## NetBeans IDE Java Quick Start Tutorial

Welcome to NetBeans IDE!

This tutorial provides a very simple and quick introduction to the NetBeans IDE workflow by walking you through the creation of a simple "Hello World" Java console application. Once you are done with this tutorial, you will have a general knowledge of how to create and run applications in the IDE.

This tutorial takes less than 10 minutes to complete.

After you finish this tutorial, you can move on to the learning trails, which are linked from the <u>Documentation, Training & Support</u> page. The learning trails provide comprehensive tutorials that highlight a wider range of IDE features and programming techniques for a variety of application types. If you do not want to do a "Hello World" application, you can skip this tutorial and jump straight to the learning trails.

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To complete this tutorial, you need the following software and resources.



### Software or Resource Version Required

NetBeans IDE version 6.7

<u>Java Development Kit (JDK)</u> version 6 or version 5

### Setting Up the Project

To create an IDE project:

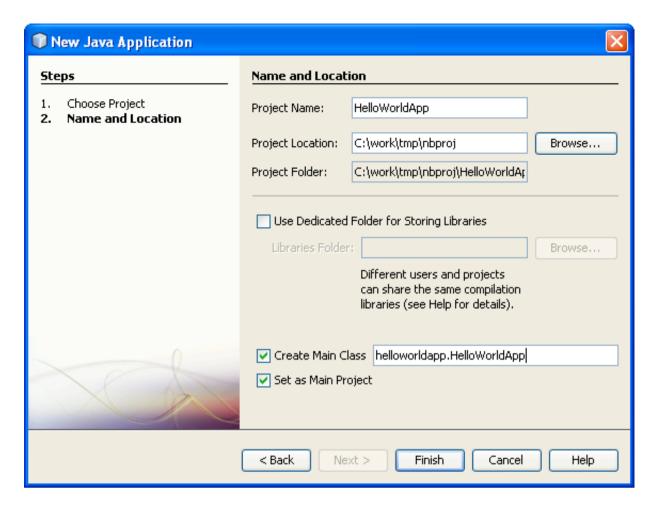
- 1. Start NetBeans IDE.
- 2. In the IDE, choose File > New Project (Ctrl-Shift-N), as shown in the figure below.



3. In the New Project wizard, expand the Java category and select Java Application as shown in the figure below. Then click Next.



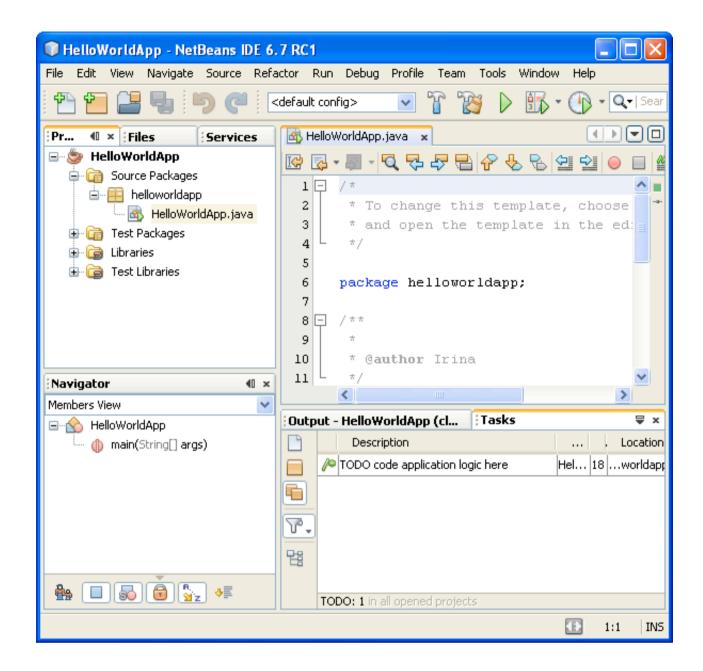
- 4. In the Name and Location page of the wizard, do the following (as shown in the figure below):
  - o In the Project Name field, type HelloWorldApp.
  - Leave the Use Dedicated Folder for Storing Libraries checkbox unselected.
  - In the Create Main Class field, type helloworldapp.HelloWorldApp.
  - Leave the Set as Main Project checkbox selected.



### 5. Click Finish.

The project is created and opened in the IDE. You should see the following components:

- The Projects window, which contains a tree view of the components of the project, including source files, libraries that your code depends on, and so on.
- The Source Editor window with a file called HelloworldApp open.
- The Navigator window, which you can use to quickly navigate between elements within the selected class.
- The Tasks window, which lists compilation errors as well other tasks that are marked with keywords such as XXX and TODO.



## Adding Code to the Generated Source File

Because you have left the Create Main Class checkbox selected in the New Project wizard, the IDE has created a skeleton class for you. You can add the "Hello World!" message to the skeleton code by replacing the line:

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

with the line:

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

Save the change by choosing File > Save.

The file should look something like the following code sample.

```
/*
* To change this template, choose Tools | Templates
* and open the template in the editor.
*/
```

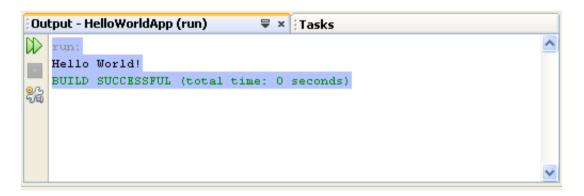
### Compiling and Running the Program

Because of the IDE's Compile on Save feature, you do not have to manually compile your project in order to run it in the IDE. When you save a Java source file, the IDE automatically compiles it.

#### To run the program:

• Choose Run > Run Main Project (F6).

The next figure shows what you should now see.



Congratulations! Your program works!

If there are compilation errors, they are marked with red glyphs in the left and right margins of the Source Editor. The glyphs in the left margin indicate errors for the corresponding lines. The glyphs in the right margin show all of the areas of the file that have errors, including errors in lines that are not visible. You can mouse over an error mark to get a description of the error. You can click a glyph in the right margin to jump to the line with the error.

# Building and Deploying the Application

Once you have written and test run your application, you can use the Clean and Build command to build your application for deployment. When you use the Clean and Build command, the IDE runs a build script that performs the following tasks:

- Deletes any previously compiled files and other build outputs.
- Recompiles the application and builds a JAR file containing the compiled files.

#### To build your application:

• Choose Run > Clean and Build Main Project (Shift-F11).

You can view the build outputs by opening the Files window and expanding the HelloWorldApp node. The compiled bytecode file HelloWorldApp.class is within the build/classes/helloworldapp subnode. A deployable JAR file that contains the HelloWorldApp.class is within the dist node.

Files **≪** Services Projects ı build i build 🖮 🧀 dist 🖮 🥅 HelloWorldApp.jar imeta-inf MANIFEST.MF in helloworldapp README.TXT nbproject · 🛅 src in helloworldapp 🗎 test build.xml manifest.mf

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## **Next Steps**

You now know how to accomplish some of the most common programming tasks in the IDE.

To learn more about the IDE workflow for developing Java applications, including classpath management, see <u>Developing</u> and <u>Deploying General Java Applications</u>.

To find information specific to the kind of applications you are developing, use the NetBeans IDE learning trail for that type of application. Each learning trail contains a series of tutorials and guides that range in scope from basic to advanced. The following learning trails are available:

- General Java Development
- Integration with External Tools and Services
- Java and JavaFX GUIs
- Java Web Applications
- EJB and Web Service Applications

- PHP Applications
- Dynamic Languages
- NetBeans Platform and Module Development
- C/C++ Applications
- Mobile Applications