

A. Complete the First Tutorial

This tutorial will teach you how to:



- add Kodu to your world
- program Kodu to respond to user input

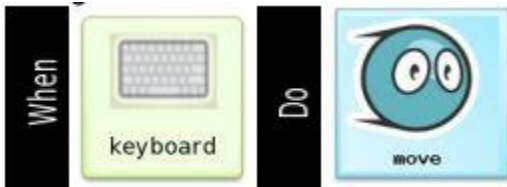
1. Choose **“Load World”**
2. Click **“First Tutorial”** and **“Play”**
3. Press Esc (keyboard) to edit the world.



4. Select the **“Add and Program Objects”** icon from the toolbar.
5. Left click anywhere on the ground to add a new object
6. Choose **“Add object”** and click on Kodu
7. Customize Kodu’s color, size and height



8. Click on the **“Object tool”** to add or program the character
9. Right click on Kodu and select **“Program”**



10. Press Esc to go back to the Edit Menu



11. Click on **“Play Game”** to run the program (control Kodu to move)

This tutorial will teach you how to:

- add to your world
- program Kodu to find and eat the apples

1. Choose **“Load World”**
2. Click **“Programming Kodu to find apples tutorial”**
3. Press Esc (keyboard) to edit the world.



4. Select the **“Add and Program Objects”** icon from the toolbar
5. Left click anywhere on the ground to add a new object

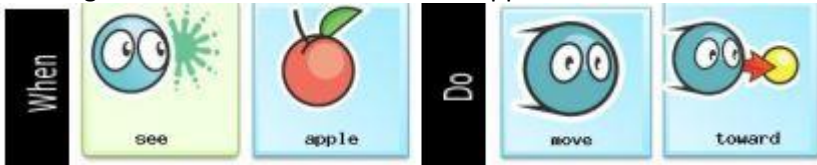


6. Choose **“Add object”** and click on Apple (inside Objects)
7. Add a few apples and then add Kodu



8. Click on the **“Object tool”** to add or program the character
9. Right click on Kodu and select **“Program”**

10. Program Kodu to move towards the apples when he sees them



11. Now program Kodu to eat the apples when he bumps into them



12. Press Esc to go back to the Edit Menu

13. Click on "Play Game"  to run your game

Getting to Know the Bots and Objects

In this activity, we will explore the various bots and objects that are available in Kodu Game Lab. We will investigate the various attributes and abilities of the different bots.

1. Different bots have different attributes and abilities.
2. Use colors to distinguish different character roles (e.g. red cycle, black cycle)
3. All bots and objects have settings that you can set as the game is created, but not by using programming during the game

The Edit Menu:



1. Home Menu
2. Play Game
3. Move Camera
4. Object Tool: Add or Edit Characters and Objects
5. Path Tool: Add or Edit Paths
6. Ground Brush: Paint, Add or Delete Ground
7. Up/Down: Create Hills or Valleys
8. Flatten: Make Ground Smooth or Level
9. Roughen: Create Spiky or Hilly Ground
10. Water Tool: Add, Remove, or Tin Water
11. Delete Tool: Use a Brush to Clear Objects
12. Change World Settings

The Bots:

A. Player controlled bots

We can write simple programs in order to control a bot with the keyboard or xbox controller. We can also map actions such as jumping to specific keys on the keyboard or gamepad.

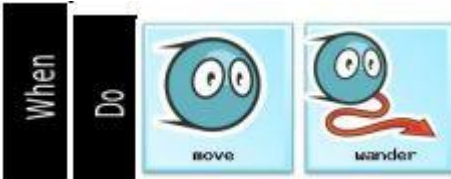


B. AI bots

We can program other bots that will interact with the player's bot.



If we just want the bots to wander rather than follow we can use:



C. The Bots in Kodu Game Lab:



Sensors and actions:

- See, hear, got, bump, shot hit, health, held by, on land and on water are physical actions of the bot or object.
- Timer, scored, gamepad, keyboard and mouse are external actions that the bot or object can respond to.
- All of the actions are not available to all of the bots and objects.

A. When physical sensors:




B. Do physical actions:



Solving Problems 1 and 2







Problem 1

Objectives:

- To add Kodu  and apples  on the map
- To program Kodu to move  with keyboard Arrow keys
- To program Kodu to jump  with keyboard Space key
- To program Kodu to shoot  with keyboard S key
- To program Kodu to eat  apples when bump  into them
- To program Kodu to say  "Yummy!" when get the apples 

Problem 2

Objectives:

- To add Cycle  on the map
- To program Cycle to wander  on the map
- To program Cycle to vanish  apples  when bump  into them
- To program Cycle to stun  Kodu  when bump  into it

C. Game Play:

After all the programs are set, try to test the game!

You should be able to control Kodu to eat all the apples on the map. Avoid bumping into the Cycle, it will stun Kodu. Try to jump and shoot at the Cycle. Adjust the game camera with the mouse scroll wheel and try playing the game in first-person mode!