

Java Network Programming

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Important Notes:

- All example files for the above practicals are zipped into **JavaNet.zip** file, which you can download from module's learning room in NOW.
- Please then unzip the **whole** examples directories (i.e. Prac1, Prac2, etc.) into your home account in the **H:** drive and use them from there.

Object Oriented Java - Practical Study #1

The aim of this session is to familiarize with the Netbeans IDE (Integrated Development Environment). You should learn how to:

1. Create and manage a Netbeans project;
2. Compile the source file to generate the executable class;
3. Configure the program *run-time* parameters and run the Java program;

The example file is in: **Prac1\src\myID.java**. The program simply prompts you for your Student ID and prints a greeting message.

I – Familiarizing with the Netbeans IDE

Follow the tutorial below to construct a simple “HelloWorld” application. I recommend that you setup a folder in your H: drive to hold DOC practicals. I also advice you not to use spaces in folder or file names, e.g. use “DisObjComp” instead of “Dis Obj Comp”.

<http://netbeans.org/kb/docs/java/quickstart.html>

I - Creating your first Project and browsing the source files

1. Instead of create a completely new project to hold a “**Java Application**” as you did above, create a new project by choosing a “**Java Project with Existing Sources**”.



2. Next browse to the Prac1 project folder in your H: drive.
3. On the following screen you need to specify the location of your “**Existing Sources**”. The convention is to hold source files in a “**src**” folder, and this is where you’ll find the source files in the supplied examples.

Click the [Add Folder ...] button to select “**Prac1\src**” as your source package folder.

4. Find “**myID.java**” under [Source Packages\<default package>] in the **Project** navigator window. Open the file examine the source file and make sure you understand the code (ask tutor for help). The program simply reads a name passed as an argument to the program “**args[]**”, and then prompts you to enter your Student ID and prints out a greeting message.

II – Compiling and running the code

1. Run the program as demonstrated in the **HelloWorld** tutorial above. You'll have to enter your name in the [**Output**] window (usually at the bottom of the IDE) for the program to proceed.

Try to locate the executable class (myID.class).

2. When satisfied that the program runs OK, try to modify it to output more details, e.g.:

Name: A Student

Email: MyEmail@ntu.ac.uk

Module: Distributed Object Computing

3. If you want to explore the environment further it can be very useful to experiment with **debugging** the code. Use the NetBeans online help (**Contents→IDE Basics→Java Applications**)
4. Debugging project: to find out about debugging and breakpoints. Ask tutor for help.