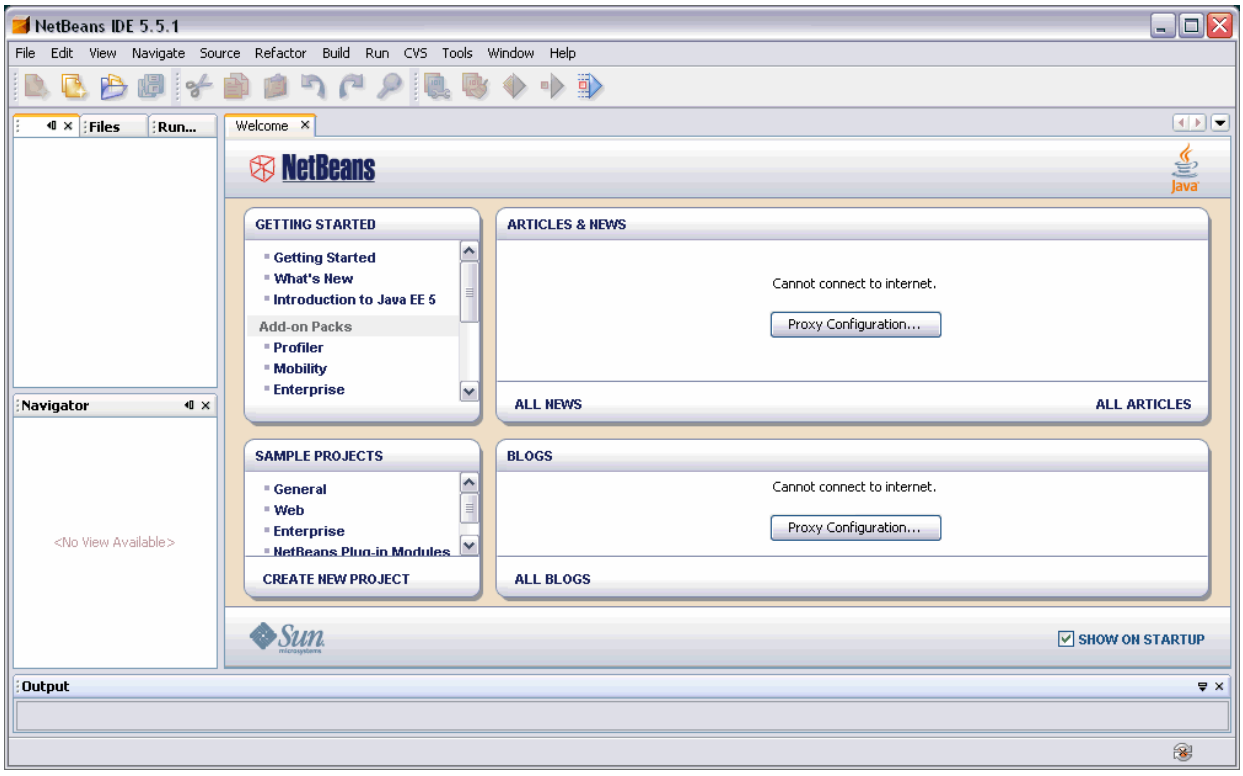
How to use the Sun *NetBeans* IDE for Java Application Development

Java application development is supported by many different tools. One of these tools is the *NetBeans* IDE (Integrated Development Environment). This very helpful development tool is available free of charge.

NetBeans is also a part of some versions of the Sun JDK (Java Development Kit). For more information about *NetBeans* please visit http://www.netbeans.org/.

The following sample was made with the *Sun J2SE Development Kit 5.0 Update 13 with NetBeans IDE 5.5.1 Bundle*. The download file was *jdk-1_5_0_13-nb-5_5_1-Win-ml.exe*. The Sun JDK 5 was installed on a Windows XP-based PC. Please see also *mHT-CPC1L-15.pdf: How to write a Hello World for the Java Runtime Environment (JRE).*

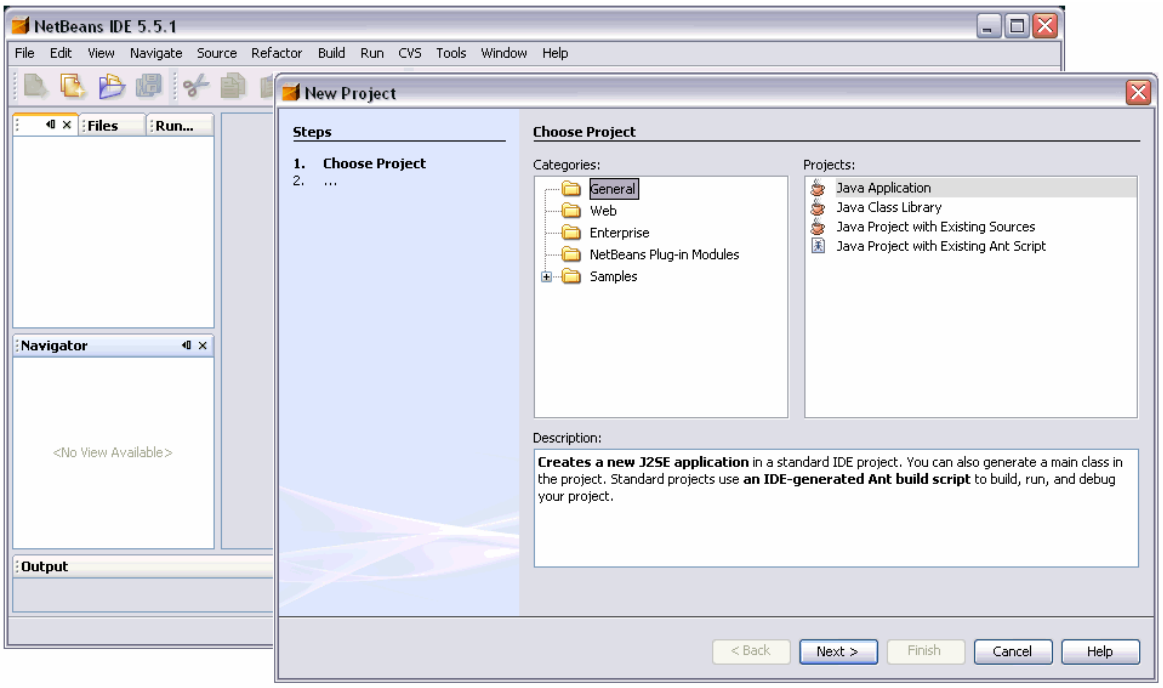
- **1. Step**: Please run your *NetBeans* IDE on your development PC. Most *NetBeans* installations leave an icon on the desktop. Just double-click this icon.



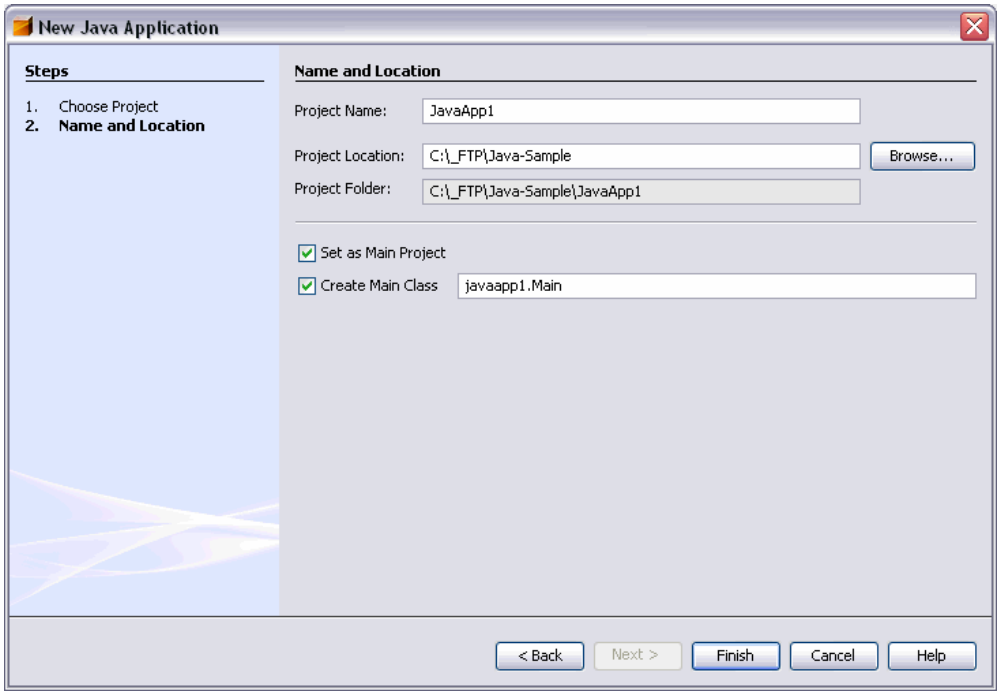
- **2. Step**: Close the *NetBeans* welcome window. Some parts of this window need an active Internet connection.

  The Java development with *NetBeans* is also possible without an active Internet link of your development PC. In this case some help information not available.

- **3. Step**: Open the *NetBeans* ***File*** menu. Then select ***New Project*** and create a new Java project. The project category for this sample is ***General***. The project type is ***Java Application***. Then press the ***Next*** button.



- **4. Step**: Select a project name (e.g. ***JavaApp1***) and a project location of your choice. Then press ***Finish***.

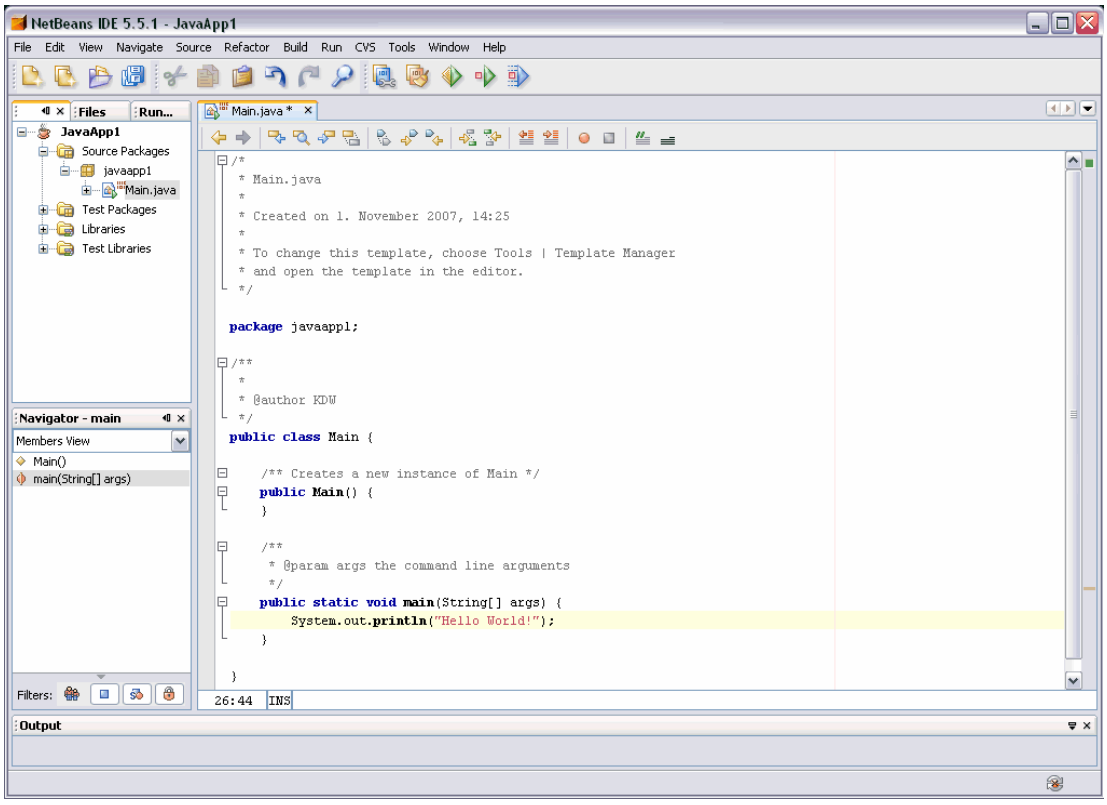


- **5. Step**: The *NetBeans* IDE creates the project environment and a Java source code file as a template. Please replace the line

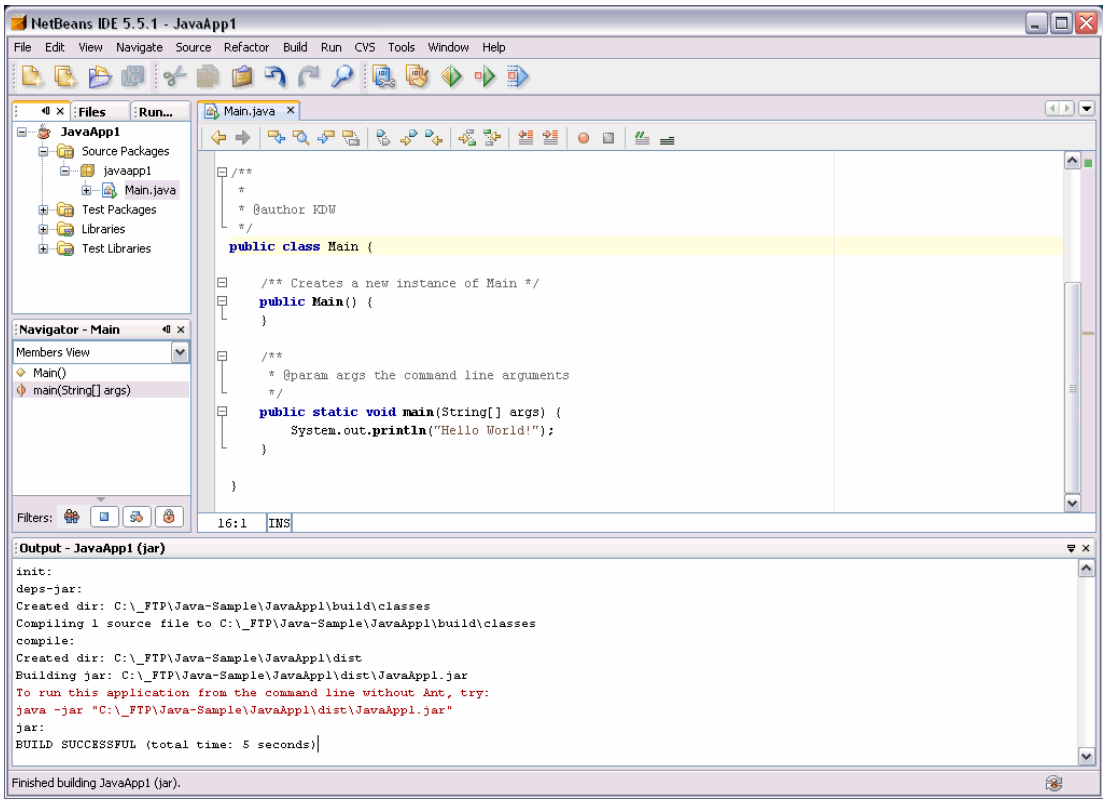
```
// TODO code application logic here
```

with

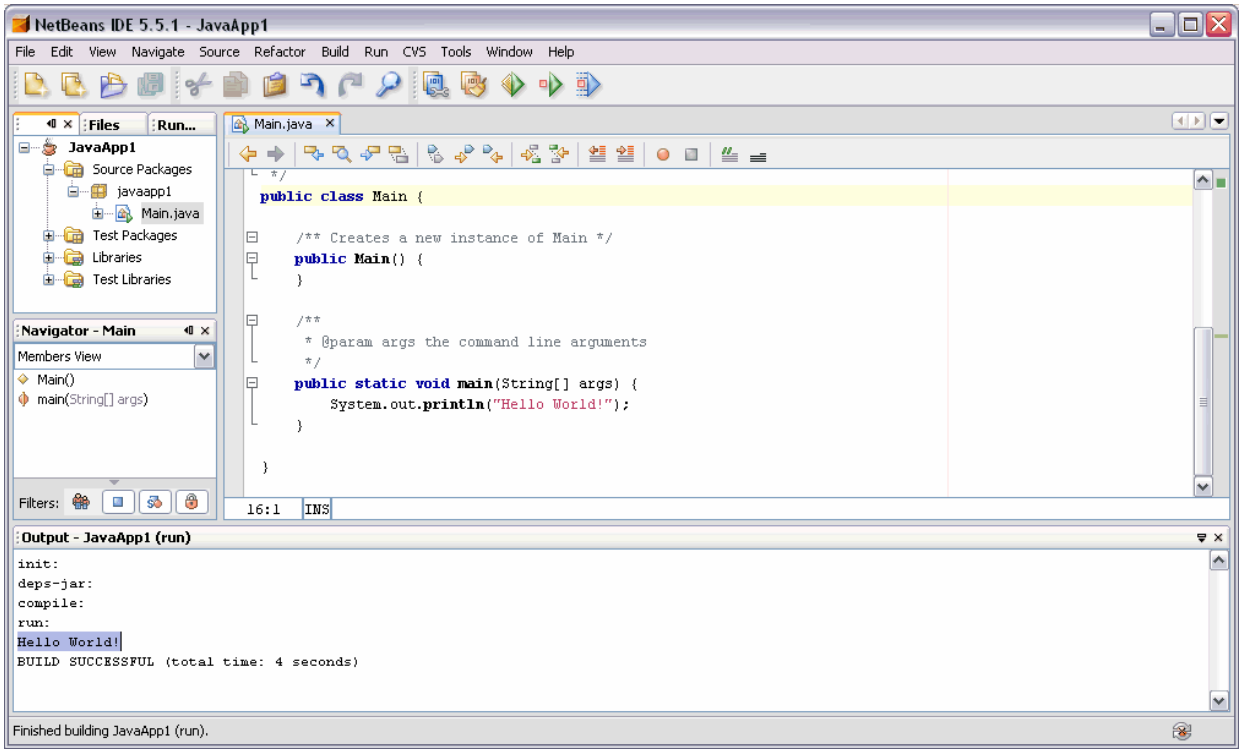
```
System.out.println("Hello World!");
```



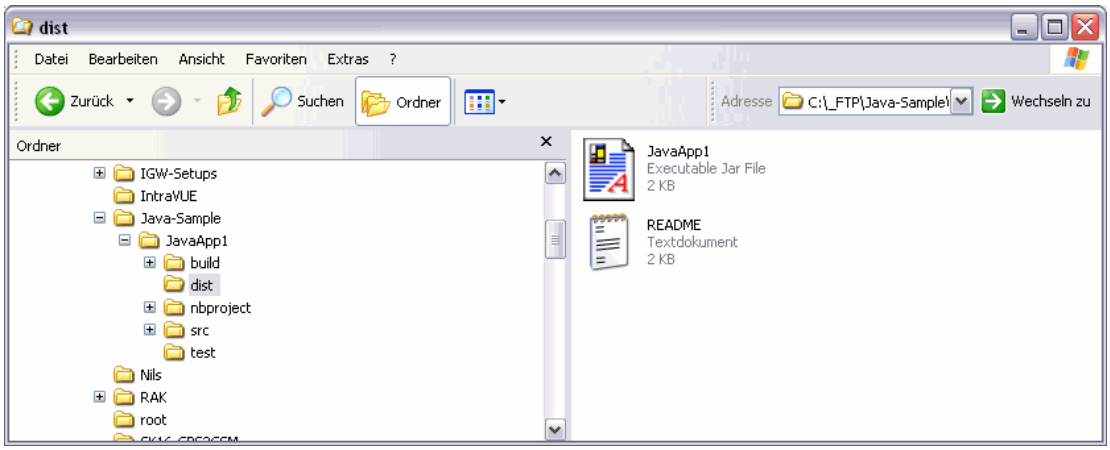
- **6. Step**: Open the ***Build*** menu and select ***Build Main Project***. The IDE creates a JAR file for your project.



- **7. Step**: Open the ***Run*** menu and select the menu item ***Run Main Project***. This starts the execution of your Java application within the *NetBeans* IDE. Watch the *Hello World!* output within the output window.



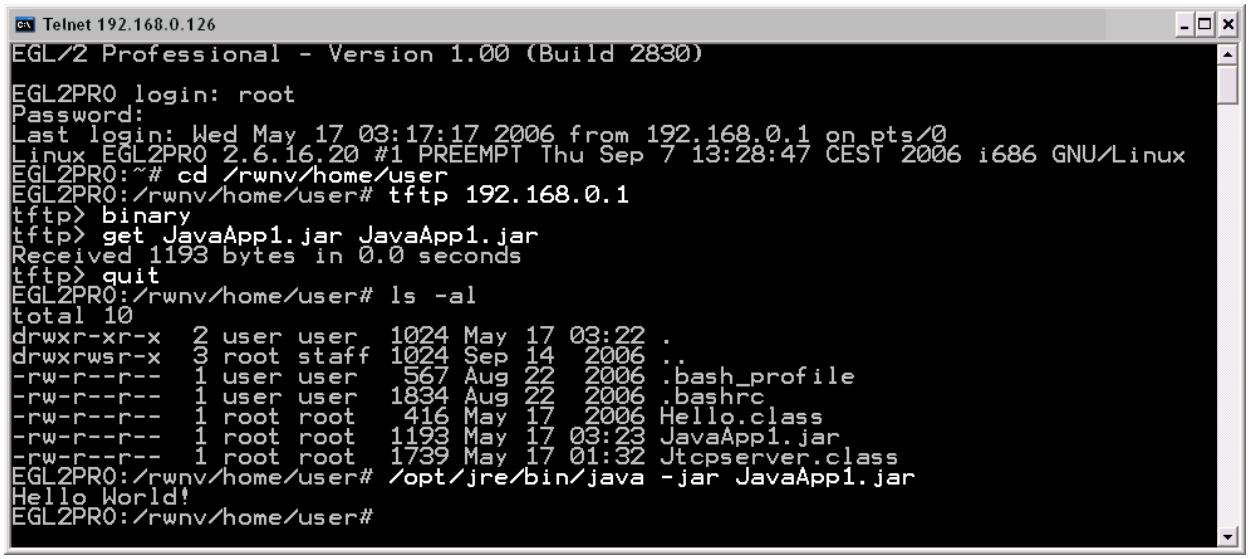
The executable JAR file is located in the *dist* directory of your project (in this sample the JAR file name is *JavaApp1.jar*). Please transfer this JAR file to the Com/PC.



- **8. Step**: Use TFTP and a Telnet or SSH session for transferring the JAR file. Run the JAR file on the Com/PC. Use the following command sequence for this job:

```
cd /rwnv/home/user
tftp 192.168.0.1
binary
get JavaApp1.jar JavaApp1.jar
```

```
quit
/opt/jre/bin/java -jar JavaApp1.jar
```



Please note: A JAR file (or **J**ava **AR**chive) is used for aggregating many files into one. The JAR file is generally used to distribute Java classes and associated metadata. JAR files a typically started with a command line similar to:

```
java -jar foo.jar
```

or

```
java -jar "foo.jar"
```

The means, the JAR file is an executable for the JVM (Java Virtual Machine). A JAR file is a binary file and not a text file. Make sure that your file transfer operates in binary mode. Otherwise the execution with the Com/PC Java VM produces some unclear error messages.

That is all.