RoboNewbie_1.0
Installation

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There are several ways of installing an environment for using RoboNewbie, here the simplest of them is described.
It assumes that you have little experience in programming with **Java** and use **Windows**. **Linux** and **Mac OS X** users, please see the note at the installation instructions for SimSpark below.

1) **Java SE 7 Development Kit (JDK) or newer**
   Download from:
   http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html
   If an older version of Java is installed, you may have to uninstall it. You just need **one** of the listed files, the right version for your computer and operating system, for example only „jdk-7u13-windows-i586.exe“.

2) **Java 3D 1.5 or newer**
   This is not the same as the JDK, this is a library for graphics.
   Download from:
   http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-java-client-419417.html#java3d-1.5.1-oth-JPR
   If an older version of Java 3D is installed, you may have to uninstall it. You just need **one** of the listed files, the right version for your computer and operating system. The filenames ending „amd64“ are for a 64bit computer, „i586“ are for a 32bit computer.

3) **NetBeans 7.1 Java SE or newer**
   Download from:
   http://netbeans.org/downloads/index.html
   Notice (especially for WinXP)! On old computers NetBeans may get performance problems when used together with other programms described here. When problems occur, NetBeans does not react any more. In this case, after starting the programs as usually, change in „Windows Task Menager“ (Shortcut Crtl+Alt+Del) under „Processes“ the „Process priority“ of „netbeans.exe“ to „high“.

4) **MotionEditor**
   Download the MotionEditor from the RoboNewbie-Homepage:
   http://www.naoteamhumboldt.de/projects/RoboNewbie/ .
   This version is configured for RoboNewbie, versions from other sources are not. Unzip the downloaded file and the MotionEditor is ready for usage.
   Try it out:
   Start it with a double click on file „MotionEditor.jar“. You should see a window with a robot on the right side. You can turn the robot with the mouse. Please notice the usage description, which can also be downloaded from the homepage.

5) **SimSpark RoboCup 3D Soccer Simulation (SimSpark RCSS)**
   Download SimSpark version r300 for WindowsXP or newer from the RoboNewbie-Homepage: http://www.naoteamhumboldt.de/projects/RoboNewbie/ .

This version is configured for RoboNewbie, versions from other sources are not. Just unzip the downloaded file and SimSpark is ready for usage.

Try it out:

Start the server with „rcssserver3d.exe“ in the unzipped directory. You should see two windows: a **server** console and a **monitor** (a representation of a soccer field). Try changing the camera perspective with mouse, arrow-keys, page-up, page-down and number keys.

Linux, MacOS (this has not been tried out sufficiently, but should work):

Install SimSpark as described in the SimSpark-Wiki:
http://simspark.sourceforge.net/wiki/index.php/Main_Page .
Then download the version from the RoboNewbie-Homepage (see above), unzip it, find the file „naosoccersim.rb“ and replace the corresponding file in your installation. Now SimSpark should be configured for the usage with RoboNewbie.

6) **RoboNewbie_1.0**

Download RoboNewbie from the RoboNewbie-Homepage:
http://www.naoteamhumboldt.de/projects/RoboNewbie/ .
Just unzip the downloaded file, and RoboNewbie is ready for usage. The framework is a directory with Java classes organized in packages. We provide RoboNewbie as a NetBeans project to make the installation and start as easy as possible. The project already includes the required library Apache Commons Math 3.3.0 and has set relative file path dependencies to it.

Documentation:

The framework is documented inside the source code. There is a comment above the class definition, that should be read before using a class, and the methods are also commented. (The code is annotated in Javadoc syntax. That means, aside from reading the code, you can also generate a more comfortable Javadoc documentation, e.g. as a HTML-page (in Netbeans: Menu → Run → Generate Javadoc). But we recommend reading the documentation in the code, to get a better orientation of the structure of the framework.)

Check, if the installation is complete:

Start SimSpark.
Start NetBeans and open the RoboNewbie project in it. Go to the package “examples”, and run Agent_BasicStructure.java (right click on the file name → Run File) . In the SimSpark monitor window you should see a robot, after a moment it lifts the arms, then it stands still for a few seconds, and at the end the robot disappears.