



## Getting Started – Developers Guide

Welcome to the **LEGUP** development team! Depending on your level of skill and experience, you may need more or less time to become comfortable working on the project. This guide will help you prepare your computer so you can spend more time contributing and less time setting up.

**LEGUP** is developed in **Java** using **Swing** for the GUI, making it platform independent, operable on any system with a **Java Runtime Environment** (JRE). Development is shared by use of a **Git** server.

There is no required operating system, integrated development platform (IDE), or Git client to contribute to LEGUP. This guide documents several methods of setting up using a variety of operating systems and software. Every developer has their own preferred software and style. If you are new to any of this, we recommend you stick to one of the methods described in this document. If you already have your preferred development platform set up, feel free to skip around, and contribute your own expertise!

### STEP ONE – Setting up the JDK

In order to compile the LEGUP source code into Java executables, you will need the **Java Development Kit** (JDK). We recommend you use the official Oracle (formerly Sun) JDK for compatibility. This also includes the JRE required for running the Java executable.

#### WINDOWS

The self-extracting installer can be found at <http://java.sun.com/javase/downloads/widget/jdk6.jsp>. For detailed installation instructions, please see Oracle's guide at <http://www.oracle.com/technetwork/java/javase/documentation/install-windows-152927.html>.

#### MAC

Please see Apple Developer Connection at <http://developer.apple.com/java/download/> to download and install the JDK.

#### UBUNTU

If you are using Ubuntu 10.04, you can install the official JDK by issuing the following commands in a terminal:

```
sudo add-apt-repository "deb http://archive.canonical.com/ lucid partner"
sudo apt-get update
sudo apt-get -y -m install sun-java6-jdk sun-java6-fonts
```

#### OTHER

Detailed installation instructions for most platforms can be found on the Oracle website at <http://www.oracle.com/technetwork/java/javase/index-137561.html>.

### STEP TWO – Downloading the source code and setting up your development environment

You should download the LEGUP source code with a git client. Simply downloading the code as files will make committing and pushing code difficult. The repository is located at <https://github.com/Bram28/LEGUP>. A good guide for doing this is located here: <http://githowto.com/>. A small guide on how to use command-line git is located in `git_mini_manual.txt` in the same folder as this document. You can use Eclipse to do this as well according to these directions.

## ECLIPSE

Eclipse (<http://www.eclipse.org/downloads/>) is a free cross platform IDE with plugins for many languages, including Java. Download “Eclipse IDE for Java Developers”, or install from the repositories.

“Java Project from Existing Ant Buildfile” and follow the wizard, using **<your-work-folder>/build.xml** as the ant build file.

If you would like to use Eclipse's Git plugin, EGit, you can download it by going to “Help” > “Install New Software”. In the “Work with:” drop down menu, select “--All Available Sites--”. After it finishes loading, expand the “Collaboration” section. Check “Eclipse EGit” and go through the remaining prompts.

When Eclipse restarts, you can download LEGUP by going to “File” > “Import” > “Git” > “Projects from Git” > “URI” and entering <https://github.com/Bram28/LEGUP.git> as the URL along with your Github credentials. Next, select the branch you wish to work with. After selecting the import directory, Eclipse will start downloading the source code. Remember the directory you imported the code into!

After the code finished downloading, click next and select “Use the New Project wizard”. Click Finish, and in the New Project wizard select “Java Project”. Click next, uncheck “Use default location”, and change the location to the directory you imported the code into earlier. Give the project a name, i.e. LEGUP, and click finish. You will now have LEGUP as a project in Eclipse! To run LEGUP, open the **legup/build.xml** file. On the right hand side in the Outline, right click on “test” under LEGUP and select “Run As” > “Ant Build”.

## STEP THREE – Contribute!

If you've made it this far, congrats! Now you can actually start working on learning what makes LEGUP tick, and how to improve it. Once you're ready to start making changes, you should know a few things about our Git system. First off,

**EXTREMELY IMPORTANT! DO NOT DELETE, MOVE, OR ADD FILES OR FOLDERS UNLESS YOU REALLY KNOW WHAT YOU ARE DOING!**