1

Getting Started

In this chapter we show you how to interact with robots. These robots trace lines on the floor. You will program them to draw pictures. Right now we just want you to get started in less than five minutes. In chapter 5 we will explain in more detail the environment.

1 First Interaction with a Robot

Once you open the environment by dragging the file named ReadyToUse.image on the Squeak executable as explained in appendix (page 26), you should obtain an environment similar to the one presented by Figure 1.1. The environment is composed of robot factories and several flaps. A flap is a drawer containing programming tools. We will describe the tools in chapter 5. You should see a small robot in the middle of the screen.

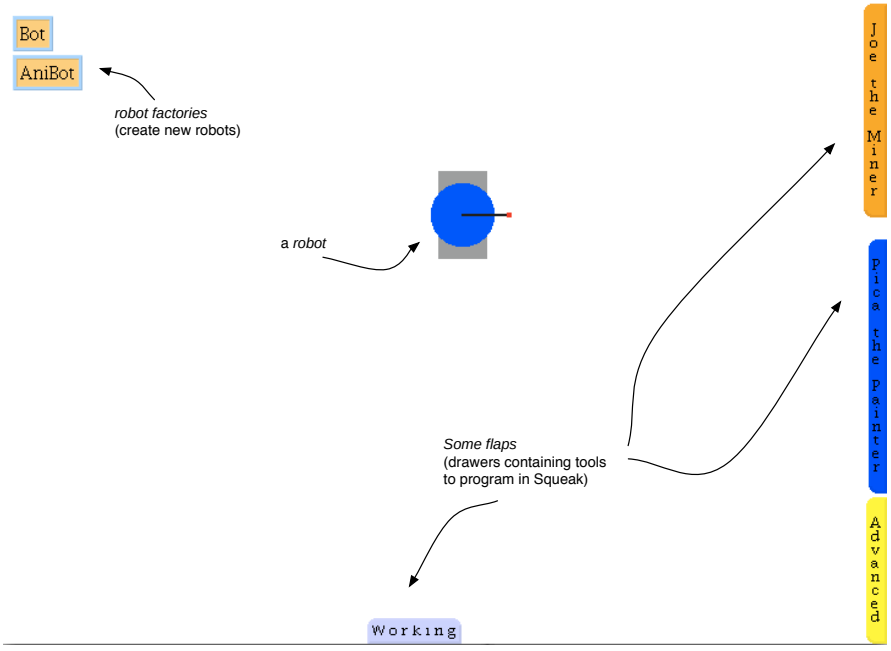

Figure 1.1: The environment ready to use.

Place the mouse over the robot and wait a second there. A balloon should pop up with some information about the robot, such as its current location and its direction, as shown in Figure 1.2. Because your screen is of different size than the one used to produce this book, you should have other values.

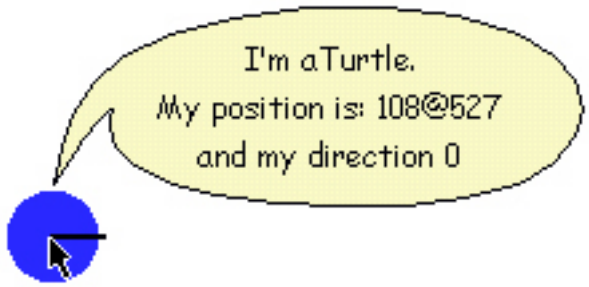

Figure 1.2: Place the mouse over a robot to get a balloon showing some information related to the robot in question.

Sending messages to a robot. To interact with the robot, click on the robot with the mouse or move the mouse over it and press the **tab** key. In both cases a balloon with a red border pops up, as shown by the left ballon in Figure 1.3. It indicates that you can type a message to send to the robot. Once you type a message, hit the **return** key to send it to the robot. The message asks the robot do something. For example by typing the expression `go: 200` and hitting the return key, we ask the robot to move forward 200 pixels in its current direction. Similarly, the expression `turnLeft: 20 + 70` asks the robot to turn 90 degrees to its left. The expression `color: Color yellow` changes the color of the robot as shown by the Figure 1.5.

As these expressions show we can write complex expressions. We will explain how to write such expressions in Chapter 13. For now simply type what we show you. Note that if you want to repeat some expressions, you do not have to retype them. Instead, use the up and down arrows to navigate through a list of previous message you have sent to the robot. In the subsequent chapters, you will arn all of the messages that a robot understands and, more importantly, how to teach it to understand new messages.

Figure 1.3: Left: Pressing the tab key or clicking on a robot produces a balloon to talk with a robot. Middle: Typing message within the balloon to ask a robot to move forward. Right: the robot moved and left a trace on the oor . The word `self` refers to the robot receiving the message.

To interact with a robot. Click on it, type the message and hit the **return** key.