to select the location where you want to put it.

FIXES

Minor bug fixes and improvements

v 1.0.7

FIXES

Minor bug fixes and improvements

v 1.0.6

FIXES

Minor bug fixes and improvements

v 1.0.5

FIXES

Minor bug fixes and improvements

v 1.0.4

NEW FUNCTIONS

1. Added English Version

An English Version has been added. When the language setting of the device is other than Japanese, the English version will start.

2. Changing the order of the Object List

You can change the order of the objects in the Object List.

[How to Operate]

1. Hold down on the object you want to change the location of.
2. When the object starts blinking, you can drag and drop to the desired location up and down.

FIXES

Minor bug fixes and improvements

v 1.0.3

NEW FUNCTIONS

1. Adjust camera location

You can use the controllers now to change the location and angle of the camera attached to an object. It is easier to adjust the camera location.

[How to Operate]

1. Check the box on the bottom right of [Camera] in the object list.
2. When full screen display, two controllers are displayed. You can change location (front/back, left/right) with [Position] controller and angle (front/back, left/right) with [Rotation] controller.
3. Change the camera setting values in the program. If you do not change them, the new location and angle will not apply.
   Tap on the area that says [Abs ▼] which is in the upper right of [Camera] in the object list.
4. Select the object you want to adjust the camera location of.
5. The location (pos) and angle (rot) of the selected object will be displayed. Each value from left is x, y and z coordinate or angle . You will enter these values to the camera command in the program.

2. Copy program to other missions

You can now copy your program to other missions.

[How to Operate]

1. Drag and drop the programs you want to copy to [Copy] in the object list. Make sure that the programs are there in [Copy] .
2. Open the mission you want to paste the program to. (It can be a mission from another Lab.)
3. Select [Copy] from the object list. The copied programs will be displayed in the programming area.
4. Scroll the object list and display the object you want to paste the program to. (Please do not select that object.)
5. Drag and drop the programs over that object from the programming area.

3. Connecting to external game controllers

You can easily connect to external controllers. You can move drones and cars in Mind Render with game controllers.

[How to Operate]

1. Connect the device and game controller through Bluetooth.
2. Tap [Add] button in the object list and select [GameController] on the [Tool] screen.
3. A game controller image will be displayed in the thumbnail. If the light is blinking, the connection is completed.
4. Move using the controller to fly a drone or race a car.

v 1.0.2

FIXES

Minor bug fixes and improvements

v 1.0.1

New Release