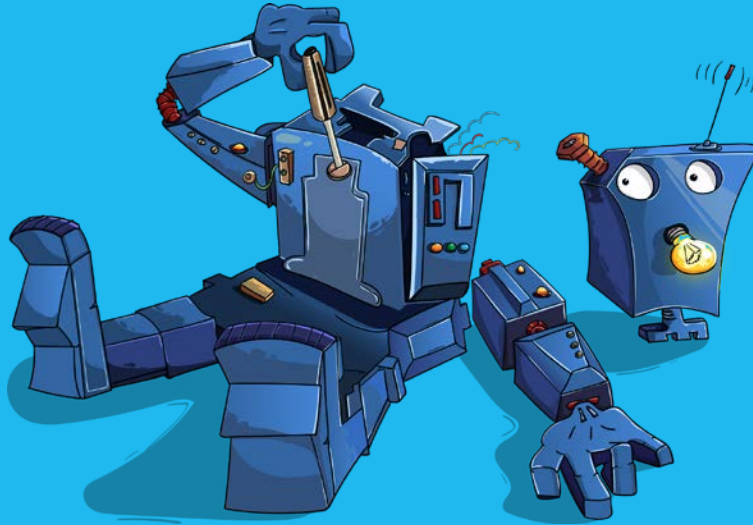




The Mind of a Robot (Part II)

Lesson 2

Tasks in this lesson

- ❑ Recognize the mBlock user interface
- ❑ Add a sprite from the Sprite Library
- ❑ Create a chat bot by using the Sensing script

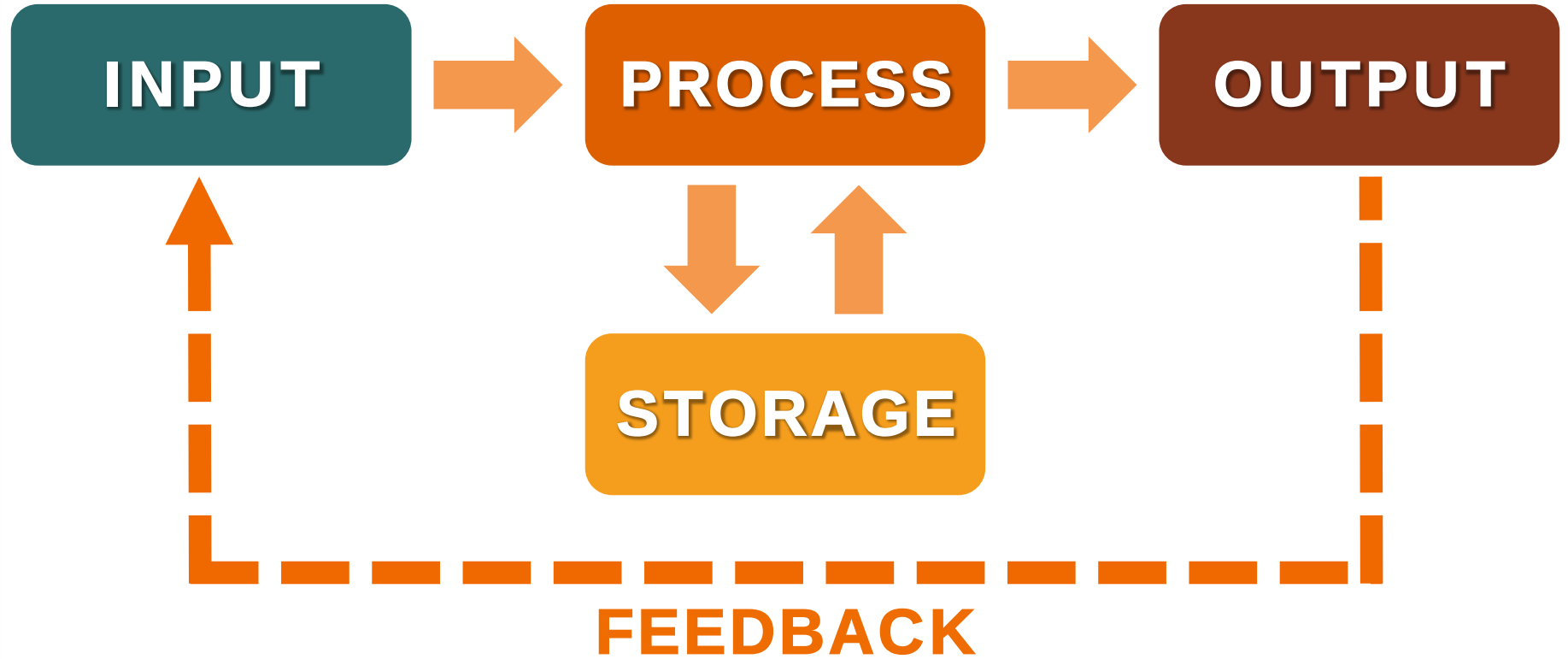


Warm Up





makeblock



Phase 1



The mBlock User Interface

- An interface is a place where you can create and run programs
- mBlock interface have three areas:

The screenshot displays the Makeblock software interface, which is divided into three main sections:

- Stage Area (Red border):** This section on the left contains a stage with a panda sprite. Below the stage are tabs for "Devices", "Sprites", and "Background". The "Devices" tab is active, showing an "mBot" device and a "Connect your device" button. There are also "Upload", "Live", and "Connect" buttons at the bottom.
- Blocks Area (Blue border):** This middle section contains a vertical toolbar with icons for "Show", "LightSound", "Action", "Sensing", "Events", "Control", "Operators", "Variables", and "My Blocks". To the right of the toolbar is a list of blocks for the "LED panel port1" device, including "shows image", "shows text", "shows number", "shows time", and "clears screen".
- Scripts Area (Green border):** This section on the right contains a workspace for scripts. It shows a sequence of blocks: "LED panel port1 shows image", "for 1 secs", "LED panel port1 shows image", "LED panel port1 shows image at x: 0 y: 0", "LED panel port1 shows text he", "LED panel port1 shows text he at x: 0 y: 0", "LED panel port1 shows number 2048", "LED panel port1 shows time 1 : 0", and "LED panel port1 clears screen". The workspace is titled "Blocks" and "Arduino C".

Stage Area **Blocks Area** **Scripts Area**

Task 1 Add a Sprite You Like

The image shows the Makeblock software interface. On the left, a vertical sidebar contains a 'Sprite' section with a 'Panda' sprite icon and an 'add' button (a blue circle with a white plus sign). Below the 'add' button is an orange arrow pointing to the 'Sprite Library' window. The 'Sprite Library' window is a modal dialog with a search bar and tabs for 'Sprite Library' and 'My Sprites'. It features a grid of 12 sprite icons, including various airplanes and accordions. At the bottom of the library are 'Cancel' and 'OK' buttons. The sidebar also includes 'Costumes' and 'Sounds' buttons.

Sprite

Panda

X 0 Y 0

Size 100 Direction 90

Show ☒ ☐

Costumes

Sounds

Sprite Library

Search

Sprite Library My Sprites

All Animals People Fantasy Plants Food Buildings Transportation Music Sports Fashion

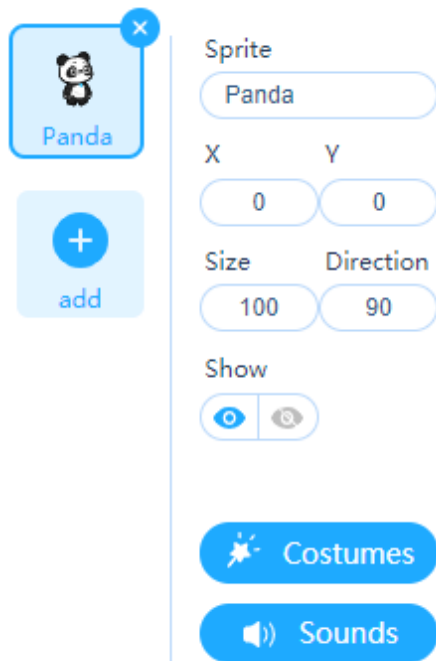
Props Icons

Accordion1 Accordion2 Accordion3 Add button26 Airplane4 Airplane6

Airplane9 Airplane15 Airplane16 Airplane20 Airplane21 Airplane22

Cancel OK

Task 1 Add a Sprite You Like



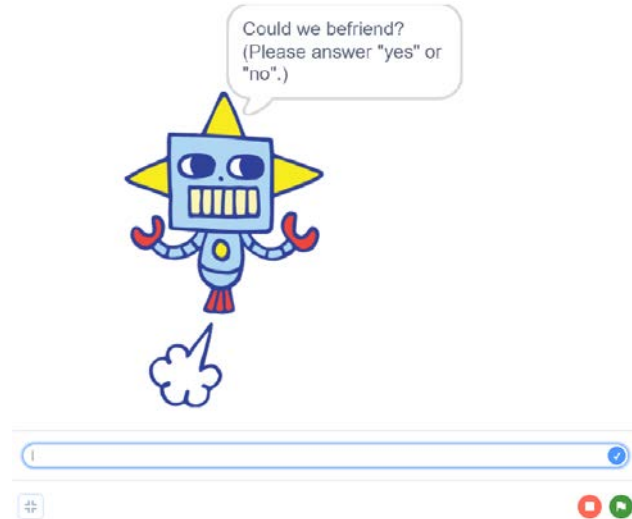
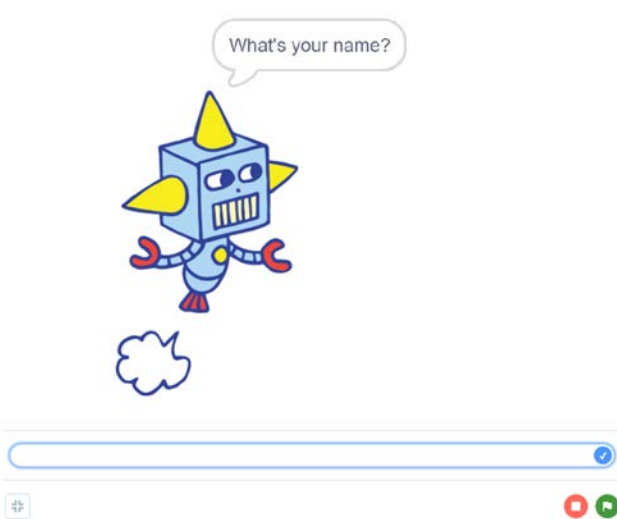
- **Questions:** How to ...
- change the sprite's site
- change the sprite's size
- make the sprite invisible
- ...

Phase 2



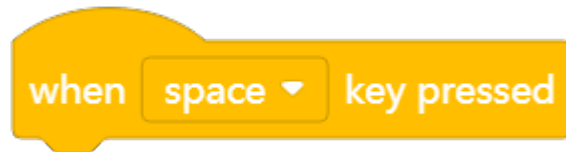
Input

- Do you remember ...

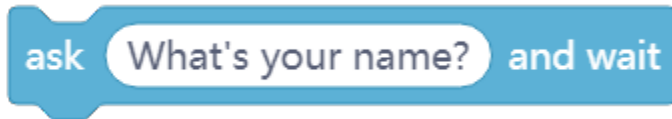


Input

- Keyboard and Mouse



- Your answer(s)



Task 2 Chat with Your Bot

- Develop a dialogue with the sprite you choose by using:

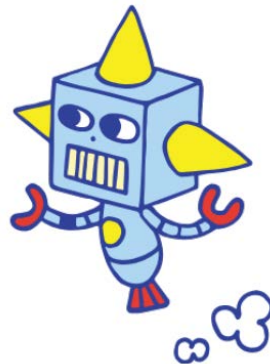
say Hello!

say Hello! for 2 seconds

ask What's your name? and wait

think Hmm...

think Hmm... for 2 seconds

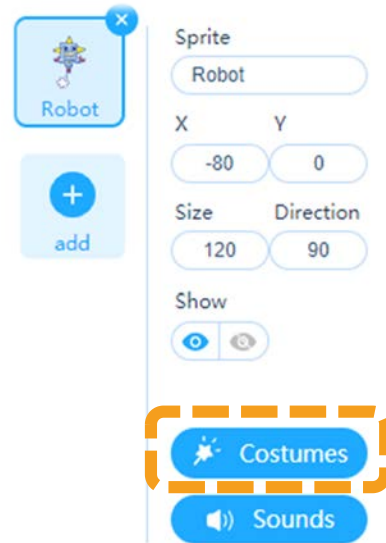


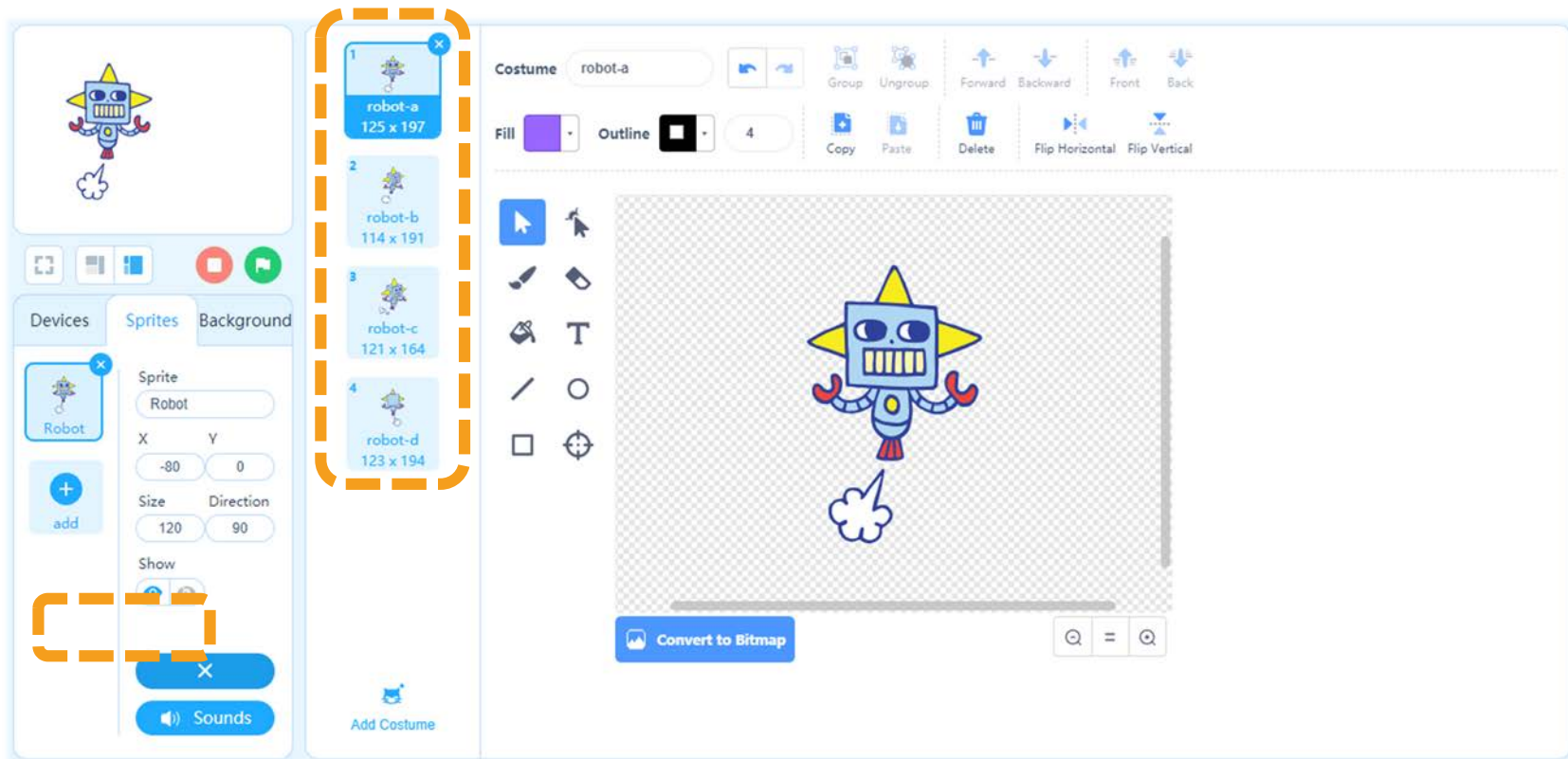
Task 2 Chat with Your Bot

- **Challenge:** Switch the costumes while chatting by using:

next costume

switch costume to robot-a ▼



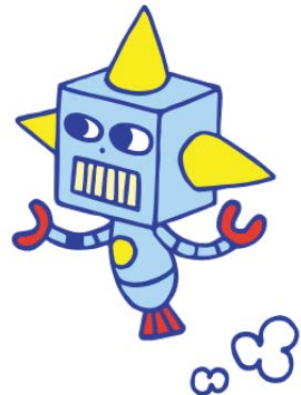


Practice



Task 3 Network with Bots

- Chat with other peers' bots
- Comment on their projects and write on the peer review.



Peer Review

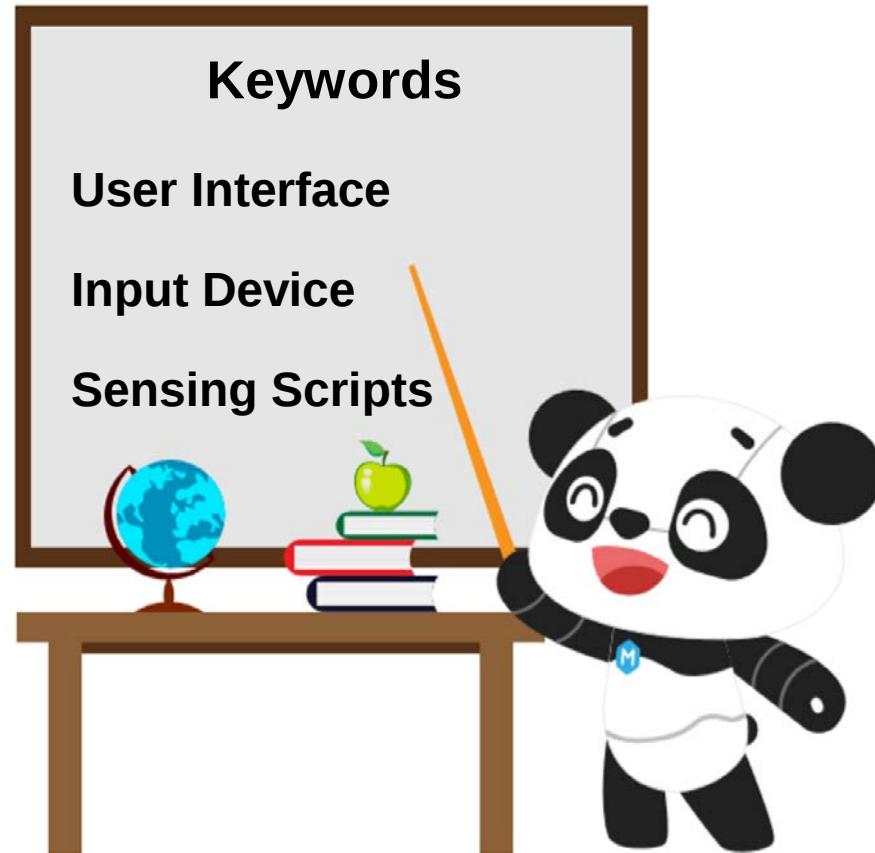
To what degree do you think ...



- You enjoy the chat with the bot?
- The chat bot is smart to know your words?
- The chat bot is human alike to react to you?
- The chat bot is interactive?

Wrap Up





Clean Up

