

Intro to Programming with Scratch



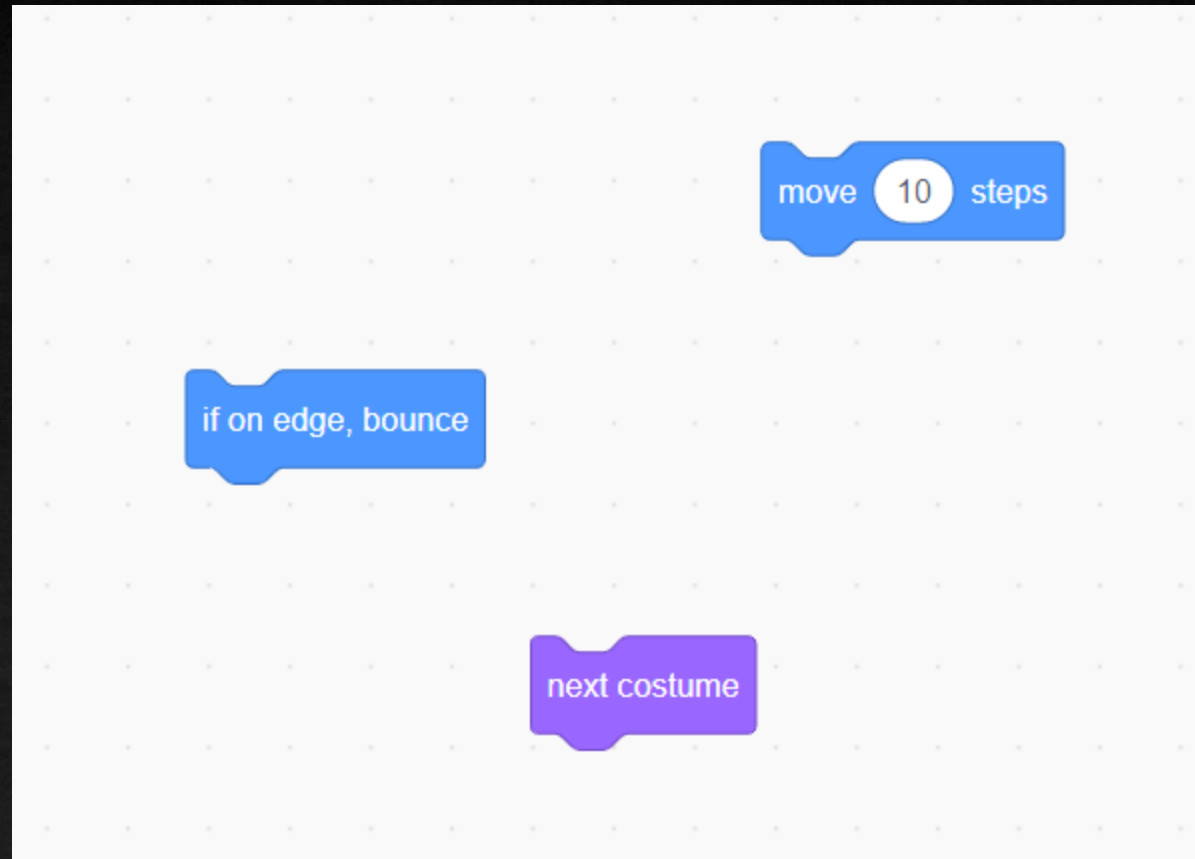
Lesson 6

-Presented By: Sean Li

Quick Exercise

Have the cat run in corresponding directions when the arrow keys are pressed. Make sure that the cat is facing that direction. When it hits the edge, the cat should change its face direction.

Functions



Functions

- A function executes a series of commands, simple or complex.
- Has inputs and outputs
- So far, you are using pre-defined functions.

Benefits

- Abstraction
 - Saves time
 - Easy to use
 - extensive

Create a block

Make a Block

block name

Add an input
number or text

Add an input
boolean

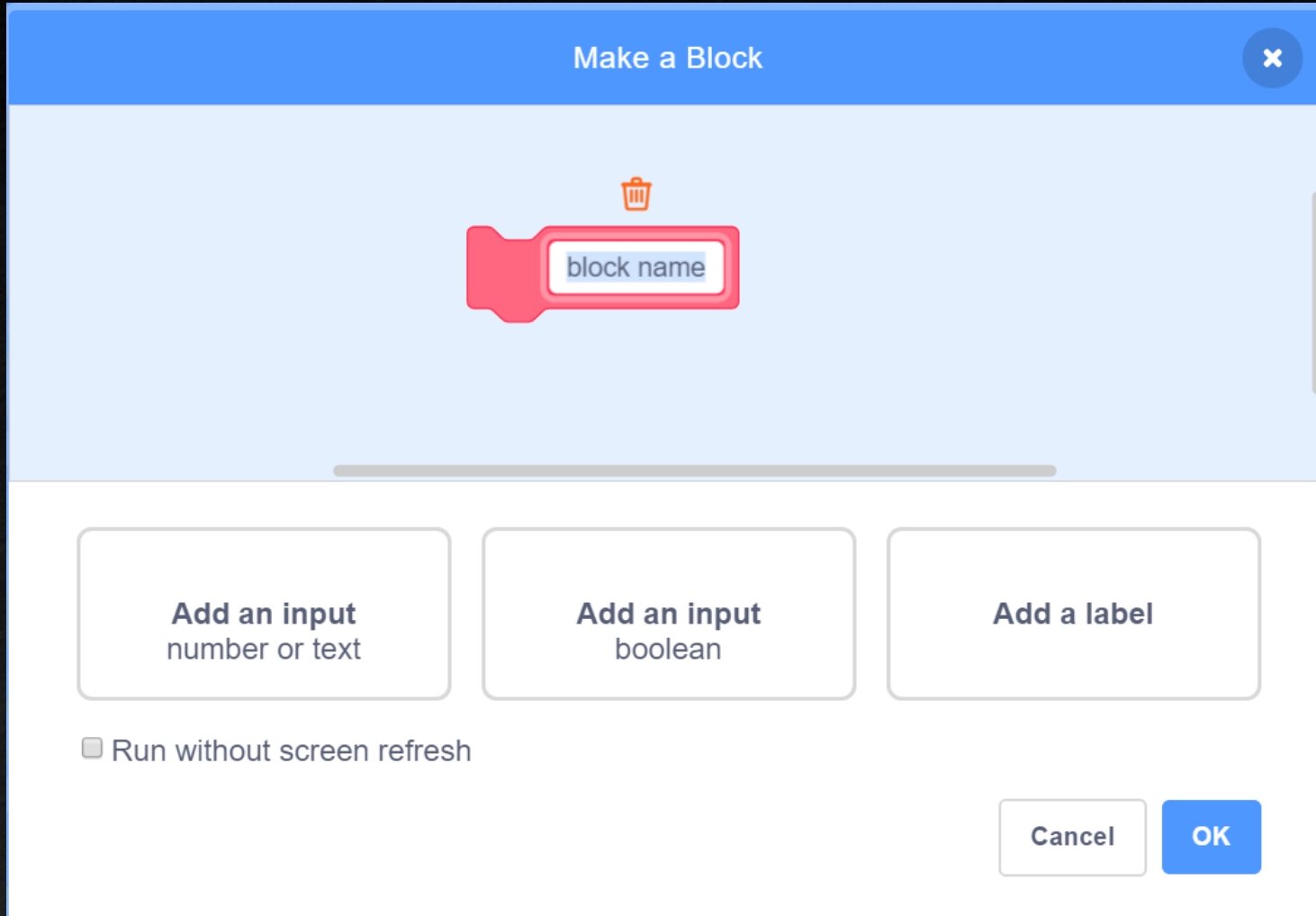
Add a label

☐ Run without screen refresh

Cancel

OK

Create a block



The screenshot shows a 'Make a Block' dialog box with a blue header bar containing a close button (X). The main area is light blue and contains a red block icon with a trash can icon above it. The block has a text input field labeled 'block name'. Below the main area is a white section with three buttons: 'Add an input number or text', 'Add an input boolean', and 'Add a label'. At the bottom left is a checkbox labeled 'Run without screen refresh'. At the bottom right are 'Cancel' and 'OK' buttons.

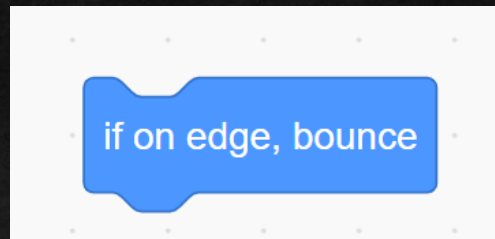
- You can define the number and type of your input
- Name the block however you want

Exercise

- Refine the cat exercise you just wrote with your own function

Exercise

- Write up your own version of “if on edge, bounce” without actually using the block



Exercise

Waiter Cat:

- Create your own menu and display it
- Have the waiter cat ask the user “what do you want to eat”
- Then ask the user “the amount of food that you want”
- Display it