Basic Requirements

The basic stuff to setup a development environment for Little Goblin on Windows

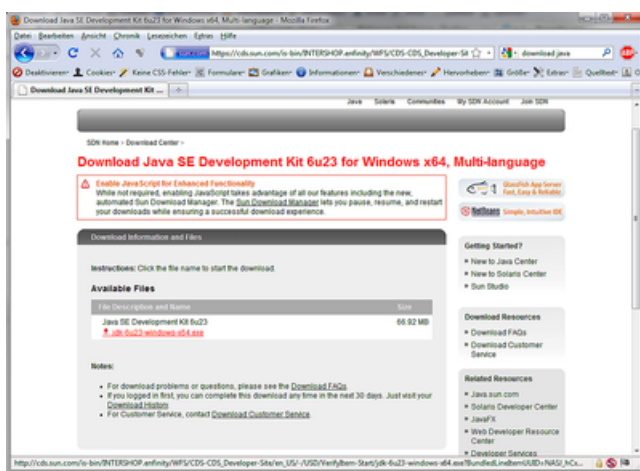**If you have questions or ideas how to present this information better, please contact me.**

The whole procedure should take an hour or two. If you run into any problems during installation, please contact me or post your problems to the Little Goblin Help Forum.

Java

You will need to download and install the Java 6 Development Kit (JDK), which is available from Oracle:

https://cds.sun.com/is-bin/INTERSHOP.enfinity/WFS/CDS-CDS_Developer-Site/en_US/-/USD/ViewProductDetail-Start?ProductRef=jdk-6u23-oth-JPR@CDS-CDS_Developer

Choose the Windows x64 edition if you have a 64 Bit Windows, or the "Windows" one if you have an older Windows 32Bit version.
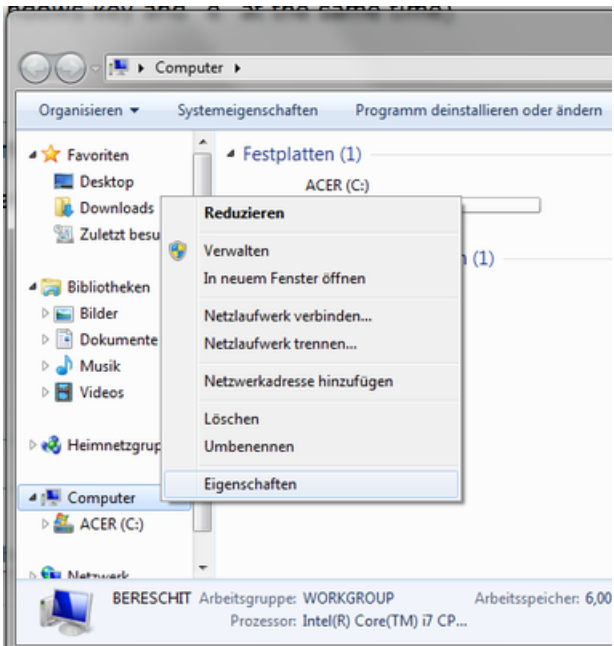

The download is ~66 MByte.

Save the file to your computer and start it. Clicking on "ok" and "next" several times should do the trick.

Follow the instructions, but do not register if a browser window opens.
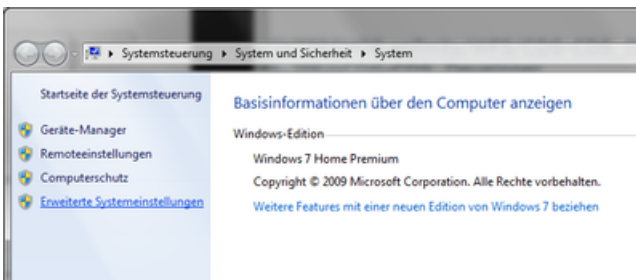
Setting the JAVA_HOME environment variable

Open the Windows Explorer (press Windows key and "e" at the same time)
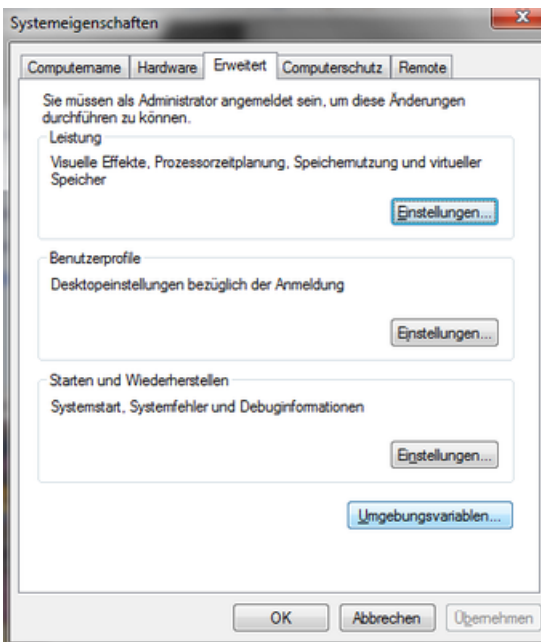
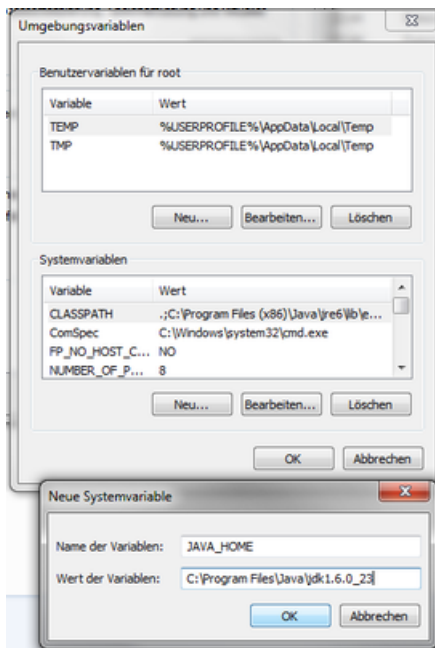Right click on "computer" and select "properties"

Click on "extended system properties"

Click on "environment variables"

Below the "System Variables" field, click on "new" and create the variable "JAVA_HOME" with the value "C:\Program Files\Java\jdk1.6.0_23" (you may have to alter the value so it points to the correct java installation, depending on which version you downloaded).
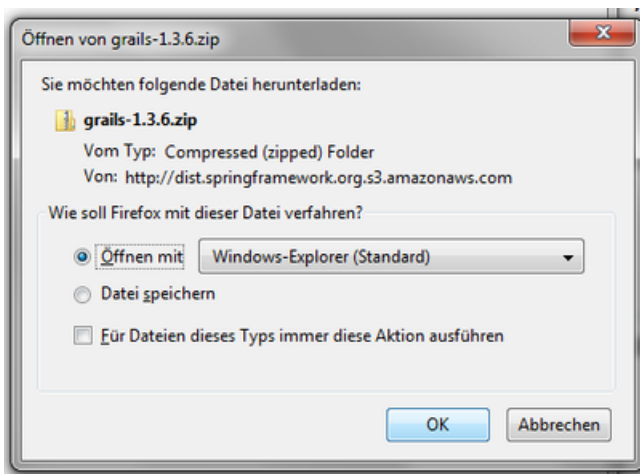
Grails

Little Goblin uses the Grails Framework, so you will need that too, if you want to run it locally on your machine.
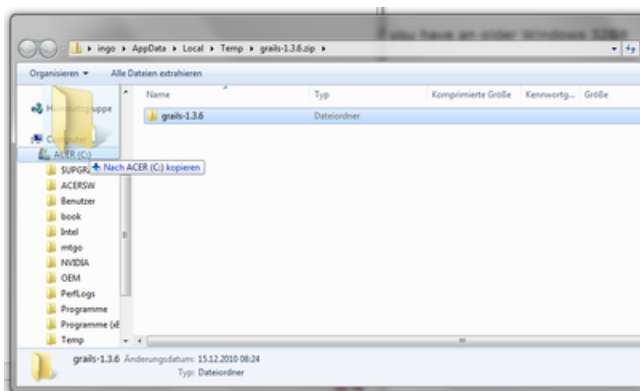
Go to http://grails.org

Download the current version, which at this time is Grails 1.3.6.

Unpack the content of the archive to C:\grails (or in a similiar, easy accessible place). You should now have a folder C:\grails which contains other folders like "bin" and "lib" etc.

(Original installation instructions can be found on http://grails.org/Installation - what follows is the abbreviated version:)
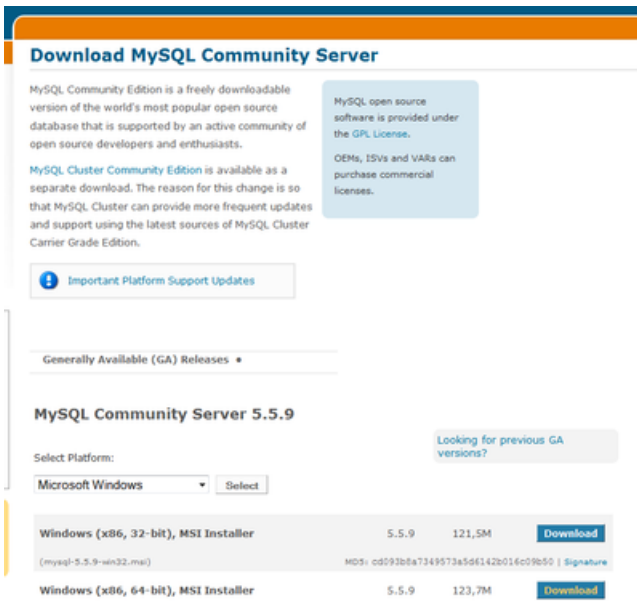
- Create a `GRAILS_HOME` environment variable that points to the path where you extracted the archive (eg C:\grails on Windows)
- There is another environment variable, called "PATH". Click on edit and append a reference to the "bin" directory within the Grails directory to your `PATH` variable (eg `%GRAILS_HOME%\bin` on Windows). Just append a ";" and %GRAILS_HOME%\bin directly behind that.
- Type "grails" at the command line, if a help message is displayed you are ready to start using Grails!

- Create a `GRAILS_HOME` environment variable that points to the path where you extracted the archive (eg C:\grails)
- Test the install by running cmd (Type in cmd in the Windows start menu) and press enter or click the cmd.exe program. In the black command line box, type "grails" and press enter. If you installed everything correctly, you should see the Grails welcome message now.

Database

Postgres or MySQL

Little Goblin can run with most modern databases. I recommend Postgres for license reasons, but because some developers still use MySQL which is easier to install on Windows, I will describe the installation procedure for this web database:

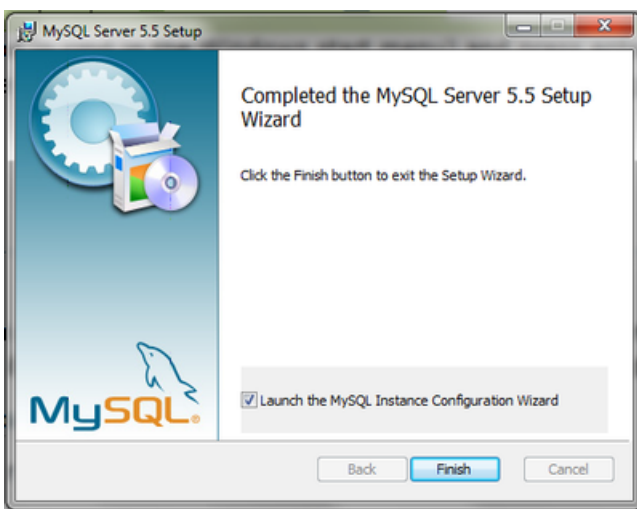Go to: http://www.mysql.de/downloads/mysql/

Download the MSI-Installer package for your version of Windows (32 or 64 Bit).
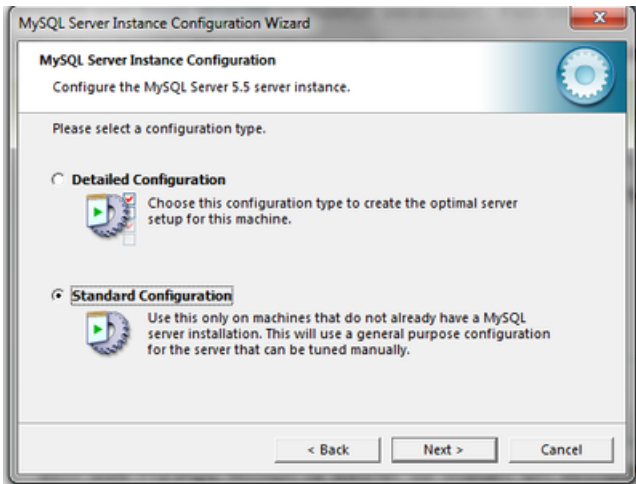
You do not need to register, just scroll down and select a suitable server in or near your country.

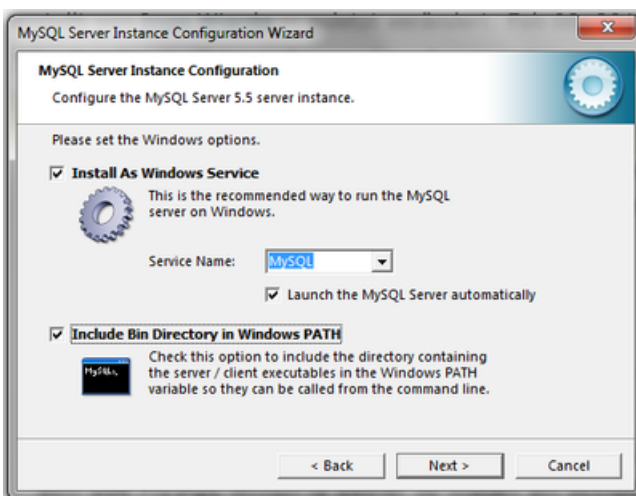Click on the "HTTP" link and download MySQL 5. (123 MByte)

Execute the downloaded file and install the database. Choose the "typical" install variant when asked.

You should run the mysql configuration wizard when offered to do so. Use the "standard configuration" variant.

Install mysql as a service and add it to the PATH variable.

Enter a root password - you will need this later on!

Finish the installation.

Create the development database

Run "cmd.exe" from the Windows start menu again. Type

```
mysql -u root -p
```

and press enter. You will be asked to enter the the root password that you just have set.

Now it is time to create the development database and the database user:

```
create database goblin_dev;
grant all on goblin_dev.* to 'goblin'@'localhost' identified by 'goblin';
```

You can also repeat this for database "goblin" if you wish to create a production database.

Now press CTRL-C or type "exit;" and press enter.

You can check if the database is ok by entering:

```
mysql -u goblin -p goblin_dev
```

Downloading the JDBC database driver

Go to http://dev.mysql.com/downloads/connector/j/

Download the ZIP archive for mysql-connector-java.

Tortoise SVN

Tortoise SVN is a tool to connect to a Subversion repository (abbreviated as "svn"), in our case: the Little Goblin repository, where the project files are located. It will help you to download and upload files from and to the Sourceforge servers where the repository resides.

Source code management (SCM) is an important aspect of working in a team - an SCM tool like Subversion helps you to manage the files and enables you to make changes locally on your system and then uploading a set of changes to the repository, where other developers can download your contribution. It also detects conflicts so you cannot accidentally overwrite another person's work.

More on Subversion: http://svnbook.red-bean.com/

Now go to http://tortoisesvn.net/downloads.html and download the 32 or 64 Bit version, as appropriate.
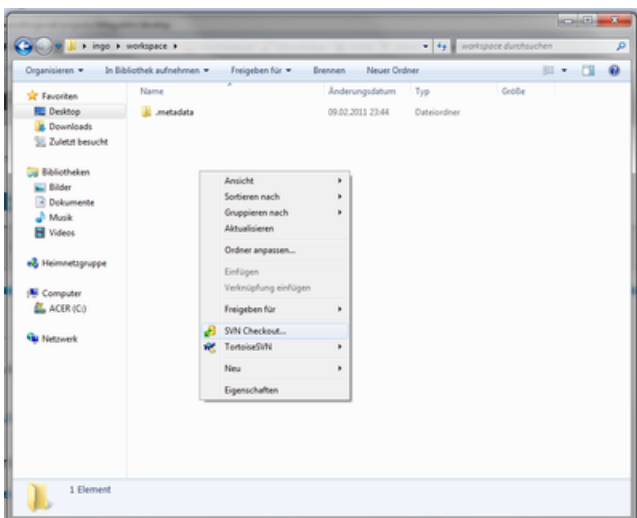
Install the software - the process is really easy. You will have to restart your computer.

Downloading Little Goblin from Sourceforge

Navigate in the Windows Explorer to the place where your Eclipse workspace is located.
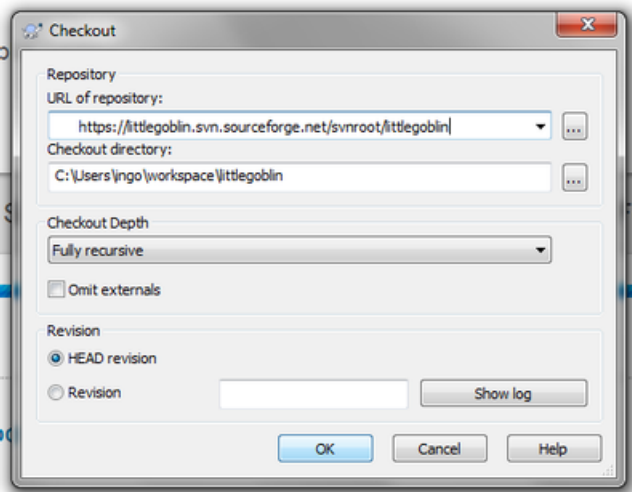
Right-click on the yet empty space:

Select "SVN Checkout" (You did restart your computer after installing Tortoise SVN, didn't you?)
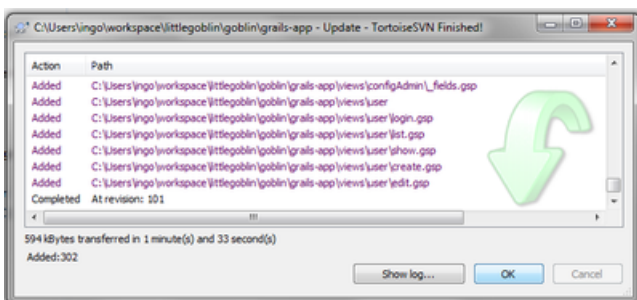

Enter the URL of the repository:

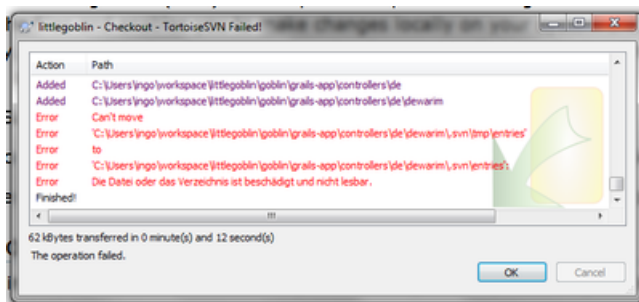`https://littlegoblin.svn.sourceforge.net/svnroot/littlegoblin`

And click ok.

If everything goes right, you should see something like the following:
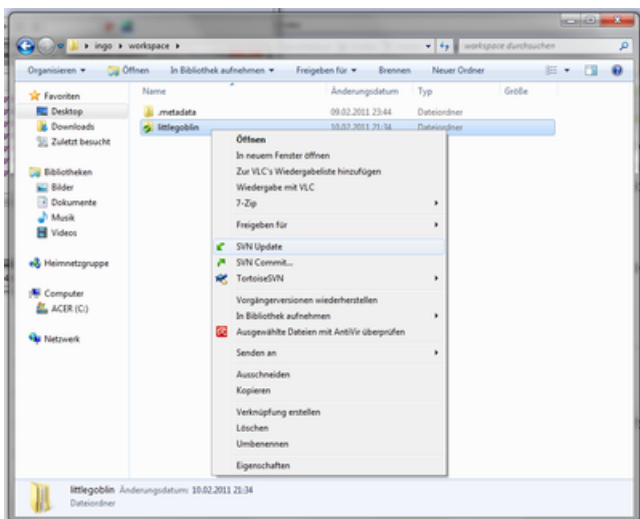

If something goes wrong, you may see messages like this:

But do not worry, this apparently happens from time to time...

You should at least have a folder named "littlegoblin" with a little green icon on it - you can right click it and select "svn update" - this should update your copy of the project to the latest status.

You should start each unit of work with an SVN Update, unless you have any unfinished work.
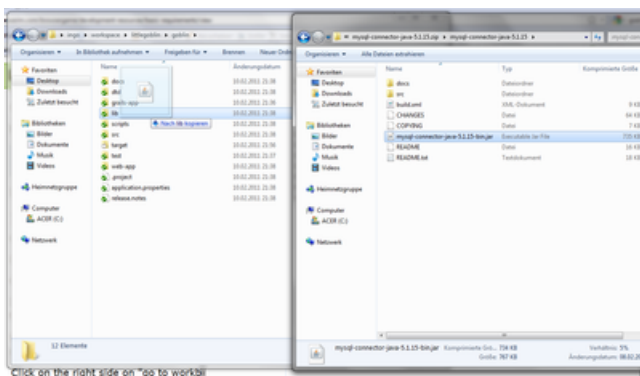
More on version management later.

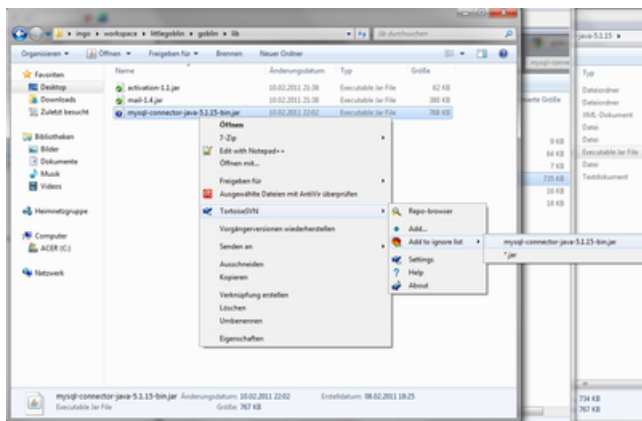## Installing Grails Plugins

(should happen automatically)

Installing the database driver

You need to install the MySQL database driver so Little Goblin can talk to the database.

From the mysql-connector-java.zip file, you should extract the mysql-connector-java-5.1.15-bin.jar and copy it into the project library folder: littlegoblin\goblin\lib\.

Afterwards, you need to add the driver to the "SVN ignore list", because **this file must not be uploaded** to the Sourceforge repository of Little Goblin for license reasons! Do this by doing a right click on it and going over "TortoiseSVN" => Add to ignore list => mysql-connector-java-5.1.15-bin.jar

Running Little Goblin for the first time

Now it is time to do a test run of Little Goblin!

Run cmd.exe and navigate to your workspace and into your project folder. If the workspace is on drive C:, you can enter

```
cd C:\users\ingo\workspace\littlegoblin\goblin
```

If your workspace is on another drive, you should switch to this first by entering for example "D:" and then cd'ing.

Inside folder goblin type:

```
grails run-app
```

You should now see a huge number of messages scroll through the message window.

Possible problems and solutions: Java needs to be allowed to communicate with the Internet.

In your browser, go to: http://localhost:8080/goblin

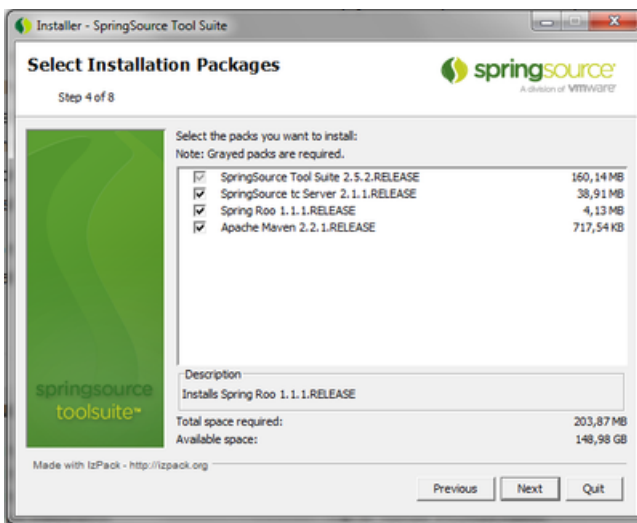Congratulations, you should now be able to start your first local game of Little Goblin!

Install SpringSource Tools Suite

The SpringSource Tools Suite is an integrated development environment which enables you to work on Grails projects like Little Goblin (navigate around the project, editing files, starting the game, etc.). It is based on Eclipse.
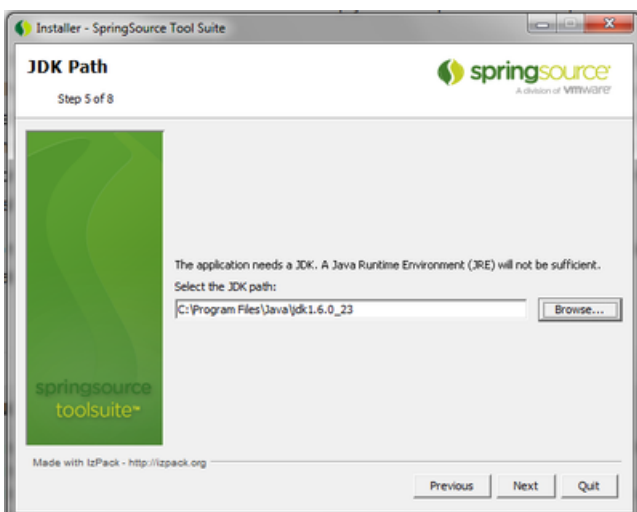
Go to http://www.springsource.com/downloads/sts

Download the current version of the installer.exe of the SpringSource Tool Suite for your version of Windows (about 190 MByte).
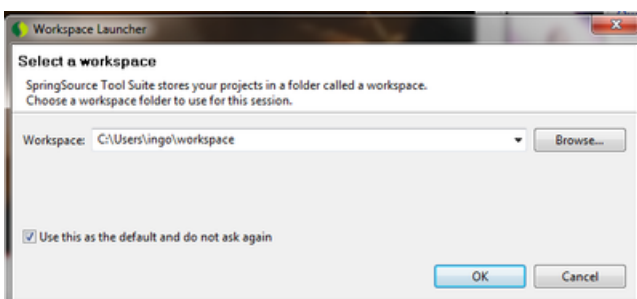
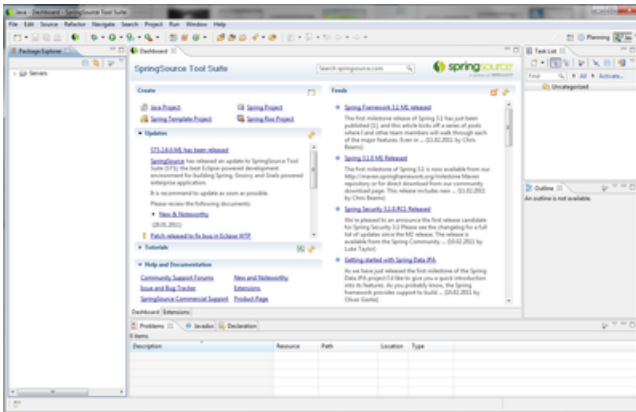Start the installer. Select all features (although you probably won't need the ROO-package).

Select your Java installation.

Select a workspace - that is where your projects will be saved, so for example use C:\workspace or C:\Users\YourUsername\workspace.
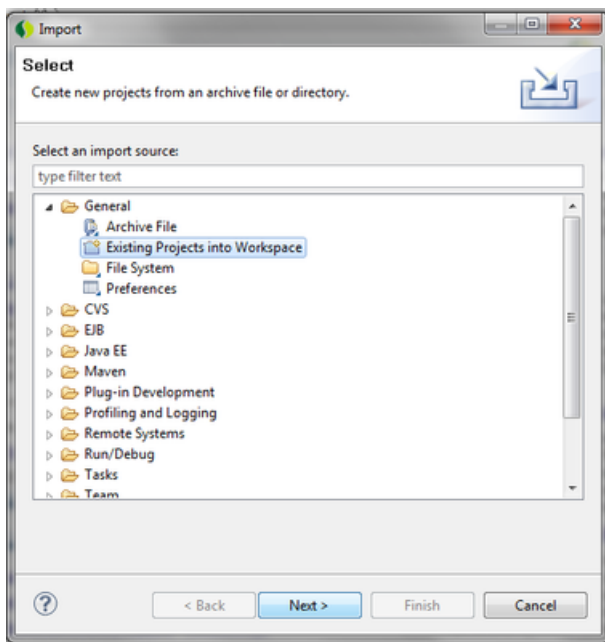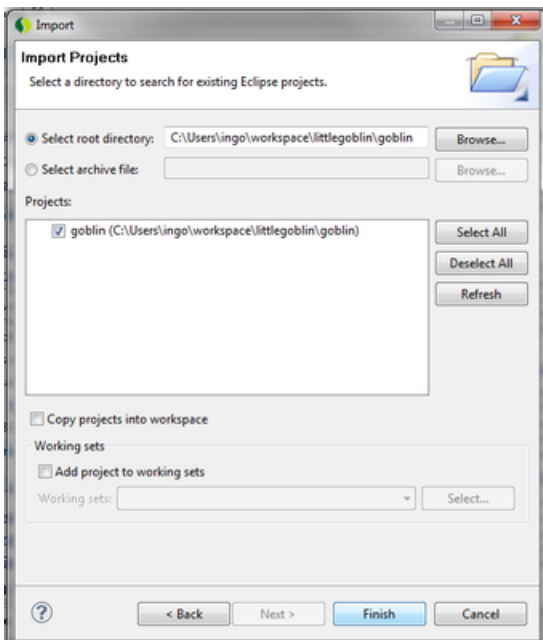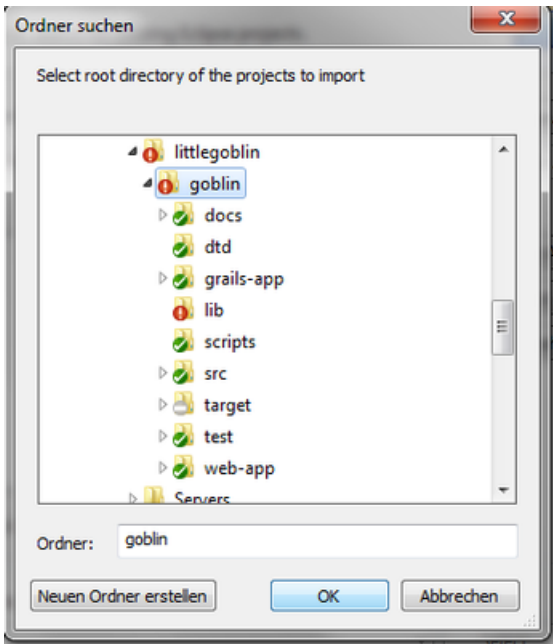

Now you should see the main Eclipse screen:

Go to http://grails.org/STS+Integration

and follow the instructions to install the Grails plugin.

Afterwards, import the Little Goblin project via File => Import ...
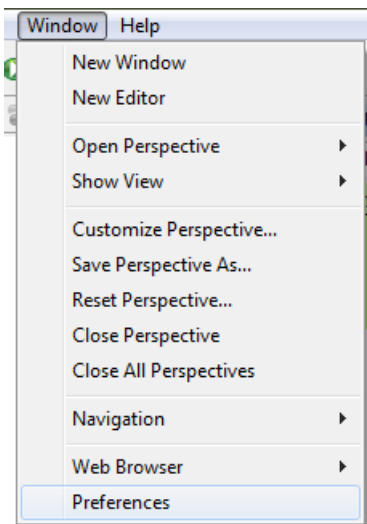

As you have already checked out the project, you can now choose General => "Existing projects into Workspace"
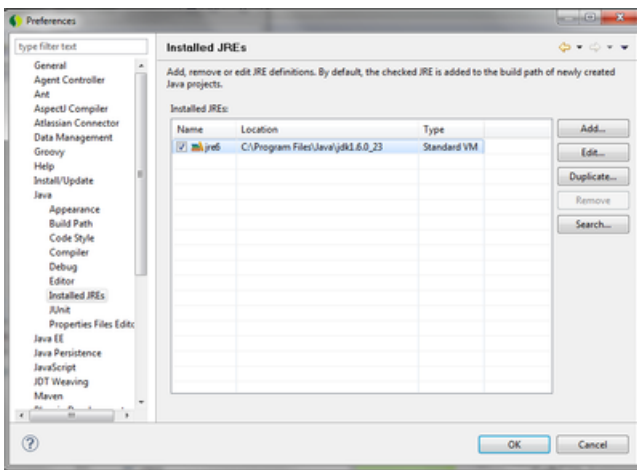
Finished - now you can explore the project.

To run Little Goblin, you may have to set the path to the correct JDK (Java Development Kit) in Eclipse. Select "Window" => "Preferences" in the menu.
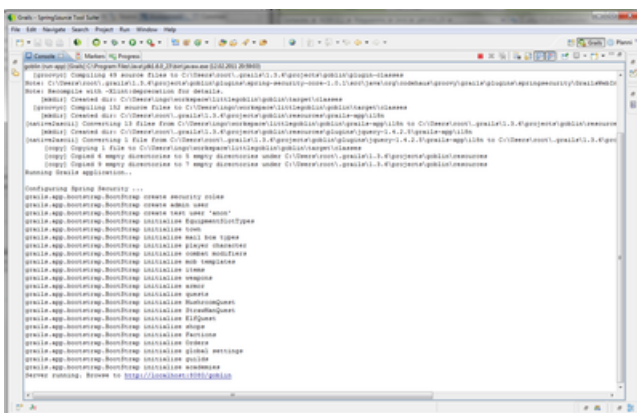
Navigate to Java => Installed JREs.

Make sure that Eclipse uses the correct JDK (the one you installed above).

Now you should be ready to launch Little Goblin from within Eclipse:

Navigate to Run in the menu and select Run. After Maven has downloaded half the internet, the game should be up and running:

Go to http://localhost:8080/goblin

If you click on the link in the console view of Eclipse, it will use the internal browser:

Congratulations!

If you have any questions or suggestions for this page, please do not hesitate to ask.