

CS-201 Robocode Orientation

In this exercise you will:

1. Learn how to install Robocode on the lab computer.
2. Learn about the Robocode environment.
3. Run sample battles.
4. Compile and run your first robot.

Installing Robocode

To perform the lab activities related to Robocode, you will need to install the Robocode files on the local lab computer that you are using. Please note that this will need to be done for every lab session. Perform the following steps to install Robocode in the c:\temp directory of the local lab computer.

Step 1. Open Windows Explorer by selecting Start > All Programs > Accessories > Windows Explorer.

Step 2. Go to Y:\cs201\Robocode

Step 3. Double-click on install2temp.bat.

A command prompt will pop up, which will display the copying process. When the process is done, the command prompt will close by itself.

Running Robocode

To run Robocode, follow the steps below.

Step 1. Open Windows Explorer by selecting Start > All Programs > Accessories > Windows Explorer.

Step 2. Go to c:\temp\robocode.

Step 3. Double-click on robocode.bat. If you are asked to download a new version click "no", then click "O.K." on the next screen.

Robocode Environment

The Robocode environment contains four menu options:

- **Battle**, for setting up battles and exiting the program.
- **Robot**, for editing, downloading, packaging, and setting up robot teams.
- **Options**, for setting general program options.
- **Help**, for help related to Robocode.

Run a sample battle by following the steps below.

Step 1. Select Battle > Open on the menu options.

Step 2. Select "intro.battle" and click Open.

Step 3. A window will pop up that will allow you to edit the configuration of the battle. For now, just click on Start Battle.

Two robots will be displayed and the battle will begin. From the names of the robots you can probably guess which one will lose. After the battle is done, a window will pop up containing the statistics of the battle. Click OK.

Step 4. Perform steps 1 through 3 again, this time select “sample.battle” in step 2.

This battle contains more robots. The battle will end when there is only one robot left on the battlefield. Immediately after the battle has ended, the new battle is started. The configuration for this battle was set to have 10 rounds.

Step 5. Terminate the battle by clicking on Stop at the bottom of the window. A window will pop up containing the statistics of the battle. Click OK.

Your First Robot

This exercise will introduce you to editing and compiling a customized robot.

Step 1. Select Robot > Editor on the menu options. A robot editor window will pop up with the menu options File, Compiler, and Help.

Step 2. From the menu options in the robot editor, select File > New > Robot.

Step 3. Type “MyFirstRobot” when asked for the name of the robot. You can name your robot anything, but make sure you use the standard of naming class names, ie. upper case letters for every word in the name and no spaces in the name.

Step 4. Type your initials when asked. Another option instead of your initials is your BlazerID.

Step 5. The source code for your robot will be displayed. This is a template of a Robot class. It contains some initial code to allow the robot to perform simple maneuvers and tasks. This robot will go ahead at a set distance of 100, rotate its gun 360 degrees, go back at a distance of 100, and rotate its gun 360 degrees again.

Step 6. Compile this robot by selecting Compiler > Compile. Confirm saving the robot (if asked) and confirm the creation of a new directory (if asked). If the robot is compiled correctly a message “Compiled successfully” is displayed.

Step 6. Close the robot editor and run the robot in a battle by selecting Battle > New. Click on the package named after your initial (or BlazerID), and double click on the name of the robot that you created. Click on the “sample” package, and double click on any of the robots listed. Click Start Battle and see how your first robot fairs in battle.