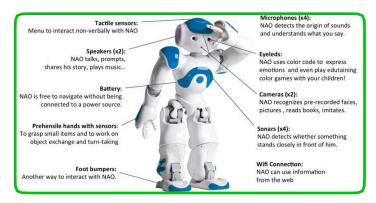
# LESSON 1

# REFERENCE

### Nao Overview

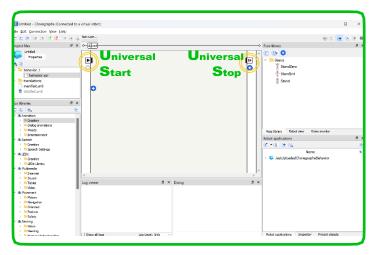


Nao is a humanoid robot with sensors, motors, cameras and LEDs!

#### **CHOREGRAPHE**

Choregraphe is the application that lets you build a program to control Nao.

#### **W**ORKSPACE



The middle portion of the choregraphe screen is called the workspace and is where you will build your code. The small box on the top left is called the universal start port. This is where you will begin your program. The small box on the top right is called the universal stop port. This is where you will finish your program.

#### **Box Library**



The box library is on the left of the choregraphe screen. It is where you will find all the boxes.

Boxes make the robot walk, talk, move, dance etc.

Boxes are the building blocks of your program!

### Connecting to Robots

On the top of the choregraphe screen there are these two buttons. The



green button connects to the robot, the gray button will turn red once you are connected and will control disconnecting from the robot. Press the green connect button.



Here is what the icons mean:



A virtual robot is available for you to connect. (You will only be able to connect to your own virtual robot)



A real robot is ready to connect



A real robot is not ready to connect.

© RobotLAB 2015

# REFERENCE

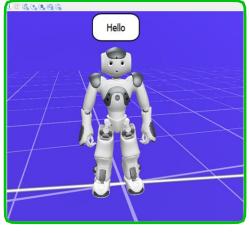
To make sure you File Edit Connection View Help connect to your own virtual robot, you can select virtual robot from the connection



drop down menu at the top of the screen.

#### **Robot View**

On the right side of the choregraphe screen is the robot view palette. This is where you see a 3d version of the connected



robot. It even moves and talks!

### Running Your Code

When you are ready to run your code,



Press the connection button.



Select a robot to connect.

Press the play button at the top of the choregraphe screen to run your program.



### Wake UP / Rest

Wake up and Rest are your first boxes!

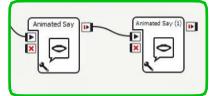
Wake up tells the robot to turn his motors on so that the robot will move during your program!

Lesson 1

Rest tells the robot to turn off his motors. at the end of the program so the robot doesn't get too tired.

#### Connecting Boxes

Now you need to *use* your first box!



Drag the mouse between the two points you want to link.

For example,

drag the mouse from onStopped output of a box onStart input of another box. Now the program will flow from the first box to the second.



For Wake Up and Rest, connect as shown below.

The rest of your program will go between these two boxes.

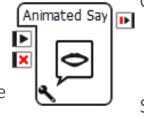
Reference Sheet continued on next Page...

# Lesson 1

# REFERENCE

### **Animated Say**

This box tells Nao to say something while moving his arms and head. Just like a real person! In order to change what NAO says, click

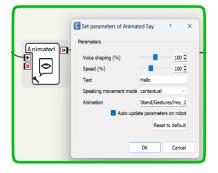


Give your project a name!

Project name: Anna-Story

Save your project in the Documents folder.

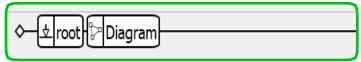
change what NAO says, click in the tool and change text box.



#### Multi-Level Diagram

Now you are inside the Diagram box. To add a group of actions.

To return to the main workspace, click the root button at the top of the page.



## Saving Your Project

Save your work when you are done! Save by pressing the save button at the top of the choregraphe screen.





